

## **The field naturalist's handbook / by J.G. Wood and Theodore Wood.**

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**THE FIELD  
NATURALIST'S  
HANDBOOK**



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Ernest Rudge

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61 Pulborough Rd  
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Wandsworth

London (S.W.)



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THE  
FIELD NATURALIST'S HANDBOOK.



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THE  
FIELD NATURALIST'S  
HANDBOOK

BY THE LATE  
REV. J. G. WOOD

AUTHOR OF "COMMON OBJECTS OF THE SEA-SHORE AND COUNTRY," "ILLUSTRATED  
NATURAL HISTORY," "HOMES WITHOUT HANDS," ETC. ETC. ETC.

AND THE  
REV. THEODORE WOOD

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*POPULAR EDITION*

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FIELD NATURALISTS

HANDBOOK

REV. J. G. WOOD

REV. THEODORE WOOD

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## P R E F A C E .

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A HANDBOOK such as the present work must, from its very nature, be to a great extent a compilation, as no single person could possibly obtain such a mass of information by personal research.

In addition to original observations made by myself and my friends, I have selected from a great variety of works those ascertained facts which will form a basis on which the intending Field Naturalist may work. Indeed, I have been guided in framing the book partly by recollections of my own wants when a beginner in Zoology without a guide, and partly by way of response to the innumerable queries which I am constantly receiving, and which I am unable to answer individually.

As it is evidently impossible to comprise the whole of so vast a subject into a single volume, I have chosen the three favourite departments of Entomology (restricted necessarily to the Lepidoptera), Field Botany, and Egg-collecting. I have done my best to smooth the path of the young Field Naturalist, and in this Handbook have corrected many existing errors, and given much information hitherto unpublished. In the Moths alone upwards of a thousand blanks have been filled.

The plan of the book is perfectly simple. Each month in the year is taken successively, and the reader will find a complete catalogue of all the butterflies and moths which appear in it, together with the plants that are in flower, and their localities.

In addition to each insect there are notes of its egg, caterpillar, and pupa, so that even if the perfect insect be not "out," as entomologists say, the reader will gather its life-history at a single glance. The food-plant of the caterpillar is also given, so that if the reader should find a caterpillar, and wish to rear it, he will only have to refer to the botanical department of the book to learn where he can find the required plant.

At the end of the entomological portion of the work will be found a short chapter describing the localities which are most frequented by each species of Butterflies and Moths, and the most effective modes of taking them.

Plants are arranged only according to the months in which they



flower, but Insects have a twofold arrangement, firstly by months, and secondly according to the order observed by Doubleday, which I believe to be the best system extant.

Birds are classed according to their accepted order, beginning with the hawk tribes, and ending with the petrels. I exclude altogether such birds as the Egyptian Vulture, the Pelican, and others, which have evidently escaped from confinement, and can no more be classed among British birds than can Parrots or Cockatoos which have flown out of window. I have, however, mentioned our regular winter visitors, even though they may not nest in this country save under exceptional circumstances.

The approximate stay of each bird in England is given, together with the locality of its nest, and the average number of its eggs.

I do not pretend that the work is absolutely perfect. New species of Moths, for example, are detected almost yearly, and their life-history is consequently unknown. Still, in this Handbook the reader will find all the newly-discovered Moths, together with many details of Moth-life, which are here given for the first time.

Especially is this the case with the large and most troublesome group called "Pug" Moths (*Eupithecia*) of which little or nothing was known until the Rev. H. Harpur Crewe took them in hand. Nearly fifty species of "Pug" Moths are now catalogued, and Mr. Harpur Crewe has most kindly furnished me with the full life-history of almost every species. I am also indebted to Mr. F. Bond for valuable information respecting many of the rarer Moths. I ought also to thank Mr. W. Marshall for supplying many details of Plant and Insect life which were unknown to me, and which I could not find in any botanical or entomological work.

In every case, where I was not sure of my *data*, I have left a blank space, so that the reader may feel certain that nothing has been stated on conjecture, and that he may depend on any information which he finds given as a fact. Should he be able to fill up any blank spaces by his own observations, I should feel greatly obliged if he will kindly communicate his discoveries to me as soon as possible.

Short chapters are also given on Breeding from the egg, larva, and pupa, and where to find them. The reader will also find full details of the best modes of catching butterflies and moths, setting and preserving them, together with the best methods of blowing and preserving birds' eggs, and drying and arranging plants.



# THE FIELD NATURALIST'S HANDBOOK.

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## INTRODUCTION.

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THIS work is intended as a convenient Handbook for those who wish to study Butterflies, Moths, Birds' eggs, and Plants, and intend to find them for themselves. It has nothing to do with mere collectors or purchasers—whom I rank with crest-hunters and makers of butterfly pictures. The book is addressed to those who will go into the fields, lanes, and forests, in search of insects and nests, and who desire, not only to collect specimens, but to learn the habits of the creatures for which they seek.

Now, it is absolutely impossible to be a practical insect-hunter or egg-collector without learning something of the plants on which insects feed, or the trees on which the majority of birds build. It is useless to read that certain caterpillars feed upon certain plants unless the plants can be recognised, as well as the caterpillars, and their probable localities known. Nor can the names of trees be any guide to the nests of the birds that build in them if the reader does not know an elm from an ash. I have therefore placed Zoology and Botany side by side in the present work, and made it a guide to the plants and trees as much as to the insects and nests. I have already stated in the preface that, as far as possible, the arrangement of insects and plants is by months, the former being reckoned by their period of appearance in the perfect state, and the latter by their time of flowering.

In an extremely variable climate, however, such dates can only be approximate, as a mild winter and warm spring will hasten the advent both of insects and plants, while a severe winter and cold spring will retard them. The reader, however, will find that, taking one year with another, the dates here given will be tolerably correct.

As the birds lay their eggs somewhere about the same time of year, and could be crowded into a very few months, the arrangement is that of their natural order, and not of seasons. It is true that several birds will rear more than one brood in the same year, but even in such cases the first brood only is mentioned, as the number of broods is dependent upon external conditions, such as the temperature of the season, the supply of food, and freedom from disturbance.



In order to compress the work within the limits of a portable Handbook, a few abbreviations have been used. Most of them are familiar to entomologists, but I will briefly explain them, so that the reader may have no trouble with them.

The numbers 1 to 12 refer to the months.

Fl. signifies Flowers, and R. Roots.

H. stands for Hibernates; S. for Sometimes; B. for Beginning; M. for Middle; and E. for End of a month.

♂ and ♀ are the well-known signs for Male and Female.

Now, let us look at one of our commonest insects, the Vapourer Moth, and see what we can learn about it. We are told that its scientific name is *Orgyia antiqua*, that the perfect insect is found during August, September, and October; that the eggs are to be found from September in one year to July in the next; that the caterpillar may be found throughout July, August, and beginning of September; and that the pupa can be found throughout August and September.

The caterpillar feeds upon willow, oak, rose, fruit-trees, &c.

Then, on turning to the chapter which describes the best modes of capturing insects, we find that the male moth flies in the sunshine, and that the female, which is wingless, is found on tree-trunks and palings.

All this information is compressed into two lines by the help of the abbreviations. The botanical monthly calendar gives similar assistance in finding the plants on which the caterpillars feed.

The reader will find that, with a little practice, he will be able to take in at a glance the whole life-history of an insect. A very little practice will give the knack, and it is well worth the trouble.

Nomenclature is always a difficulty in science. The love of change merely for its own sake is unfortunately given more scope in entomology than in any other branch of science, except, perhaps, ornithology, and few persons who write of insects or birds can resist the temptation to alter their names.

It is bad enough that either the popular or scientific name should be changed, but when both are altered, identification is almost impossible. Yet this is done in the most reckless manner, and without consideration for the difficulties thrown in the way of others.

One well-established genus, for example, is broken into half a dozen new genera, while the original name is transformed into an "order," "sub-order," "tribe," "phalanx," &c., just as the writer chooses to call it. Now, even if the new name be more appropriate than the old, no change ought to be made. The original name has the precedence, and ought to be allowed to keep it. Take, for example, the British Moths. I suppose that every one knows the Cinnabar Moth. Why, then, should the name be arbitrarily changed to "Pink Underwing?" The name Cinnabar is admirably appropriate, the vermilion red of the wings making it peculiarly conspicuous.

Then, there really is no reason for breaking up the well-known genus, *Callimorpha*, in which it was included, into two genera, and inventing a fresh generic name (*Euchelia*), for this single species. The old names CINNABAR MOTH (*Callimorpha Jacobææ*) were known to every one, and were even more appropriate than the clumsy titles of "Pink Underwing" (*Euchelia Jacobææ*). Moreover, the substituted



popular name is misleading, as it implies that the insect belongs to the group which comprises the Yellow Underwings, Red Underwings, Orange Underwings, &c., all of which belong to the *Noctuæ*. I have, therefore, retained the old familiar names with this and other insects.

One curious effect of this multiplication of genera has been that collectors almost invariably omit the generic name when they are speaking of a Moth, though not in writing about it. They will talk of *Jacobææ*, or *Pulchella*, or *Pudibunda*, but never think of mentioning the generic name, except in cases where the same specific name is applied to several insects.

As it is hoped that beginners will employ this work, I may add a piece of advice which those who are moderately experienced in entomology will not need. Never be without a note-book, and make a point of entering in it every detail of any insect that may come under notice.

Be sure to write legibly.

No matter how insignificant the details may seem to be at the time, they will assume an unexpected importance in after years. Nearly all the additions made to entomological knowledge in the present work have been made by means of notes taken a considerable time ago.

Lastly, comes the question of pronunciation.

If all the names were formed; as they ought to be, from Greek and Latin words, there would be little difficulty in pronouncing them, and in cases of doubt a reference to a lexicon or a dictionary would settle the point. But, unfortunately, there are too many words which are utter barbarisms, and the worst of them are those which look classical but are not.

A simple example of this sort of word is the generic name of the honeysuckle, *Lonicera*.

The latter half of the word looks as if it must be either Greek or Latin. In the former case it would be derived either from the word *Keras*, signifying, "a horn," and the *e* would be short; or from *Kerion*, "a honeycomb," in which case it would be long. If derived from the Latin *Cera*, "a honeycomb," it would still have a long *e*. But it is derived from none of these, and is not classical at all. It is merely a complimentary name, given to the honeysuckle in honour of Adam Lonice, a German botanist, who died about three hundred years ago.





# JANUARY.

## GENERAL HINTS.

THE reader will, of course, understand that these hints are intended to apply to the months as they generally present themselves in point of weather.

Sometimes a January will be milder than an average March. Sometimes the winter will begin earlier than usual and extend later, while sometimes the conventional and the actual weather are utterly at variance and upset all calculations. 1879 will be a memorable year in this respect. On a Christmas Day, for instance, the weather has been so warm that fires were too oppressive to be kept up, while the University Boat-race has been rowed through sleet, and the Derby has been run in a snow-storm.

January, however, is, as a rule, the coldest month in the year, and everything in nature is locked up by the frost. Consequently, the collector can scarcely do better in January than give his time to the thorough examination of his cabinets or boxes. He will find plenty to do among them, and will be able to set out in the new year with the happy consciousness that everything is in order for the coming campaign.

It has been said that pupa-digging can, at all events, be carried on in January, because the frost only hardens the soil for an inch or two. That is true enough, but so much of the success of the pupa-digger depends on delicacy of touch that frozen fingers will baffle him even more than blinded eyes, and he will be unable by his sense of feeling to distinguish a pupa from a stone or a lump of earth.

Whether or not the buried pupa would be injured by being brought suddenly into the frosty air I cannot say. Many pupæ do pass through the severest winters without any shelter, but then they are intended for it, and have no shelter because they do not need it.

I am inclined to think that a sudden change of condition must be injurious to any living creature. Certain it is, that many insects which are protected only by an inch or so of soil, or half an inch of bark, cannot endure contact with a freezing atmosphere—although the thermometer would show scarcely any difference of temperature—and die almost immediately that they are deprived of shelter. So, whether they die or not, it will be as well not to take buried pupæ from their resting-place while the weather is such as we may naturally expect in January.

If, however, the collector should choose to brave the frost, and hunt after lepidopterous eggs, there is no reason why he should not do so. Eggs, tiny as they are, will withstand a wonderful amount of cold, and do not lose their vitality even when surrounded by an atmosphere many degrees below freezing.

This fact explains a seeming anomaly. Whenever there is a very severe winter, the remark is frequently made that the frost will, at all events, kill the noxious insects, so that the crops will in consequence be plentiful. Practically, however, it is found that exactly the reverse is the case, and that when the winter has been exceptionally long and severe, the insects are proportionately numerous in the spring.



The reason for this fact is simple enough. The insects are mostly in the egg state, and are therefore uninjured by the frost, which has no really injurious effect upon them, and can only delay their time of hatching. But, the birds, which would have destroyed the caterpillars, had they been hatched, can find no food, and die of hunger.

The Redbreast, for instance, is peculiarly dependent on insects for a livelihood, and requires a wonderfully large supply of them. In consequence, there is not a severe winter in which dead Redbreasts may not be found lying about on the frozen ground. I have known them to be so maddened with hunger and cold, as to lose their fear of man, and to allow themselves to be taken up in the hand, without betraying any alarm.

## I N S E C T S.

| Popular Name.                 | Scientific Name.                  | Ova.      | Larva.    | Pupa. | Food-plants.                                   |
|-------------------------------|-----------------------------------|-----------|-----------|-------|--|
| <b>BUTTERFLIES.</b>           |                                   |           |           |       |  |
| Brimstone, or Sulphur . . . H | <i>Gonepteryx rhamni</i>          | 4, 5      | 6, 7      | 8     | Buckthorn.                                     |
| Clouded Yellow . . . H        | <i>Colias Edusa</i>               | 9-5       | 6, 7      | 8     | { Dutch clover, lucerne, trefoils, &c.         |
| Pale do. do. . . H            | „ <i>Hyale</i>                    | 5         | 7         | 8     | Clover, melilot, lucerne.                      |
| Comma . . . H                 | <i>Vanessa C-album</i>            | 5 & 7     | 5 & 8     | 6 & 9 | { Nettle, elm, willow, hop, sloe, & currant.   |
| Small Tortoise-shell . . . H  | „ <i>urtice</i>                   | 4, 5, & 7 | 5, 6, & 8 | 6 & 8 | Nettle.  |
| Large do. . . H               | „ <i>polychloros</i>              | 5 & 10    | 10-5      | 6, 7  | { Elm, osier, aspen, willow, and fruit-trees.  |
| Camberwell Beauty . . . H     | „ <i>Antiopa</i>                  | 5         | 6, 7      | 7     | { Willow, birch, poplar, and nettle.           |
| Peacock . . . H               | „ <i>Io</i>                       | 4, 5      | 6, 7      | 7     | Nettle.  |
| Red Admiral . . . H           | „ <i>Atalanta</i>                 | 5         | 6, 7      | 7     | Do.  |
| Painted Lady . . . H          | „ <i>cardui</i>                   | 5, 6      | 7-9       | 7-9   | { Thistles, nettle, mal-low, and scarlet bean. |
| <b>MOTHS.</b>                 |                                   |           |           |       |  |
| Humming-bird Hawk . . . H     | { <i>Macroglossa stel-latarum</i> | 5         | 8, 9      | —     | Hedge bedstraw                                 |
| Pale Brindled Beauty . . . E  | <i>Phigalia pilosaria</i>         | —         | 5, 6      | 9-12  | Oak, elm.                                      |
| Belted Beauty . . . H         | <i>Nyssia zonaria</i>             | —         | 5, 6      | 6-9   | Sea-reed.                                      |
| Early Moth . . .              | { <i>Hibernia rupica-praria</i>   | 2         | 5         | 7-1   | Oak, hawthorn, sloe.                           |
| Spring Usher . . . E          | „ <i>leucophearia</i>             | 3         | 5, 6      | 7-1   | Oak, maple.                                    |
| Winter Moth . . .             | { <i>Cheimatobia bru-mata</i>     | 11-3      | 5, 6      | 7-12  | { Oak, and many other trees.                   |
| Gem . . . H                   | { <i>Camptogramma fluviata</i>    | 7         | 8         | 9     | { Spotted persicaria, groundsel.               |
| Silky Tissue . . . H          | <i>Scotosia dubitata</i>          | 4         | 6         | 7     | Buckthorn.                                     |
| Red-green Carpet . . . H      | <i>Cidaria psittacata</i>         | —         | 7, 8      | 9     | Oak, lime, apple, rose.                        |
| Autumn Green do. . . H        | „ <i>miata</i>                    | —         | 8         | 9     | { Oak, birch, alder, willow, poplar.           |
| Scarce Dagger . . . H         | <i>Acronycta auricoma</i>         | —         | 6, 7      | 7     | Oak, birch, bramble.                           |
| Ochreous Brown . . . H        | { <i>Leucania lithargyria</i>     | —         | 1-5       | 5, 6  | { Plantain, chickweed, grasses.                |
| Dark Sword-grass . . . H      | <i>Agrotis suffusa</i>            | 4         | 5-7       | —     | { Roots of lettuce and spinach.                |
| Chestnut . . . H              | <i>Cerastis vaccinii</i>          | —         | 6, 7      | —     | Oak, elm, willow, saw-allow.                   |
| Dark do. . . H                | „ <i>spadicea</i>                 | —         | 5, 6      | —     | { Hawthorn, sloe, and honeysuckle.             |
| Red Headed do. . . H          | { „ <i>erythrocephala</i>         | —         | 5         | —     | Low plants.                                    |
| Large do. . . H               | { <i>Scopelosoma satelititia</i>  | 3         | 5, 6      | 7, 8  | { Oak. A cannibal in confinement.              |
| Dotted do. . . H              | { <i>Dasymparubi-ginea</i>        | 3         | 5-7       | —     | Apple, and low plants.                         |



Caught in January, 1912.

H. *Ruficapraia*.

H. *Leucophaea*.

C. *Brunata*.

P. *Pilosaria*.

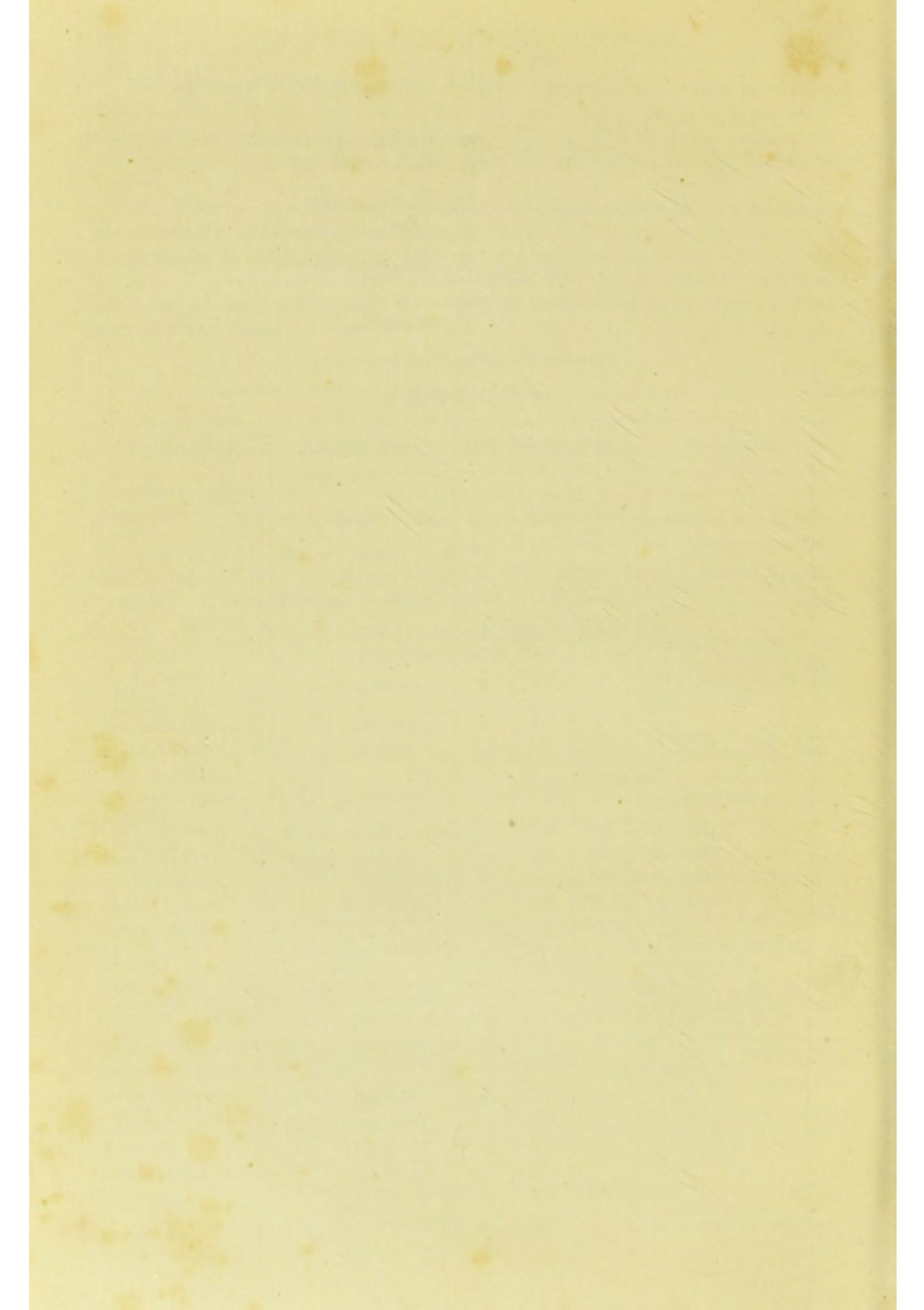
H. *Marginaria*.

C. *Vaccinii*.

1911.

New names.







INSECTS (*continued*).

| Popular Name.                   | Scientific Name.           | Ova. | Larva. | Pupa. | Food plants.                               |
|---------------------------------|----------------------------|------|--------|-------|--|
| MOTHS.                          |                            |      |        |       |  |
| Orange Upper-<br>wing . . . H } | <i>Hoporina croceago</i> . | 4    | 5, 6   | 7, 8  | Oak.                                       |
| Red Sword grass H               | <i>Calocampa vetusta</i>   | 3-4  | 4-6    | 8     | { Poplar, and various<br>plants.           |
| Common do. . . H                | „ <i>exoleta</i> .         | 4    | 4-7    | 8     | { Scabious, rest-harrow,<br>campion, dock. |
| Tawny Pinion. . H               | <i>Xylina conformis</i> .  | 3    | 5, 6   | 7, 8  | Birch, alder.                              |
| Grey Shoulder<br>Knot . . . H } | „ <i>rhizolitha</i> .      | —    | 5-7    | 7, 8  | Oak.                                       |
| Dark Pinion . . H               | „ <i>semibrunnea</i>       | —    | 7      | 8, 9  | Ash and willow.                            |
| Pale do. . . . H                | „ <i>petrificata</i> .     | —    | 5-7    | 8, 9  | Oak, birch, lime.                          |
| Herald . . . . H                | <i>Gonoptera libatrix</i>  | —    | 6, 7   | 7, 8  | { Willow, sallow, and<br>poplar.           |

## PLANTS.

| Popular Name.        | Scientific Name.               | Localities.         | Duration. |
|----------------------|--------------------------------|---------------------|-----------|
| Shepherd's Purse . . | <i>Capsella Bursa-pastoris</i> | A common weed . . . | Annual.   |
| Chickweed . . . .    | <i>Stellaria media</i> . .     | Do. . . . .         | „         |
| Groundsel . . . .    | <i>Senecio vulgaris</i> . .    | Do. . . . .         | „         |
| Red Dead-nettle . .  | <i>Lamium purpureum</i> .      | Do. . . . .         | „         |







# FEBRUARY.

## GENERAL HINTS.

WITH February the out-door life of the field naturalist may be said to begin.

As a rule, Nature ought to give visible tokens of spring; birds ought to try their voices against St. Valentine's Day; and, above all, the earth ought to be loosened from the icy chains which have held it for so long. Frozen-out pupa-diggers may therefore begin their operations.

Pupa-digging, which is as needful to the entomologist as treacling, to which we shall soon refer, requires very little apparatus. The chief requisites are a strong garden trowel, plenty of pill-boxes, and cotton-wool. But more needed than all are observant eyes, sensitive fingers, and patience. As to the trowel, a common garden trowel will answer every purpose, and there is not the least use in having a flattened blade, as is often recommended. As for "diggers," whether simple or folding, they are not one bit better than ordinary trowels, and cost twice as much.

Chip pill-boxes are the best, and can be purchased very cheaply either at a dealer's or from any chemist, and four dozen can be procured for a shilling. As a good many will be wanted in a pupa-digging expedition, the collector will find it advisable to have a bag or satchel in which to carry them, for even a dozen large pill-boxes make the pockets bulge in a very awkward manner.

Never mind the appearance of the bag; true entomologists ought to care nothing for appearances, and the general public has by this time become so used to them that it takes little or no notice of them.

The best spots for a pupa-digger are found under solitary trees, especially oaks, poplars, and elms. Chestnuts are useless. Between the roots, at a foot or so from the tree, is the usual resting-place of the pupa. Of course, the digger should face the tree when he begins operations.

He need not make a very deep hole, nor, indeed, use the trowel more than is necessary. He should put it into the ground almost perpendicularly, and then press it gradually backwards, so as to raise a tolerably large sod, which should be carefully broken to pieces between the fingers, and every particle of it subjected to the touch as well as the sight. Pupæ which would otherwise escape observation can thus be distinguished from the stones and earth which they so much resemble.

At first the pupa-digger must expect failures, but experience will certainly bring success in its train, and, as I said before, patience is one of the chief requisites in this branch of entomology. If any one wishes to learn beforehand what are the hopes and fears, the ambitions and disappointments of a pupa-digger, he should turn to the Rev. J. Greene's "Insect Hunter's Companion," a little book which is full of humour combined with practical instruction.

It will be found a good plan to carry a piece of white linen, which can be laid on the ground, and the sods broken over it. Otherwise, pupæ are apt to fall among grass or roll back into the hole, and so escape detection. A gardener's knee-cap is also useful, not to preserve the clothes, which I presume to be the worst in the ward-



robe, but to save the knee from sharp stones and sticks and wet, this last being apt to cause rheumatism.

Take with you plenty of cotton-wool in a bag—a wonderful amount can be compressed into a very small bag—and as each pupa is discovered roll it loosely in a little cotton-wool and put it into a pill-box. Several pupæ, according to their size, can be put into a single box, but they should be laid lightly in it; and if the box be not full, some cotton-wool should be placed on them so as to prevent them from shaking about.

I use the term pupa-digging for convenience sake, as it is so well understood, but in reality pupæ may be found hidden in all kinds of places, very favourite localities being a heap of fallen leaves at the foot of a tree, the loose roots of grasses, or under the bark of trees. The half-decayed needle-like leaves of the pine are generally left to decay under the trees, and, owing to their shape and texture, form distinct layers, which can be easily lifted by hand, and the pupæ which lie between them uncovered.

Dead plants and shrubs, if pulled up, especially in a dry and loose soil, will often be found to have pupæ clinging to them.

Many caterpillars “spin up,” *i.e.*, envelop themselves with silk in all kinds of crevices, sometimes attaching extraneous substances to the silk, so as to disguise its appearance. Perhaps the most difficult of discovery is the pupa of the Puss Moth (*Dicranura vinula*), which spins up in the deep crevices of bark, especially that of the willow or poplar, and interweaves little chips of bark with the silk, which not only render the cocoon almost undistinguishable from the bark, but form, when dry, a covering so strong that a penknife can scarcely penetrate it. The eye can hardly detect it, but a practised finger will often do so when the eye has failed.

Then there are the wood-boring species, such as those of the Goat Moth, the Wood Leopard Moth, and the various Clear-wings, all of which must be procured in the pupa state, as many of them are rarely seen on the wing.

A few caterpillars may be found if the weather be fine, but they will be mentioned in connection with the next month.

Having procured the pupæ, what are we to do with them? All kinds of elaborate breeding-cages are recommended, with glazed windows, wire doors, and what not. I never used anything of the kind, nor, except in the case of one or two insects, took any trouble except laying the pupæ in a box on dry earth.

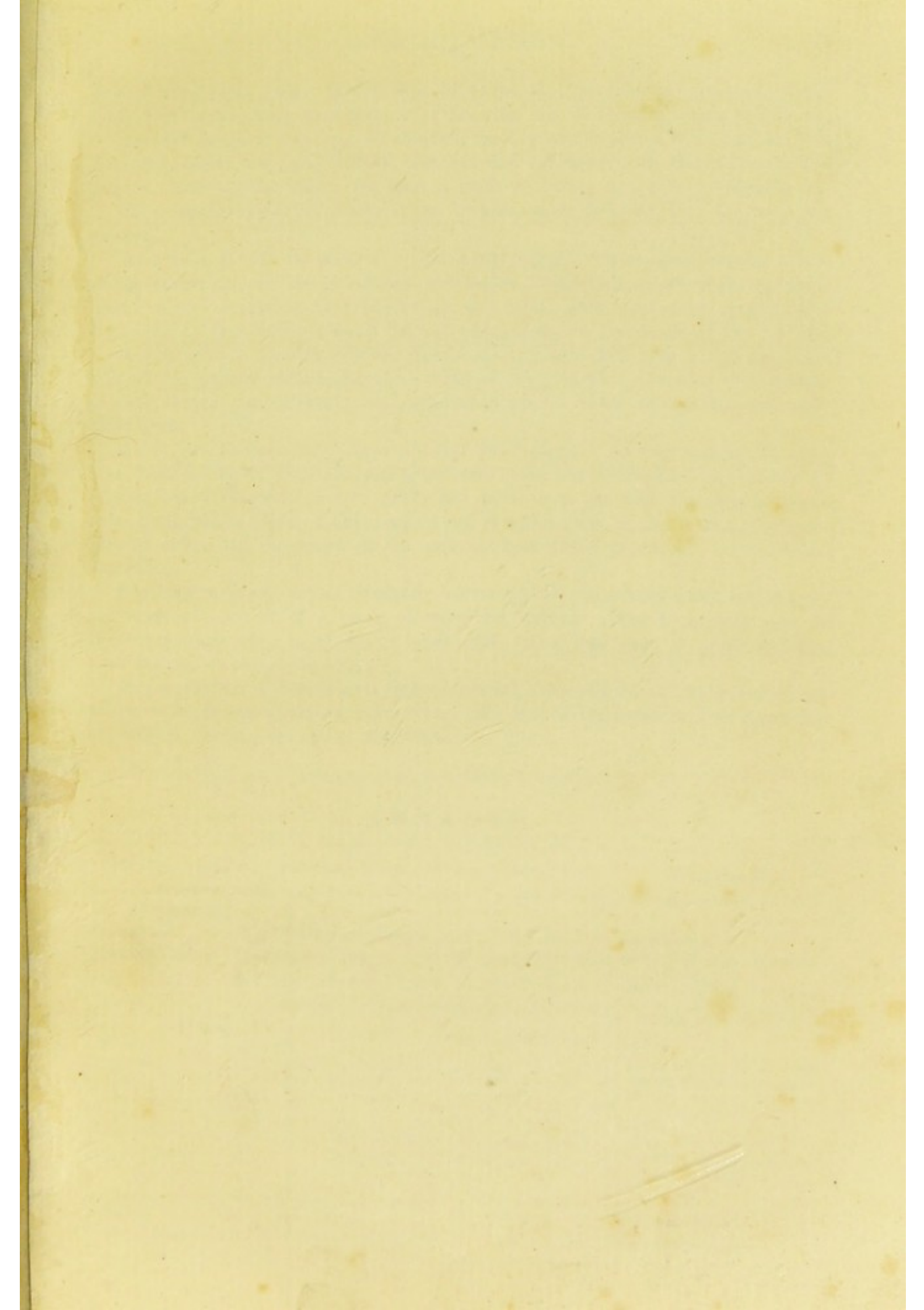
Any box will do, provided that the lid fit closely enough to prevent the escape of the moths, and the rougher it is the better for the insects. Indeed, if the sides be smooth it will be as well to roughen them artificially, as when the moths emerge from the pupal skin they want to climb to some little height, so that they may dry their wings.

The lid may open over the whole top of the box, for the moths will not fly away when it is raised. They will cling quietly to the sides or lid, and when their wings are quite dry they can be “pill-boxed” with ease.

As the term “pill-boxing” will be often used, I will explain it.

As a rule, moths, unlike butterflies, are taken while sitting. “Scissor-nets” are sold by dealers for this purpose, but are seldom used by practical entomologists, who invariably employ the pill-box. Nothing is simpler than the mode of using it. The lid is placed loosely on the box, which is then so held that the tip of the middle finger and half the first joint of the thumb come upon the edge, and hold the box firmly. The lid is then held by the first joint of the forefinger and the other





New names



half of the thumb-joint. It will then be found that the lid can be moved up and down with perfect ease, so as to open or close the box, the thumb acting as a hinge.

The movement of opening and shutting the box will require a little practice, but it soon becomes easy, and, indeed, the box and lid seem to fit themselves to the fingers almost mechanically. If, then, a moth be sitting on a paling, which is one of the favourite resorts of moths, it can be scraped, so to speak, into the box, and secured.

As a rule, it will be perfectly quiet when boxed. There are, however, a few moths which are apt to be restless and knock themselves about when captured. Such "noisy" moths, as they are called, can be at once quieted by opening the box a little way, putting a small drop of chloroform on the inside of the lid, and closing it again. A moth-collector should always have with him a tiny bottle of chloroform, tightly corked, for the benefit of noisy moths. Benzine will answer as well, but it has a strong and unpleasant smell, which is not the case with chloroform.

As to the "scissor-nets," they are like the "digger" already mentioned, cane nets, bat-fowling or clap-nets, tin traps, and other paraphernalia—very pretty to look at, but of no practical use. They are much on a par with the elegant apparatus displayed in fishing-tackle shops; and it will always be found that in proportion as either the fisherman or the entomologist gains experience he abandons apparatus.

Similarly, a young writer overloads his paragraphs with tropes and metaphors, and is greatly proud of a piece of superfine writing. But as he improves in literary workmanship he ceases to strain after effect, and aims at simplicity, the most difficult of objects to attain.

As for plants in this most uncertain of months, there will be nothing except those plants which flower all through the year. The Snowdrop, however, may generally be obtained towards the end of the month.

## I N S E C T S .

| Popular Name.                      | Scientific Name.            | Ova.      | Larva.    | Pupa. | Food-plants.  |
|------------------------------------|-----------------------------|-----------|-----------|-------|---|
| <b>BUTTERFLIES.</b>                |                             |           |           |       |   |
| Brimstone . H                      | <i>Gonepteryx rhamni</i>    | 4         | 6, 7      | 7     | Buckthorn.  |
| Clouded Yellow H                   | <i>Colias Edusa</i> . .     | 9-5       | 6, 7      | 8     | { Dutch clover, lucerne,                            |
| Pale do. do. . H                   | „ <i>Hyale</i> . .          | 5         | 7         | 8     | { trefoils, &c.                                     |
| Comma . . H                        | <i>Vanessa C-album</i> .    | 5 & 7     | 5 & 8     | 6 & 9 | { Clover, melilot, lucerne,                         |
| Small Tortoise- }<br>shell . . H } | „ <i>urticæ</i> .           | 4, 5, & 7 | 5, 6, & 8 | 6 & 8 | { Elm, willow, sloe, hop,<br>{ nettle, and currant. |
| Large do. . . H                    | „ <i>polychloros</i>        | 5-10      | 10-5, 6   | 7     | { Elm, aspen, osier, wil-                           |
| Camberwell }<br>Beauty . . H }     | „ <i>Antiope</i> .          | 5         | 6, 7      | 7     | { low, and fruit-trees.                             |
| Peacock . . H                      | „ <i>Io</i> .               | 4, 5      | 6, 7      | 7     | { Birch, poplar, willow,                            |
| Red Admiral . H                    | „ <i>Atalanta</i> .         | 5         | 6, 7      | 7     | { and nettle.                                       |
| Painted Lady . H                   | „ <i>cardui</i> .           | 6         | 6-9       | 7-9   | { Nettle.<br>{ Do.                                  |
| <b>MOTHS.</b>                      |                             |           |           |       |   |
| Humming-bird }<br>Hawk . . H }     | <i>Macroglossa stel-</i> }  | 5         | 8, 9      | —     | Hedge bedstraw.                                     |
| Small Eggar . .                    | <i>latarum</i> . }          | 4         | 5-7       | 7-1   |   |
|                                    | <i>Eriogaster lanestris</i> |           |           |       | Hawthorn, sloe.                                     |



INSECTS (*continued*).

| Popular Name.                  | Scientific Name.                                 | Ova. | Larva. | Pupa. | Food-plants.                                    |
|--------------------------------|--|------|--------|-------|---|
| <b>MOTHS.</b>                  |  |      |        |       |   |
| Pale Brindled Beauty . . . }   | <i>Phigalia pilosaria</i> .                      | —    | 5, 6   | 9-11  | Oak and elm.                                    |
| Belted Beauty . . . H }        | <i>Nyssia zonaria</i> .                          | —    | 5, 6   | 6-9   | Sea-reed.                                       |
| Small Brindled do. . . . . H } | „ <i>hispidaria</i> .                            | —    | 5, 6   | 6-1   | Oak.  |
| Great Oak do. . . E }          | { <i>Amphidasis pro-</i><br><i>dromaria</i> . }  | —    | 6, 7   | 8-2   | Oak, elm, birch, and nut.                       |
| Engrailed . . . E }            | { <i>Tephrosia cre-</i><br><i>puscularia</i> . } | —    | 8, 9   | 10-1  | { Elm, poplar, willow,<br>birch, and alder.     |
| Early Moth . . . }             | { <i>Hibernia rupica-</i><br><i>praria</i> . }   | 2    | 5      | 7-1   | Oak, hawthorn, and sloe.                        |
| Spring Usher . . . }           | „ <i>leucophearia</i> .                          | 3    | 5, 6   | 7-1   | Oak and maple.                                  |
| Dotted Border . . . }          | „ <i>progemma</i> .                              | —    | 5, 6   | 7-1   | Oak, birch, and nut.                            |
| March Moth . . . E }           | { <i>Anisopteryx</i><br><i>cæscularia</i> . }    | —    | 5, 6   | 10-1  | { Oak, elm, lime, haw-<br>thorn, apple.         |
| Silky Tissue . . . H }         | <i>Scotosia dubitata</i> .                       | 4    | 6      | 7     | Buckthorn.                                      |
| Red-green Carpet H }           | <i>Cidaria psittacata</i> .                      | —    | 7, 8   | 9     | Oak, lime, apple, & rose.                       |
| Autumn Green do. . . . . H }   | „ <i>miata</i> .                                 | —    | 8      | 9     | { Oak, birch, poplar, wil-<br>low, and alder.   |
| Ochreous Brown H }             | { <i>Leucania lithar-</i><br><i>gyria</i> . }    | 7    | 1-5    | 5-6   | { Plantain, chickweed,<br>and grasses.          |
| Dark Sword-grass . . . H }     | <i>Agrotis suffusa</i> .                         | 4    | 5-7    | 7-4   | { Roots of lettuce,<br>spinach, &c.             |
| Chestnut . . . H }             | <i>Cerastis vaccinii</i> .                       | —    | 6-7    | —     | Oak, elm, willow, saw-<br>tooth.                |
| Dark do. . . . H }             | „ <i>spadicea</i> .                              | —    | 5, 6   | —     | { Hawthorn, sloe, and<br>honeysuckle.           |
| Red-headed do. H }             | „ <i>erythrocephala</i> .                        | —    | 5      | —     | Low plants.                                     |
| Large do. . . . H }            | { <i>Scopelosoma</i><br><i>satellitica</i> . }   | 3    | 5, 6   | 7, 8  | { Oak. A cannibal in<br>confinement.            |
| Dotted do. . . . H }           | { <i>Dasycampa rubi-</i><br><i>ginea</i> . }     | 3    | 5-7    | —     | Apple and low plants.                           |
| Orange Upper-wing . . . H }    | <i>Hoporina croceago</i> .                       | 4    | 5, 6   | 7, 8  | Oak.  |
| Olive Rustic . . . H }         | <i>Dasypolia Templi</i> .                        | 3    | 4-7    | 8     | Cow parsley.                                    |
| Red Sword-grass H }            | <i>Calocampa vetusta</i> .                       | 3, 4 | 4-6    | 8     | { Poplar and various low<br>plants.             |
| Common do. . . . H }           | „ <i>exoleta</i> .                               | 4    | 4-7    | 8     | { Campion, scabious, rest-<br>harrow, dock, &c. |
| Tawny Pinion . . . H }         | <i>Xylina conformis</i> .                        | 3    | 5, 6   | 7, 8  | Birch and alder.                                |
| Grey Shoulder-knot . . . H }   | „ <i>rhizolitha</i> .                            | —    | 5-7    | 7, 8  | Oak.  |
| Dark Pinion . . . H }          | „ <i>semibrunnea</i> .                           | —    | 7      | 8, 9  | Ash and willow.                                 |
| Pale do. . . . . H }           | „ <i>petrificata</i> .                           | —    | 5-7    | 8, 9  | Oak, birch, and lime.                           |
| Herald . . . . . H }           | <i>Gonoptera libatrix</i> .                      | —    | 6, 7   | 7, 8  | Poplar, willow, saw-<br>tooth.                  |

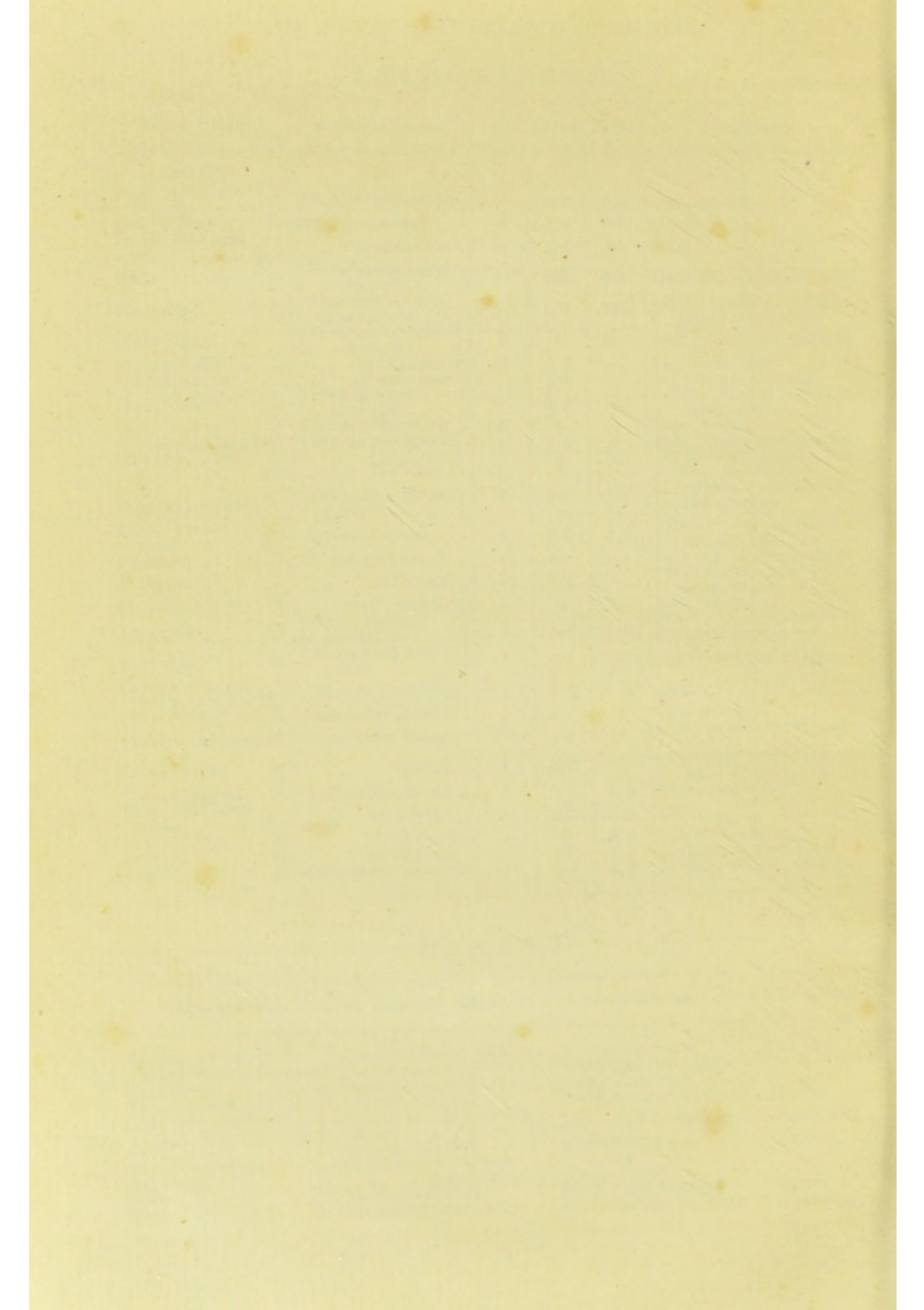
## PLANTS.

| Popular Name.                        | Scientific Name.                                  | Localities.             | Duration.  |
|--------------------------------------|---|-------------------------|------------|
| Shepherd's Purse . . .               | <i>Capsella Bursa-pastoris</i>                    | A common weed . . .     | Annual.    |
| Vernal Whitlow Grass.                | <i>Draba verna</i> . . .                          | Walls and dry banks . . | „          |
| Chickweed . . . . .                  | <i>Stellaria media</i> . . .                      | A common weed . . .     | „          |
| Furze, Gorse, or Whin .              | <i>Ulex Europæus</i> . . .                        | Commons and thickets .  | Shrub.     |
| Strawberry-leaved Cinquefoil . . . } | { <i>Potentilla Fragarias-</i><br><i>trum</i> . } | Banks and hedges . . .  | Perennial. |
| Groundsel . . . . .                  | <i>Senecio vulgaris</i> . . .                     | A common weed . . .     | Annual.    |
| Red Dead-nettle . . .                | <i>Lamium purpureum</i> . .                       | Do. . . . .             | „          |
| Henbit do. . . . .                   | „ <i>amplexicaule</i> . . .                       | Waste places . . .      | „          |
| Hazel . . . . .                      | <i>Corylus avellana</i> . . .                     | Woods and thickets . .  | Shrub.     |
| Snowdrop . . . . . E                 | <i>Galanthus nivalis</i> . . .                    | Meadows and thickets .  | Perennial. |



New names.







# M A R C H .

## GENERAL HINTS.

Should March be propitious, and vegetation be tolerably forward, we may hope to find many caterpillars, and go larva hunting.

Success in this pursuit requires practice and patience, just as pupa-digging does, and an expert will fill his boxes on the very ground that a novice has searched, and on which he has found nothing.

Look under the leaves rather than above them, and avoid shaking the plants, for many caterpillars allow themselves to fall when alarmed, and are then so hidden among the herbage that they cannot be discovered.

Advantage, however, may be taken of this habit by spreading a cloth under the branches, and then shaking them. In default of a cloth, an umbrella, opened and reversed, will be better than nothing.

After dark is perhaps the best time for discovering and capturing larvæ, the light of a lantern bringing out their bodies in bold contrast to the leaves on which they are feeding. This plan is doubly valuable, because there are many caterpillars which conceal themselves during the day, some even burrowing underground, and only seeking for their food at night.

Great care must be taken of the caterpillars, as they will not endure rough handling, and may either die or only produce crippled moths. Different species should not be put into the same box, and, in any case, they ought to have plenty of room in the pill-boxes. Some of the hairy species are most irritating to a delicate skin, and it will be safer to get the caterpillar into the box without touching it with the fingers. Even the larva of the Tiger Moth, popularly known as the "Woolly Bear," is exceedingly irritating, but the worst of all, as far as my experience goes, are those of the pretty and common Gold-tailed Moth, the Drinker, and Oak Eggar.

Feeding the larvæ, when they are obtained, is really a laborious task, for the amount of food which half-grown caterpillars will consume is almost incredible; and it is a necessity that the food should be perfectly fresh, and, if possible, gathered daily. Fortunately, many caterpillars will feed indifferently on several plants, and if this were not the case, the task of supplying a few hundred caterpillars with food would be one man's work.

When I was at college I had an average of eight or nine hundred larvæ to feed, and could not have done so had I not impressed a scout to run out during his few intervals of work, and procure food. Besides him, a regular agent used to bring food daily, and I had one or two volunteer assistants as well.

Moving the larvæ from the old to the new food is not very easy. As a rule, however, the food should be laid alternately on opposite sides of the breeding cage. The caterpillars will then move of their own accord to the new food. The old food and withering plants must then be carefully examined, lest any caterpillars should have "spun up" in them, and should be then burned.



Very great care must be taken of the cleanliness of the feeding-cage, for the odour of decaying plants is always objectionable, and when they have been eaten by caterpillars is indescribably offensive.

Elaborate cages are not needed for the breeding of caterpillars—almost any box will answer the purpose, and, as so many of them burrow in the ground before they change into the pupa, there should be about a couple of inches of dry earth at the bottom of the box.

In March you may begin to search palings, and, indeed, it is a good plan to keep an eye on them throughout the year, no matter what may be the month. For many moths palings have a positive fascination, and the blacker they are the better the insects seem to like them.

Until the eye is trained to the task, it is exceedingly difficult to detect a moth when settled on a paling. It may seem absurd to say that a white moth on a black paling, or a black moth on a white paling, can escape detection, and yet every practical entomologist knows that such is the case.

When they are seen they should be pill-boxed, and, as every moth-collector ought unceasingly to examine every paling which he passes, and always to have a nest or two of pill-boxes in his pocket, his collection will have greatly increased by the end of the season.

Even more important than palings is treacling, an art which has undergone great vicissitudes. It has entirely superseded the old plan of "sugaring."

Do not go to the dealers for apparatus. They will furnish all kinds of expensive paraphernalia, whereas nothing expensive need be purchased except a lantern with a strong reflector. Space being valuable, I will compress treacling into the smallest possible space.

Get some of the coarsest treacle that can be obtained—"green" treacle is the strongest, and golden syrup the weakest when used alone. A mixture, however, of green treacle and golden syrup, in equal parts, is the best. Also, buy a bottle of the very coarsest and newest rum, and a common painter's brush. A bottle or two of rum will last for a whole season.

During the day-time look out for trees growing singly or in small patches, or on the outskirts of woods and copses. Avoid chestnuts, as in pupa-digging. Mark out a number of them—if possible in a large circle—and then on a warm, still, moonless night, start off for the trees in your very worst of clothes. Should there be rain, so much the better, and if you be drenched to the skin you will be none the worse, provided that you do not sit down in wet clothes.

Take with you some of the treacle in a pot, or a blacking-bottle will answer admirably, put about a wine-glass full of the rum in a little bottle, have the lantern trimmed and the reflector polished, and do not forget matches. It may seem to be a useless caution, but as a season never passes without many treaclers forgetting to bring matches with them, it is really needed. Also, if you use safety matches, remember that they will only ignite on their own box. Pill-boxes and a satchel you will have, as in pupa-digging.

Being arrived at the spot, light the lantern, mix the rum with the treacle, and then paint a rather long streak upon the trunk of the tree; a couple of inches in breadth, and at least two feet in length, will answer best. Streaks have been found in practice to answer better than patches. They should not be higher than the shoulder, and the treacle should be worked well into the crevices of the bark, so that it may not drop on the ground and be wasted on the slugs, which always find



their way to a treacled tree. So do field-mice, but as they can climb the trunk it is useless to take any precautions against them.

Going round the trees, and treacling them for the first time, is rather a long operation, and it will be as well to begin it before dark, so as to spare the oil in the lantern. Moreover, moths always come in greater numbers when the treacle is laid on before darkness sets in. Afterwards, a mere streak with the treacle brush will serve to freshen the scent.

Should there be many trees to be treacled the blacking-bottle will not hold enough treacle, and a larger vessel must be employed. A very excellent one can be made out of an emptied mustard tin. A wire handle can be attached to it by means of a couple of holes in the sides, about an inch and a half from the top, and if the lid be carried a hole should be cut in it for the handle of the brush.

Darkness will have set in by the time that you have treacled the last tree. Now take the lantern in the left hand, and a pill-box in the right, and begin your round of the trees. Direct the light of the lantern to the *foot* of the tree, and examine it carefully upwards. You will probably see some moths seated on the treacle and feeding greedily on it. Box them, taking care to hold the box under them, so that they may fall into it, and so proceed until you have reached the top of the treacle.

If you begin at the upper end of the streak a moth may be alarmed, allow itself to fall, and so alarm others below it.

When you have gone the round of the trees transfer the moths, boxes and all, to the satchel (which it will be as well to hide), take a fresh supply of empty boxes, and start again. Some treaclers prefer to work alone, while others like to have a companion, and in that case, they take alternate choice of the captured moths.

When moths are taken on treacle they should be left in the boxes for at least twenty-four hours, or otherwise their bodies will be full of treacle, which will sooner or later make its way through the tissues and spoil the specimen.

In this month the sallows will be in flower, and may be treated in much the same manner. As a rule it is useless to put treacle near flowering sallows, though there are instances where the moths have come to both baits. Both treacle and sallows should be postponed to the end of March. When the collector visits the sallows, he should, if possible, spread a white sheet under them, as the moths which frequent the flowers are apt to drop when alarmed. The umbrella, as before mentioned, will answer in default of a sheet.

Careful management of the light is required with sallows, as it should only be directed on a few flowers at a time. A bull's-eye lantern is best for this purpose, as it throws a narrow bar of light, and does not cause general alarm among the sallows feeders.

Botanical work will be light during the whole of this month, but it will be as well to look after those plants which are marked as being local.

Very few birds will have laid their eggs, but those of the thrush and blackbird may generally be found in March.



## INSECTS.

| Popular Name.                | Scientific Name.                                  | Ova.     | Larva.         | Pupa.   | Food-plants.                                       |
|------------------------------|---|----------|----------------|---------|--|
| <b>BUTTERFLIES.</b>          |   |          |                |         |  |
| Brimstone . H                | <i>Gonepteryx rhamni</i>                          | 4        | 6, 7           | 7       | Buckthorn.   |
| Clouded Yellow H             | <i>Colias Edusa</i> .                             | 5-9      | 6, 7           | 8       | { Dutch clover, lucerne,<br>trefoils, &c.          |
| Pale do. do. H               | „ <i>Hyale</i> .                                  | 5        | 7              | 8       | Clover, melilot, lucerne,                          |
| Comma . . H                  | <i>Vanessa C-album</i> .                          | 5 & 7    | 5 & 8          | 6 & 9   | { Elm, willow, sloe, hop,<br>nettle, and currant.  |
| Small Tortoise-shell . . H   | „ <i>urticæ</i> .                                 | 4, 5 & 7 | 5, 6 & 8       | 6 & 8   | Nettle.  |
| Large do. . . H              | „ <i>polychloros</i>                              | 5 s. 10  | s. 10 & 5      | 7       | { Elm, aspen, osier, wil-<br>low, and fruit-trees. |
| Camberwell Beauty . . H      | „ <i>Antiope</i> .                                | 5        | 6, 7           | 7       | { Birch, poplar, willow,<br>and nettle.            |
| Peacock . . H                | „ <i>Io</i> .                                     | 4, 5     | 6, 7           | 7       | Nettle.  |
| Red Admiral . H              | „ <i>Atalanta</i> .                               | 5        | 6, 7           | 7       | Do.  |
| Painted Lady . H             | „ <i>cardui</i> .                                 | 6        | 6-9            | 7-9     | { Thistles, nettle, mal-<br>low, and scarlet bean. |
| <b>MOTHS.</b>                |   |          |                |         |  |
| Small Eggar . .              | <i>Eriogaster lanestris</i>                       | 4        | 5-7            | 7-1     | Hawthorn, sloe.                                    |
| Kentish Glory . .            | { <i>Endromis versi-</i><br><i>color</i> . . . }  | 4        | 6, 7           | 8-3     | Birch.   |
| Early Thorn . .              | <i>Selenia illunaria</i> .                        | 4 & 7    | 6 & 9          | 6 & 9-3 | { Ash, willow, oak, haw-<br>thorn, and plum.       |
| Pale Brindled Beauty . .     | <i>Phigalia pilosaria</i>                         | —        | 5, 6           | 9-11    | Oak, elm.  |
| Belted Beauty . H            | <i>Nyssia zonaria</i> .                           | —        | 5, 6           | 6-9     | Sea-reed.  |
| Small Brindled Beauty . .    | „ <i>hispidaria</i> .                             | 4        | 5, 6           | 6-1     | Oak.   |
| Brindled Beauty .            | <i>Biston hirtaria</i> .                          | 4        | 6, 7           | 9-3     | { Elm, ash, lime, and<br>fruit-trees.              |
| Great Oak do. .              | { <i>Amphidasis pro-</i><br><i>dromaria</i> . }   | —        | 6, 7           | 8-2     | Oak, elm, birch, and nut.                          |
| Engrailed . . .              | { <i>Tephrosia cre-</i><br><i>puscularia</i> . }  | —        | 8, 9           | 10-1    | { Elm, poplar, willow,<br>birch, and alder.        |
| Spring Usher . .             | { <i>Hibernia leuco-</i><br><i>phearia</i> }      | 3        | 5, 6           | 7-1     | Oak, maple.  |
| Dotted Border . .            | „ <i>progemma</i>                                 | —        | 5, 6           | 7-1     | Oak, birch, and nut.                               |
| March Moth . .               | { <i>Anisopteryx æs-</i><br><i>cularia</i> . }    | —        | 5, 6           | 10-1    | { Oak, elm, lime, haw-<br>thorn, and apple.        |
| Short Pug . . .              | { <i>Eupithecia ab-</i><br><i>breviata</i> . }    | —        | 6, 7           | —       | Oak.   |
| Shoulder Stripe Carpet . . M | <i>Anticlea badiata</i> .                         | 3        | 6              | 7-3     | Dog-rose.  |
| Streamer . . M               | „ <i>derivata</i> .                               | 3, 4     | 6              | 7-3     | { Dog-rose and honey-<br>suckle.                   |
| Many-lined . .               | { <i>Phibalapteryx</i><br><i>polygrammata</i> }   | —        | —              | —       | —  |
| Silky Tissue . H             | <i>Scotosia dubitata</i> .                        | 4        | 6              | 7       | Buckthorn.   |
| Red-green Carpet H           | <i>Cidaria psittacata</i>                         | —        | 6, 7           | 9       | Oak, lime, apple, rose.                            |
| Autumn Green Carpet . . H    | „ <i>miata</i> .                                  | —        | 8              | 9       | { Oak, birch, poplar, wil-<br>low, and alder.      |
| Rannoch Sprawler .           | <i>Petasia nubeculosa</i>                         | 4        | 5, 6           | —       | Birch.   |
| Birch Prominent .            | { <i>Notodonta car-</i><br><i>melita</i> . }      | —        | 6, 7           | 8-3     | Do.  |
| Yellow-horned . .            | { <i>Cymatophora fla-</i><br><i>vicornis</i> }    | —        | 6, 7           | 9       | Do.  |
| Frosted Green . .            | „ <i>ridens</i> .                                 | 4        | 6, 7           | 8       | Oak.   |
| Ochreous Brown H             | { <i>Leucania lithar-</i><br><i>gyria</i> . }     | —        | 1-5            | 5, 6    | { Plantain, chickweed,<br>and grasses.             |
| Silver Cloud . H             | { <i>Xylomiges con-</i><br><i>spicillaris</i> . } | —        | 6-8            | 9-3     | { Bird's-foot trefoil and<br>other low plants.     |
| Dark Sword-grass H           | <i>Agrotis suffusa</i> .                          | —        | 5-7            | —       | { Roots of lettuce,<br>spinach, &c.                |
| Pearly Underwing H           | „ <i>saucia</i> .                                 | —        | 11-1 &<br>7, 8 | —       | { Dock, plantain, and<br>other low plants.         |
| Pine Beauty . E              | <i>Trachea piniperda</i>                          | —        | 6, 7           | 8-2     | Fir and pine.                                      |



new names.



New names.



## INSECTS (continued).

| Popular Name.                        | Scientific Name.                                | Ova. | Larva. | Pupa. | Food-plants.                                     |
|--------------------------------------|---|------|--------|-------|--|
| <b>MOTHS.</b>                        |   |      |        |       |  |
| Hebrew Character }<br>E }            | <i>Tæniocampa gothica</i> }                     | 4    | 5-8    | 7-3   | { Oak, saw, broom,<br>lilac, and dock.           |
| White Letter }<br>Rustic . . . E }   | " <i>leucographa</i> }                          | 4    | 6, 7   | 8-3   | Plantain.  |
| Red Quaker . . E                     | " <i>rubricosa</i> .                            | 4    | 5-7    | 8-3   | Elm and dock.                                    |
| Clouded Drab . E                     | " <i>instabilis</i> .                           | —    | 5-7    | 8-3   | { Oak, willow, saw,<br>dock.                     |
| Northern do. . E                     | " <i>opima</i> . .                              | 4    | 5-7    | 8-3   | Willow, saw, rose.                               |
| Intermediate . E                     | " <i>populeti</i> .                             | 4    | 6, 7   | 7-3   | Poplar.  |
| Common Quaker E                      | " <i>stabilis</i> .                             | —    | 5-7    | 8-3   | Oak, elm, and hawthorn.                          |
| Lead - coloured }<br>Drab . . . E }  | " <i>gracilis</i> .                             | 5    | 5-7    | 8-3   | { Willow, saw, and<br>low plants.                |
| Blossom Under- }<br>wing . . . E }   | " <i>miniosa</i> .                              | 4    | 5, 6   | 7-2   | Oak, birch, hawthorn.                            |
| Twin - spotted }<br>Quaker . . . E } | " <i>munda</i> .                                | —    | 5, 6   | 7-3   | Oak, elm, and poplar.                            |
| Small do. . . . E                    | " <i>cruda</i> . .                              | —    | 5-7    | 8-3   | { Oak, saw, nut. A can-<br>nibal in confinement. |
| Chestnut . . . H                     | <i>Cerastis vaccinii</i> .                      | —    | 6, 7   | —     | Oak, elm, willow, saw.                           |
| Dark do. . . . H                     | " <i>spadicea</i> .                             | —    | 5, 6   | —     | { Hawthorn, sloe, and<br>honeysuckle.            |
| Red-headed do. H                     | " <i>erythrocephala</i>                         | —    | 5      | —     | Low plants.                                      |
| Large do. do. . H                    | { <i>Scopelosoma sa-</i><br><i>tellitia</i> . } | 3    | 5, 6   | 7, 8  | { Oak. A cannibal in con-<br>finement.           |
| Dotted do. . . H                     | { <i>Dasycompa rubi-</i><br><i>ginea</i> . }    | 3    | 5-7    | —     | Apple and low plants.                            |
| Orange Upper- }<br>wing . . . H }    | <i>Hoporina croceago</i> .                      | 4    | 5, 6   | 7     | Oak.   |
| Olive Rustic . . H                   | <i>Dasypolia templi</i> .                       | 3    | 4-7    | 8     | Cow parsley.                                     |
| Green-brindled Dot                   | <i>Valeria oleagina</i> .                       | —    | 5, 6   | —     | Sloe.  |
| Early Grey . . .                     | { <i>Xylocampa litho-</i><br><i>rhiza</i> . }   | —    | 6-8    | 10-2  | Honeysuckle.                                     |
| Red Sword-grass H                    | <i>Calocampa vetusta</i>                        | 3, 4 | 4-6    | 8     | { Poplar and various<br>plants.                  |
| Common do. . . H                     | " <i>exoleta</i>                                | 4    | 4-7    | 8     | { Campion, scabious,<br>rest-harrow, dock, &c.   |
| Tawny Pinion . H                     | <i>Xylina conformis</i> .                       | 3    | 5, 6   | 7, 8  | Birch and alder.                                 |
| Grey Shoulder- }<br>knot . . . H }   | " <i>rhizolitha</i> .                           | —    | 5-7    | 7, 8  | Oak.   |
| Dark Pinion . . H                    | " <i>semibrunnea</i>                            | —    | 7      | 8, 9  | Ash and willow.                                  |
| Pale do. . . . H                     | " <i>petrificata</i> .                          | 5    | 5-7    | 8, 9  | Oak, birch, and lime.                            |
| Orange Under- }<br>wing . . . E }    | <i>Brephos parthenias</i>                       | —    | 6-8    | 9-3   | Birch, beech, and oak.                           |
| Light do. . . . E                    | " <i>notha</i> .                                | —    | 6      | —     | Aspen and saw.                                   |
| Herald . . . . H                     | <i>Gonoptera libatrix</i> .                     | —    | 6, 7   | 7, 8  | { Poplar, willow, saw,<br>&c.                    |

## PLANTS.

| Popular Name.                         | Scientific Name.               | Localities.                | Duration.  |
|---------------------------------------|--------------------------------|----------------------------|------------|
| Wood Anemone or }<br>Windflower . . } | <i>Anemone nemorosa</i> .      | Woods . . . .              | Perennial. |
| Lesser Celandine . .                  | <i>Ranunculus Ficaria</i> .    | Banks, &c. . . .           | "          |
| Green Hellebore . .                   | <i>Helleborus viridis</i> .    | Woods on chalk soil .      | "          |
| Stinking do. . . .                    | " <i>fatidus</i> .             | Woods . . . .              | "          |
| Shepherd's Purse . .                  | <i>Capsella Bursa-pastoris</i> | A common weed . .          | Annual.    |
| Rock Hutchinsia . .                   | <i>Hutchinsia petraea</i> .    | Limestone rocks. Local     | "          |
| Danish Scurvy Grass .                 | <i>Cochlearia Danica</i> .     | Cliffs and hedges near sea | "          |
| Vernal Whitlow Grass                  | <i>Draba verna</i> . . .       | Walls and dry banks .      | "          |



P L A N T S (*continued*).

| Popular Name.                                    | Scientific Name.  | Localities.                               | Duration.   |
|--|---|---|-------------|
| Yellow Alpine Whit-<br>low Grass . . . }         | <i>Draba aizoides</i> . . . }                             | { Rocks and walls near<br>Swansea }       | Perennial.  |
| Sweet Violet . . . }                             | <i>Viola odorata</i> . . . }                              | Woods and hedge-banks                     |             |
| Chickweed . . . }                                | <i>Stellaria media</i> . . . }                            | A common weed . . . }                     | Annual.     |
| Little, or Five-sta-<br>mened Mouse-ear }        | { <i>Cerastium semidecan-</i><br><i>drum</i> . . . }      | Waste places and walls .                  | "           |
| Furze, Gorse, or Whin.<br>Sloe, or Blackthorn; } | <i>Ulex Europæus</i> . . . }                              | Commons and thickets .                    | Shrub.      |
| Bullace, or Wild<br>Plum }                       | <i>Prunus communis</i> . . . }                            | Woods and hedges . . . }                  | Small tree. |
| Strawberry-leaved<br>Cinquefoil . . . }          | { <i>Potentilla Fragari-</i><br><i>astrum</i> . . . }     | Banks and hedges . . . }                  | Perennial.  |
| Purple Saxifrage. . . }                          | <i>Saxifraga oppositifolia</i>                            | Mountain summits . . . }                  | "           |
| Golden do. . . . . }                             | { <i>Chrysosplenium al-</i><br><i>ternifolium</i> . . . } | Damp places. Rare. . . }                  | "           |
| Mistletoe. . . . . }                             | <i>Viscum album</i> . . . }                               | { Parasitic, chiefly on<br>apple . . . }  | "           |
| Colt's-foot . . . . . }                          | <i>Tussilago Farfara</i> . . . }                          | Clayey banks . . . . . }                  |             |
| Groundsel . . . . . }                            | <i>Senecio vulgaris</i> . . . }                           | A common weed . . . . . }                 | Annual.     |
| Red Dead-Nettle . . . }                          | <i>Lamium purpureum</i> . . . }                           | Do. . . . . }                             | "           |
| Henbit do. . . . . }                             | " <i>amplexicaule</i> . . . }                             | Waste places . . . . . }                  | "           |
| Primrose . . . . . }                             | <i>Primula vulgaris</i> . . . }                           | Woods and banks . . . . . }               | Perennial.  |
| Mezereon . . . . . }                             | <i>Daphne Mezereum</i> . . . }                            | Woods . . . . . }                         | Shrub.      |
| Spurge-Laurel . . . . }                          | " <i>Laureola</i> . . . . . }                             | Do. . . . . }                             | "           |
| Shrubby Spurge . . . . }                         | <i>Euphorbia Characias</i> . . . }                        | Bushy places. Not native                  | Perennial.  |
| Common Elm . . . . . }                           | <i>Ulmus campestris</i> . . . }                           | Woods and hedges . . . }                  | Tree.       |
| Cork-barked do. . . . . }                        | " <i>suberosa</i> . . . . . }                             | Hedges . . . . . }                        | "           |
| Dutch do. . . . . }                              | " <i>major</i> . . . . . }                                | Do. Doubtful native . . . }               | "           |
| Smooth do. . . . . }                             | " <i>glabra</i> . . . . . }                               | Woods . . . . . }                         | "           |
| Wych do. . . . . }                               | " <i>montana</i> . . . . . }                              | Do. . . . . }                             | "           |
| Alder . . . . . }                                | <i>Alnus glutinosa</i> . . . . . }                        | Damp ground . . . . . }                   | "           |
| Purple Willow . . . . }                          | <i>Salix purpurea</i> . . . . . }                         | Damp meadows . . . . . }                  | "           |
| Rose do. . . . . }                               | " <i>Helix</i> . . . . . }                                | Damp ground . . . . . }                   | "           |
| White Poplar . . . . . }                         | <i>Populus alba</i> . . . . . }                           | Damp woods . . . . . }                    | "           |
| Hoary do. . . . . }                              | " <i>canescens</i> . . . . . }                            | Meadows . . . . . }                       | "           |
| Aspen . . . . . }                                | " <i>tremula</i> . . . . . }                              | Damp woods . . . . . }                    | "           |
| Hazel . . . . . }                                | <i>Corylus avellana</i> . . . . . }                       | Woods and thickets . . . }                | Shrub.      |
| Yew . . . . . }                                  | <i>Taxus baccata</i> . . . . . }                          | Woods on chalk soil . . . }               | Tree.       |
| Snake-head Iris . . . . }                        | <i>Iris tuberosa</i> . . . . . }                          | Not native. . . . . }                     | Perennial.  |
| Spring Crocus. . . . . }                         | <i>Crocus vernus</i> . . . . . }                          | Meadows . . . . . }                       | "           |
| Small Purple do. . . . }                         | " <i>præcox</i> . . . . . }                               | Suffolk. Not native . . . }               | "           |
| Golden do. . . . . }                             | " <i>aureus</i> . . . . . }                               | Meadows . . . . . }                       | "           |
| Daffodil . . . . . }                             | { <i>Narcissus Pseudo-</i><br><i>Narcissus</i> . . . }    | Damp woods . . . . . }                    | "           |
| Snowdrop . . . . . }                             | <i>Galanthus nivalis</i> . . . . . }                      | Meadows and thickets . . }                | "           |
| Butcher's Broom . . . . }                        | <i>Ruscus aculeatus</i> . . . . . }                       | Woods . . . . . }                         | "           |
| Two-leaved Squill. . . }                         | <i>Scilla bifolia</i> . . . . . }                         | Do. Doubtful native . . . }               | "           |
| Yellow Gagea . . . . . }                         | <i>Gagea lutea</i> . . . . . }                            | { Damp thickets and<br>pastures. Local. } | "           |
| Wood Hairy-Rush. . . . }                         | <i>Luzula pilosa</i> . . . . . }                          | Woods . . . . . }                         | "           |
| Annual Meadow-grass. }                           | <i>Poa annua</i> . . . . . }                              | Waste ground . . . . . }                  | Annual.     |
|  | <i>Knappia agrostidea</i> . . . }                         | Sandy sea-side pastures .                 | "           |



## APRIL.

### GENERAL HINTS.

GET up early and go round palings and tree-trunks.

Insects' eggs may still be found.

Not much pupa-digging need be done this month, but continue to search at roots of weeds and among last year's leaves.

Caterpillars are now becoming plentiful, and can be found both by night and day, as before mentioned. "Sweeping" is useful, for which a sweep-net is a necessity. The wire of the net ought to be stronger than is usually made, and should, indeed, almost deserve the name of bar rather than wire. If it be not very heavy its weight will not carry it through the herbage.

The handle should be of ash, and at least five feet long. The net itself is best when made of strong brown holland, deep, and cut so as to have no corners wherein the captives can hide, and in which they are often injured or even killed.

Both hands are employed with the sweep-net, and the best way is, to swing it against the herbage with a firm, but not violent sweep, so as to scrape the plants from the roots upwards. A peculiar knack is soon acquired of drawing the net towards you at the conclusion of the sweep, so as to shake the dislodged insects into it as they fall from the leaves or flowers. At first, sweeping will be a very fatiguing task, but the arms soon become accustomed to it, and then it scarcely tires them at all.

Very valuable captures are often made with the sweep-net, the contents of which are always of a very miscellaneous kind. Larvæ, snails, slugs, bees, beetles, and spiders, will always be there, and I once, to my astonishment, found a frog in the net. I suppose that it must have been alarmed, and taken a leap just as the net came across it.

In some grass the net will be quite soaked with the cuckoo-spit, but the collector need not trouble himself about it, for it is a very clean juice, and is little more than sap which has been drawn out of the plants, and blown into bubbles. The little green creature which produces it is the larva of the common frog-hopper (*Cerceris*).

Sallow-hunting and treacling can go on as in March, but the captures will generally begin to fall off towards the end of the month.

I may mention, by the way, that about an hour or an hour and a half from dusk the moths will hardly come to treacle at all. In the present month they will become scarce about half-past nine, and not resume their visits to the treacle until half-past ten or eleven. Why this should be so I do not know, but such is the case.

For many moths artificial light has a wonderful attraction. Even in the crowded streets of London we may see moths fluttering round the lighted lamps, and trying to make their way through the glass. In the suburbs, especially in the neighbourhood of woods, the moths are sure to be plentiful about the gas lamps, and may be taken in various ways.



Climbing the post and pill-boxing the moths is the simplest way of catching them, but it is not every one who can climb a lamp-post. A very simple and effective mode of capturing such moths is by a "cyanide bottle."

This is a small wide-necked bottle in which is a little blotting paper that has been dipped in a strong solution of cyanide of potassium. It is kept tightly corked until wanted, and it is then attached by an elastic band to the end of a long stick. When a moth is covered with it, the insect becomes stupefied, falls into the bottle, and dies.

Moths may be found on the lamps in the morning, long after the gas has been extinguished, and can be captured in the same way. Now and then, a moth contrives to crawl into the lamp by means of the aperture through which the pipe passes, and those, of course, cannot be taken without climbing the lamp and opening the door. Do not let a policeman see you, for no reason less potent than half-a-crown will persuade him that you have no felonious intentions.

It is a good plan to take the lamplighter into your service, and to pay him a certain sum for the moths which he can catch on the lamps. He may be safely entrusted with a cyanide bottle, provided that you renew the poison yourself every two or three days.

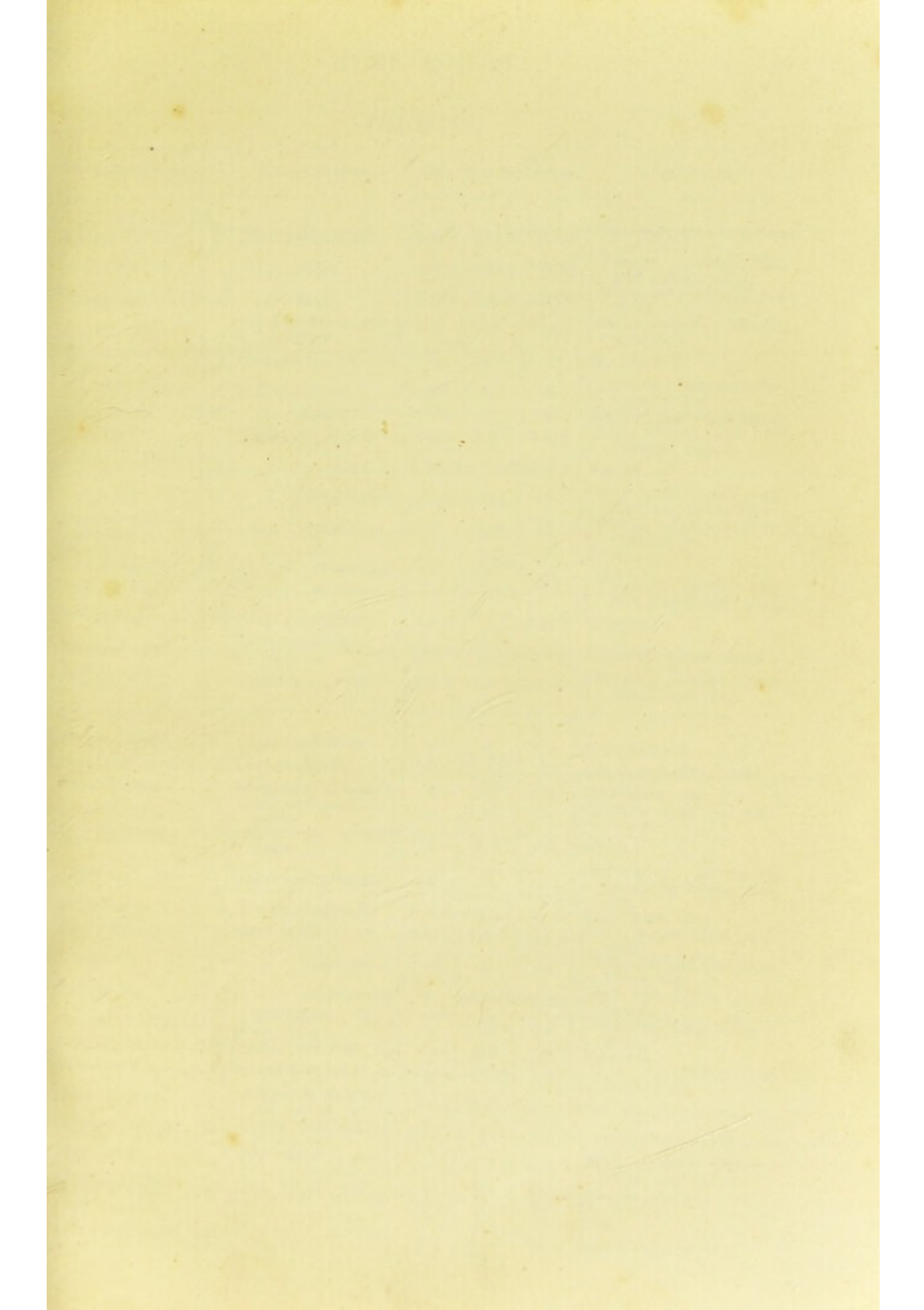
Do not try to make him understand the difference between common and valuable moths, but let him bring you all that he can catch. He will be sure to bring a number of moths which you do not want, but never make any distinction between them in his presence, and, above all, never throw away the worthless specimens until he is out of the way.

Give the man an ample supply of boxes and pins, and teach him how to use them. He should not try to set the insects, but should leave that business for yourself. Sometimes the insects will be stiff when handed over, especially if they be small, but the relaxing pan will soon restore their flexibility.

Some moths are very provoking in their way of settling on lamps. Moths which cling to the glass are easily seen, but when they insist on clinging to the framework very few persons can detect them. There are some which almost invariably choose the stout framework at the bottom of the lamp, and they contrive to make themselves so invisible, that even when an experienced collector has climbed the post, he has much difficulty in distinguishing them, though his eyes are within a few inches of them.

Many plants are now coming into flower, and the hardier birds will have finished their nests, and begun to lay.







New names



## INSECTS.

| Popular Name.               | Scientific Name.                                | Ova.     | Larva.       | Pupa.    | Food-plants.                                   |
|-----------------------------|---|----------|--------------|----------|--|
| <b>BUTTERFLIES.</b>         |   |          |              |          |  |
| Large White . E             | <i>Pieris brassicae</i> .                       | 5 & 8    | 6 & 9        | 7 & 9-4  | { Cabbage, &c., and nasturtium.                |
| Small do. . . . .           | „ <i>rapae</i> . .                              | 5 & 8    | 6 & 9        | 7 & 9-4  | { Turnip, cabbage, &c., and nasturtium.        |
| Green-veined do. .          | „ <i>napi</i> . .                               | 5 & 8    | 6 & 9        | 7 & 9-4  | { Rape, and other <i>Cruciferae</i> .          |
| Orange-tip . . .            | { <i>Anthocharis car-</i><br><i>damines</i> . } | 5        | 7            | 7-4      | { Lady's-smock, treacle-mustard.               |
| Brimstone, or Sulphur . H   | <i>Gonepteryx rhamni</i>                        | 4        | 6, 7         | 7        | Buckthorn.                                     |
| Clouded Yellow H            | <i>Colias Edusa</i> .                           | 9-5      | 6, 7         | 8        | { Lucerne, Dutch clover, trefoils, &c.         |
| Pale do. do. . H            | „ <i>Hyale</i> . .                              | 5        | 7            | 8        | Melilot, clover, lucerne.                      |
| Comma . . . H               | <i>Vanessa C-album</i> .                        | 5 & 7    | 5 & 8        | 6 & 9    | { Elm, willow, sloe, hop, currant, nettle.     |
| Small Tortoise-shell . H    | „ <i>urticae</i> .                              | 4, 5 & 7 | 5, 6 & 8     | 6 & 8    | Nettle.  |
| Large do. . . H             | „ <i>polychloros</i>                            | 5 s. 10  | s. 10-5, 6   | 7        | { Elm, aspen, osier, willow, and fruit-trees.  |
| Camberwell Beauty . H       | „ <i>Antiopa</i> .                              | 5        | 6, 7         | 7        | { Birch, poplar, willow, and nettle.           |
| Peacock . . . H             | „ <i>Io</i> . .                                 | 4, 5     | 6, 7         | 7        | Nettle.  |
| Red Admiral . H             | „ <i>Atalanta</i> .                             | 5        | 6, 7         | 7        | Do.  |
| Painted Lady . H            | „ <i>cardui</i> .                               | 5        | 6-9          | 7-9      | { Thistles, nettle, mal-low, and scarlet bean. |
| Wood Argus . E              | <i>Satyrus Aegeria</i> .                        | 5 & 8    | 6, 7 & 9-3   | 4 & 7    | Grasses.                                       |
| Small Copper . M            | { <i>Polyommatus</i><br><i>Phlaeas</i> . }      | 6 & 10   | 5-8 & 10-4   | 4 & 10   | Ragwort, sorrel, dock.                         |
| Holly Blue, or Azure Blue M | <i>Lycaena argiolus</i> .                       | 5 & 8    | 6 & 9        | 7 & 10-4 | { Flowers of holly, buckthorn, and ivy.        |
| <b>MOTHS.</b>               |   |          |              |          |  |
| Spotted Muslin E            | <i>Arctia mendica</i> .                         | —        | 8            | 9-4      | Sloe, plantain.                                |
| Nut-tree Tussock .          | <i>Demas coryli</i> .                           | —        | 6, 7 & s. 10 | 10       | Beech and other trees.                         |
| Small Eggar . B             | <i>Eriogaster lanestris</i>                     | 4        | 5-7          | 7-1      | Hawthorn, sloe.                                |
| Small Lappet . .            | { <i>Lasiocampalici-</i><br><i>folia</i> . }    | —        | 8            | —        | { Sallow and whortleberry.                     |
| Kentish Glory .             | { <i>Endromis versi-</i><br><i>color</i> . }    | 4        | 6, 7         | 8-3      | Birch.   |
| Emperor . . .               | <i>Saturnia carpini</i> .                       | 5        | 8            | 10-4     | { Sallow, hawthorn, bramble, heath, sloe, &c.  |
| Brimstone. . .              | <i>Rumia crataegata</i> .                       | 4 & 9    | 6 & 9-3      | —        | Hawthorn, sloe.                                |
| Early Thorn . .             | <i>Selenia illunaria</i> .                      | 4 & 7    | 6 & 9        | 6 & 9-3  | { Oak, ash, willow, hawthorn.                  |
| Lunar do. . E               | „ <i>lunaria</i> .                              | —        | 8            | 8-4      | { Oak, elm, ash, nut, hawthorn, sloe.          |
| Purple do. . E              | „ <i>illustraria</i>                            | —        | 6 & 9-10     | 7 & 11-4 | { Oak, ash, birch, beech, maple.               |
| Scalloped Hazel E           | { <i>Odontopera bi-</i><br><i>dentata</i> . }   | —        | 8, 9         | 9-4      | { Oak, ash, nut, sawlow, sloe.                 |
| Belted Beauty . H           | <i>Nyssia zonaria</i> .                         | —        | 5, 6         | 6-9      | Sea-reed.                                      |
| Brindled do. . .            | <i>Biston hirtaria</i> .                        | 4        | 6, 7         | 9-3      | { Elm, ash, lime, and fruit-trees.             |
| Great Oak do. .             | { <i>Amphidasis pro-</i><br><i>dromaria</i> . } | —        | 6, 7         | 8-2      | Oak, elm, birch, nut.                          |
| Waved Umber E               | { <i>Hemerophila ab-</i><br><i>ruptaria</i> . } | —        | 6            | 9-4      | Lilac, privet, rose.                           |
| Engrailed . . .             | { <i>Tephrosia cre-</i><br><i>puscularia</i> }  | —        | 8, 9         | 10-1     | { Elm, poplar, willow, birch, and alder.       |
| Pale Engrailed              | „ <i>biundularia</i> .                          | 5        | 6-9          | 10-3     | Oak, birch, &c.                                |
| Birch Mocha . E             | <i>Ephyra pendularia</i>                        | —        | 7            | 8-4      | Birch.   |
| Grey Carpet . .             | <i>Aleucis pictaria</i>                         | —        | 7?           | —        | Sloe.  |
| Barred Umber. E             | { <i>Numeria pulve-</i><br><i>raria</i> . }     | —        | 7, 8         | 9-4      | Sallow, nut, privet.                           |



## INSECTS (continued).

| Popular Name.                       | Scientific Name.                                    | Ova.  | Larva.         | Pupa.   | Food-plants.  |
|-------------------------------------|---|-------|----------------|---------|---|
| <b>MOTHS.</b>                       |   |       |                |         |   |
| Netted Mountain }<br>Moth . . . E } | <i>Fidonia carbonaria</i>                           | —     | 7              | 8-4     | Birch, willow.  |
| Bordered White . . .                | " <i>pinaria</i> .                                  | 6     | 8, 9           | 10-3    | Larch and Scotch fir.                                 |
| March Moth . . .                    | { <i>Anisopteryx</i> }<br><i>æscularia</i> . }      | —     | 5, 6           | 10-1    | { Oak, elm, lime, haw-<br>thorn, apple.               |
| Mottled Grey . . .                  | { <i>Larentia multi-</i> }<br><i>strigaria</i> . }  | 4     | 6              | 7-3     | Bedstraw.   |
| Swiss Pug . . .                     | { <i>Eupithecia helve-</i> }<br><i>ticata</i> . }   | 6     | 9              | 9-6     | Juniper.  |
| Marbled do. . .                     | " <i>irriguata</i> .                                | 6     | 6              | 7-6     | Oak and sloe.   |
| Burnet do. . .                      | " <i>pimpinellata</i> .                             | 6, 7  | 6 & 9          | 9-6     | Seeds of pimpernel.                                   |
| Common do. . .                      | " <i>vulgata</i> .                                  | 5     | 7 & 9          | 8-5     | { Willow, hawthorn, rag-<br>wort, golden-rod.         |
| Brindled Brown do.                  | " <i>dodoneata</i> .                                | 5     | 6, 7           | 7-5     | Oak.  |
| Short do. . .                       | " <i>abbreviata</i> .                               | 5     | 6, 7           | 7-5     | Do.   |
| Double Striped do..                 | " <i>pumilata</i> .                                 | 6-8   | 6 & ?          | 8-6     | { Flowers of chervil,<br>gorse, clematis, &c.         |
| V. do. . .                          | " <i>coronata</i> .                                 | 6     | 7, 8           | 8-6     | { Flowers of bramble,<br>golden-rod, clematis,<br>&c. |
| Seraphim . . .                      | { <i>Lobophora hex-</i> }<br><i>apterata</i> }      | —     | 8              | —       | Poplar, willow.                                       |
| Early-striped . . .                 | " <i>lobulata</i> .                                 | 4     | 8              | —       | { Willow, willow, honey-<br>suckle.                   |
| Barred do. . .                      | " <i>polycommata</i> .                              | 4, 5  | 6              | —       | Ash, honeysuckle.                                     |
| Grey Juniper Carpet                 | <i>Thera simulata</i> .                             | —     | 6 & 10         | —       | Juniper.  |
| Garden Carpet . .                   | <i>Melanippe fluctuata</i> .                        | —     | 6 & 9          | —       | { Cabbage, horse-radish,<br>nasturtium, &c.           |
| Shoulder-stripe do..                | <i>Anticlea badiata</i> .                           | 3     | 6              | 7-3     | Dog-rose.   |
| Streamer . . .                      | " <i>derivata</i> .                                 | 3, 4  | 6              | 7-3     | { Dog-rose and honey-<br>suckle.                      |
| Gem . . . H                         | { <i>Camptogramma</i> }<br><i>fluviata</i> . }      | 7     | 8              | 9       | { Spotted persicaria,<br>groundsel.                   |
| Autumn Green }<br>Carpet . . . H }  | <i>Cidaria miata</i> .                              | —     | 8              | 9       | { Oak, birch, poplar, wil-<br>low, and alder.         |
| Water do.. . .                      | " <i>suffumata</i> .                                | —     | 9, 10          | 3       | { Ragwort and hedge<br>bedstraw.                      |
| Scalloped Hook- }<br>tip . . . E }  | { <i>Platypteryx la-</i> }<br><i>certula</i> . }    | 6     | 6 & 8, 9       | —       | Birch.  |
| Scarce Kitten . . .                 | <i>Dicranura bicuspis</i> .                         | —     | 8-10           | 10-4    | Birch, beech, and alder.                              |
| Rannoch Sprawler.                   | <i>Petasia nubeculosa</i> .                         | 4     | 5, 6           | —       | Birch.  |
| Chocolate Tip . .                   | <i>Clostera curtula</i> .                           | 4 & 7 | 5 & 8, 9       | 6 & 9-3 | Poplar, willow.                                       |
| Birch Prominent .                   | <i>Notodontacarmelita</i> .                         | —     | 6, 7           | 8-3     | Birch.  |
| Great do. . . E                     | " <i>trepida</i> .                                  | —     | 8              | 9-4     | Oak.  |
| Lunar Marbled . .                   | " <i>chaonia</i> .                                  | —     | 6-8            | 8-4     | Do.   |
| Frosted Green . .                   | <i>Cymatophora ridens</i> .                         | 4     | 6, 7           | 8       | Do.   |
| Silver Cloud . . .                  | { <i>Xylomiges con-</i> }<br><i>spicillaris</i> . } | —     | 6-8            | 9-3     | { Birdsfoot trefoil, and<br>other low plants.         |
| Pearly Underwing.                   | <i>Agrotis saucia</i> .                             | —     | 11-1 &<br>7, 8 | —       | { Dock, plantain, and<br>other low plants.            |
| Pine Beauty . . .                   | <i>Trachea piniperda</i> .                          | —     | 6, 7           | 8-2     | Fir and pine.   |
| Hebrew Character.                   | <i>Taeniocampa gothica</i> .                        | 4     | 5-8            | 7-3     | { Oak, willow, broom,<br>lilac, and dock.             |
| White Letter Rustic                 | " <i>leucographa</i> .                              | 4     | 6, 7           | 8-3     | Plantain.   |
| Red Quaker . . .                    | " <i>rubricosa</i> .                                | 4     | 5-7            | 8-3     | Elm and dock.   |
| Clouded Drab . .                    | " <i>instabilis</i> .                               | —     | 5-7            | 8-3     | { Oak, willow, willow,<br>dock.                       |
| Northern do. . .                    | " <i>opima</i> .                                    | 4     | 5-7            | 8-3     | Willow, willow, rose.                                 |
| Intermediate . .                    | " <i>populeti</i> .                                 | 4     | 6, 7           | 7-3     | Poplar.   |
| Common Quaker .                     | " <i>stabilis</i> .                                 | —     | 5-7            | 8-3     | Oak, elm, and hawthorn.                               |
| Lead-coloured Drab                  | " <i>gracilis</i> .                                 | 5     | 5-7            | 8-3     | { Willow, willow, and<br>low plants.                  |
| Blossom Under- }<br>wing . . . }    | " <i>miniosa</i> .                                  | 4     | 5, 6           | 7-3     | Oak, birch, hawthorn.                                 |
| Twin-spotted }<br>Quaker . . . }    | " <i>munda</i> .                                    | —     | 5, 6           | 7-3     | Oak, elm, poplar.                                     |
| Small do. . .                       | " <i>cruda</i> .                                    | —     | 5-7            | 8-3     | { Oak, willow, nut. A can-<br>nibal in confinement.   |



new names.



New names



## INSECTS (continued).

| Popular Name.                    | Scientific Name.                                     | Ova. | Larva.     | Pupa. | Food-plants.                                   |
|----------------------------------|--|------|------------|-------|--|
| <b>MOTHS.</b>                    |  |      |            |       |  |
| Chestnut . . . H                 | <i>Cerastis vaccinii</i> .                           | —    | 6, 7       | —     | Oak, elm, willow, willow.                      |
| Dark do. . . . H                 | „ <i>spadicea</i> .                                  | —    | 5, 6       | —     | { Hawthorn, sloe, and<br>honeysuckle.          |
| Large do. . . . H                | { <i>Scopelosoma sa-</i><br><i>tellitica</i> . . . } | 3    | 5, 6       | 7, 8  | { Oak. A cannibal in<br>confinement.           |
| Orange Upper-<br>wing . . . . H  | <i>Hoplorina croceago</i>                            | 4    | 5, 6       | 7     | Do.  |
| Olive Rustic . . H               | <i>Dasypolia templi</i> .                            | 3    | 4-7        | 8     | Cow parsley.                                   |
| Green-brindled Dot               | <i>Valeria oleagina</i> .                            | —    | 5, 6       | —     | Sloe.  |
| Angle-shades . .                 | { <i>Phlogophora me-</i><br><i>ticulosa</i> . . . }  | —    | 11-4       | —     | { Broom, and many low<br>plants.               |
| Early Grey . . .                 | { <i>Xylocampa litho-</i><br><i>rhiza</i> . . . }    | —    | 6-8        | 10-3  | Honeysuckle.                                   |
| Red Sword-grass H                | <i>Calocampa vetusta</i>                             | 3, 4 | 4-6        | 8     | { Poplar, and various<br>low plants.           |
| Common do. . . H                 | „ <i>exoleta</i>                                     | 4    | 4-7        | 8     | { Campion, scabious,<br>rest-harrow, dock, &c. |
| Tawny Pinion. . H                | <i>Xylina conformis</i> .                            | 3    | 5, 6       | 7, 8  | Birch and alder.                               |
| Grey Shoulder-<br>knot . . . . H | „ <i>rhizolitha</i> .                                | —    | 5-7        | 7, 8  | Oak.   |
| Dark Pinion . . H                | „ <i>semibrunnea</i>                                 | —    | 7          | 8, 9  | Ash and willow.                                |
| Pale do. . . . . H               | „ <i>petrificata</i> .                               | 5    | 5-7        | 8, 9  | Oak, birch, and lime.                          |
| Mullein . . . . .                | <i>Cucullia verbasci</i> .                           | —    | 6, 7       | 9     | Mulleins and figworts.                         |
| Chamomile Shark S                | „ <i>chamomillæ</i>                                  | —    | 5, 6, s. 8 | 8, 4  | { Chamomile, and flowers<br>of feverfew.       |
| Orange Underwing                 | <i>Brephos partheians</i>                            | —    | 6-8        | 9-3   | Birch, beech, oak.                             |
| Pale do. do. . . .               | „ <i>notha</i> .                                     | —    | 6          | —     | Aspen, willow.                                 |
| Silver Y . . . . .               | <i>Plusia gamma</i> .                                | —    | 4 & 7-9    | —     | { Nettle, hop, and low<br>plants.              |
| Herald . . . . . H               | <i>Gonoptera libatrix</i>                            | —    | 6, 7       | 7, 8  | { Poplar, willow, willow,<br>&c.               |

## PLANTS.

| Popular Name.  | Scientific Name.               | Localities.  | Duration. |
|--|--------------------------------|--|-----------|
| Wood Anemone, or<br>Windflower . . }                             | <i>Anemone nemorosa</i> .      | Woods . . . . .  | Perennial |
| Pasque-flower . . .  | „ <i>pulsatilla</i> .          | { High chalky pastures.<br>Scarce . . . . . }                                      | „         |
| Lesser Celandine . .   | <i>Ranunculus Ficaria</i> .    | Banks, &c. . . . .   | „         |
| Wood Crowfoot . . .  | „ <i>auricomus</i> .           | Woods . . . . .  | „         |
| Green Hellebore . .  | <i>Helleborus viridis</i> .    | Do. . . . .  | „         |
| Stinking do., or Bear's-<br>foot . . . . . }                     | „ <i>fatidus</i> .             | Do. . . . .  | „         |
| Perfoliate Penny Cress   | <i>Thlaspi perfoliatum</i> .   | { Limestone pastures in<br>Oxfordshire and<br>Gloucestershire.<br>Rare . . . . . } | Annual    |
| Shepherd's Purse . .   | <i>Capsella Bursa-pastoris</i> | A common weed . . .  | „         |
| Rock Hutchinsia . .  | <i>Hutchinsia Petrea</i> .     | Limestone rocks. Local   | „         |
| Danish Scurvy Grass  | <i>Cochlearia Danica</i> .     | Cliffs and hedges near sea   | „         |
| Vernal Whitlow Grass   | <i>Draba Verna</i> .           | Walls and dry banks  | „         |
| Yellow Alpine do. do. .  | „ <i>aizoides</i> .            | { Rocks and walls near<br>Swansea . . . . . }                                      | Perennial |
| Coral-root . . . . .   | <i>Dentaria bulbifera</i> .    | Woods. Rare . . . . .  | „         |
| Large-flowered Bitter<br>Cress . . . . . }                       | <i>Cardamine amara</i> .       | { River banks. Not com-<br>mon . . . . . }   | „         |
| Early Winter Cress   | <i>Barbarea praecox</i> .      | Damp waste places . .  | Biennial. |
| Garlic-mustard, Jack-<br>by-the-hedge, or<br>Sauce-alone . . . } | <i>Althaea officinalis</i> .   | Hedges, &c. . . . .  | Annual.   |



## P L A N T S (continued).

| Popular Name.                                       | Scientific Name.                                    | Localities.   | Duration.   |
|---|---|---|-------------|
| Wall-flower . . . . .                               | <i>Cheiranthus Cheiri</i> .                         | Walls . . . . .   | Biennial.   |
| Hairy Violet . . . . .                              | <i>Viola hirta</i> . . . . .                        | Chalk and limestone soil  | Perennial.  |
| Sweet do. . . . .                                   | " <i>odorata</i> . . . . .                          | Woods and hedge-banks   | "           |
| Marsh do. . . . .                                   | " <i>palustris</i> . . . . .                        | Bogs and marshy ground  | "           |
| Dog do. . . . .                                     | " <i>canina</i> . . . . .                           | Woods and hedge-banks   | "           |
| Jagged Chickweed . . . . .                          | <i>Holosteum umbellatum</i> .                       | { Old walls near Nor-<br>wich and Bury St. }<br>Edmunds . . . . . | Annual.     |
| Common do. . . . .                                  | <i>Stellaria media</i> . . . . .                    | A common weed . . . . .   | "           |
| Broad-leaved Mouse-ear                              | <i>Cerastium vulgatum</i> . . . . .                 | Fields and roadsides . . . . .                                    | "           |
| Little, or Five-sta-<br>mened Mouse-ear }           | " <i>semidecandrum</i>                              | Waste places and walls . . . . .                                  | "           |
| Dove's-foot Crane's-bill                            | <i>Geranium molle</i> . . . . .                     | Fields and waste places . . . . .                                 | "           |
| Furze, Gorse, or Whin.                              | <i>Ulex Europæus</i> . . . . .                      | Commons and thickets . . . . .                                    | Shrub.      |
| Spring Vetch . . . . .                              | <i>Vicia lathyroides</i> . . . . .                  | Dry places . . . . .  | Annual.     |
| Sloe, or Blackthorn ;<br>Bullace, or Wild<br>Plum } | <i>Prunus communis</i> . . . . .                    | Woods and hedges . . . . .  | Small tree. |
| Spring Cinquefoil . . . . .                         | <i>Potentilla verna</i> . . . . .                   | Dry pastures . . . . .  | Perennial.  |
| Strawberry-leaved do. . . . .                       | " <i>Fragariastrum</i>                              | Banks and hedges . . . . .  | "           |
| Wild Pear . . . . .                                 | <i>Pyrus communis</i> . . . . .                     | Woods and hedges . . . . .  | Tree.       |
| Gooseberry . . . . .                                | <i>Ribes grossularia</i> . . . . .                  | Hedges and thickets . . . . .                                     | Shrub.      |
| Purple Saxifrage . . . . .                          | <i>Saxifraga oppositifolia</i>                      | Mountain summits . . . . .  | Perennial.  |
| Golden do. . . . .                                  | { <i>Chrysosplenium alter-</i><br><i>nifolium</i> } | Damp places. Rare . . . . .                                       | "           |
| Chervil, or Cow Parsley                             | <i>Anthriscus sylvestris</i> . . . . .              | Hedge-banks . . . . .   | "           |
| Moschatel . . . . .                                 | <i>Adoxa moschatellina</i> . . . . .                | Woods and hedge-banks   | "           |
| Mistletoe . . . . .                                 | <i>Viscum album</i> . . . . .                       | Parasitic, chiefly on apple                                       | "           |
| Corn Salad . . . . .                                | <i>Fedia olitoria</i> . . . . .                     | A common weed . . . . .   | Annual.     |
| Dandelion . . . . .                                 | <i>Leontodon Taraxacum</i> .                        | Do. . . . .   | Perennial.  |
| Colt's-foot . . . . .                               | <i>Tussilago Farfara</i> . . . . .                  | Clayey banks . . . . .  | "           |
| Butter-bur . . . . .                                | <i>Petasites vulgaris</i> . . . . .                 | River banks and wet<br>meadows . . . . .                          | "           |
| Groundsel . . . . .                                 | <i>Senecio vulgaris</i> . . . . .                   | A common weed . . . . .   | Annual.     |
| Daisy . . . . .                                     | <i>Bellis perennis</i> . . . . .                    | Pastures . . . . .  | Perennial.  |
| Mediterranean Heath . . . . .                       | <i>Erica mediterranea</i> . . . . .                 | West of Ireland . . . . .   | Shrub.      |
| Ash . . . . .                                       | <i>Fraxinus excelsior</i> . . . . .                 | Woods and hedgerows . . . . .                                     | Tree.       |
| Lesser Periwinkle . . . . .                         | <i>Vinca minor</i> . . . . .                        | { Thickets and woods,<br>especially in the }<br>West . . . . .    | Perennial.  |
| Spring Gentian . . . . .                            | <i>Gentiana verna</i> . . . . .                     | Mountains. Rare . . . . .   | "           |
| Early Forget-me-not . . . . .                       | <i>Myosotis collina</i> . . . . .                   | Dry fields and walls . . . . .                                    | Annual.     |
| Toothwort . . . . .                                 | <i>Lathræa Squamaria</i> . . . . .                  | Parasitic on tree-roots . . . . .                                 | Perennial.  |
| Ivy-leaved Speedwell . . . . .                      | <i>Veronica hederifolia</i> . . . . .               | A common weed . . . . .   | Annual.     |
| Germander Chickweed . . . . .                       | " <i>agrestis</i> . . . . .                         | Do. . . . .   | "           |
|   | " <i>Buxbaumii</i> . . . . .                        | Fields . . . . .  | "           |
|   | " <i>verna</i> . . . . .                            | Dry fields. Scarce . . . . .                                      | "           |
| Vernal Speedwell . . . . .                          | <i>Scrophularia vernalis</i> . . . . .              | Shady places. Local . . . . .                                     | Biennial.   |
| Yellow Fig-wort . . . . .                           | <i>Ajuga Chamæpitys</i> .                           | Chalky fields. Local . . . . .                                    | Annual.     |
| Yellow Bugle, or<br>Ground-pine }                   | <i>Lamium album</i> . . . . .                       | Hedges and waysides . . . . .                                     | Perennial.  |
| White Dead-nettle . . . . .                         | " <i>purpureum</i> . . . . .                        | A common weed . . . . .   | Annual.     |
| Red do. . . . .                                     | " <i>amplexicaule</i> . . . . .                     | Waste places . . . . .  | "           |
| Henbit do. . . . .                                  | <i>Glechoma hederacea</i> . . . . .                 | Hedge-banks . . . . .   | Perennial.  |
| Ground Ivy . . . . .                                | <i>Primula vulgaris</i> . . . . .                   | Woods and banks . . . . .   | "           |
| Primrose . . . . .                                  | " <i>elatior</i> . . . . .                          | Thickets and pastures . . . . .                                   | "           |
| Oxlip . . . . .                                     | <i>Polygonum aviculare</i> . . . . .                | A common weed . . . . .   | Annual.     |
| Knot-grass . . . . .                                | <i>Empetrum nigrum</i> . . . . .                    | { Bogs and mountainous<br>heaths . . . . . }                      | Shrub.      |
| Crow-berry, or Crake-<br>berry }                    | <i>Mercurialis perennis</i> . . . . .               | Woods and thickets . . . . .                                      | Perennial.  |
| Mercury . . . . .                                   | { <i>Euphorbia amygd-</i><br><i>loides</i> }        | Woods . . . . .   | "           |
| Wood Spurge . . . . .                               | <i>Buxus sempervirens</i> . . . . .                 | Chalk hills. Very local . . . . .                                 | Shrub.      |
| Box . . . . .                                       | <i>Callitriche verna</i> . . . . .                  | Pools . . . . .   | Annual.     |
| Spring Water Starwort                               | <i>Ulmus Campestris</i> . . . . .                   | Woods and hedges . . . . .  | Tree.       |
| Common Elm . . . . .                                | <i>Betula alba</i> . . . . .                        | Woods . . . . .   | "           |
| White Birch . . . . .                               | <i>Alnus glutinosa</i> . . . . .                    | Damp ground . . . . .   | "           |
| Alder . . . . .                                     | <i>Salix purpurea</i> . . . . .                     | Damp fields . . . . .   | "           |
| Purple Willow . . . . .                             | " <i>rubra</i> . . . . .                            | Meadows and osier-beds  | "           |
| Green-leaved Osier . . . . .                        |   |   |             |



## PLANTS (continued).

| Popular Name.                        | Scientific Name.                             | Localities.                             | Duration.  |
|--------------------------------------|--|---|------------|
| Crack Willow                         | <i>Salix fragilis</i>                        | Marshy ground                           | Tree.      |
| Bedford do.                          | " <i>Russelliana</i>                         | Marshy woods                            | "          |
| Rosemary-leaved do.                  | " <i>rosmarinifolia</i>                      | Damp ground                             | "          |
| Little Tree do.                      | " <i>angustifolia</i>                        | Highlands                               | "          |
| Creeping do.                         | " <i>fusca</i>                               | Heaths                                  | "          |
| Common Osier                         | " <i>viminialis</i>                          | Marshes                                 | "          |
| Long-leaved Willow                   | " <i>acuminata</i>                           | Woods                                   | "          |
| Grey Sallow                          | " <i>cinerea</i>                             | Do.                                     | "          |
| Great do.                            | " <i>caprea</i>                              | Hedges and thickets                     | "          |
| Dark-leaved Willow                   | " <i>nigricans</i>                           | Woods                                   | "          |
| Damson-leaved do.                    | " <i>damascena</i>                           | Scotland                                | "          |
| Laurel-leaved do.                    | " <i>laurina</i>                             | Woods                                   | "          |
| Woolly do.                           | " <i>lanata</i>                              | Highlands                               | "          |
| White Poplar                         | <i>Populus alba</i>                          | Damp woods                              | "          |
| Aspen                                | " <i>tremula</i>                             | Do.                                     | "          |
| Black Poplar                         | " <i>nigra</i>                               | Damp ground                             | "          |
| Beech                                | <i>Fagus sylvatica</i>                       | Woods                                   | "          |
| Oak                                  | <i>Quercus pedunculata</i>                   | Woods and hedge-rows                    | "          |
| Hazel                                | <i>Corylus avellana</i>                      | Woods and thickets                      | Shrub.     |
| Hornbeam                             | <i>Carpinus Betulus</i>                      | Woods                                   | Tree.      |
| Yew                                  | <i>Taxus baccata</i>                         | Woods on chalk soil                     | "          |
| Spider Orchis                        | <i>Ophrys aranifera</i>                      | Chalk hills. Rare                       | Perennial. |
| Snake-head Iris                      | <i>Iris tuberosa</i>                         | Not native.                             | "          |
| Butcher's Broom                      | <i>Ruscus aculeatus</i>                      | Woods                                   | "          |
| Spring Squill                        | <i>Scilla verna</i>                          | Sea-cliffs                              | "          |
| Two-leaved do.                       | " <i>bifolia</i>                             | Woods. Doubtful native                  | "          |
| Star of Bethlehem                    | { <i>Ornithogalum umbel-</i><br><i>latum</i> | { Meadow and pastures.<br>Naturalised.  | "          |
| Yellow Gagea                         | <i>Gagea lutea</i>                           | { Damp thickets and<br>pastures. Local. | "          |
| Wild Tulip                           | <i>Tulipa sylvestris</i>                     | Chalky fields. Local                    | "          |
| Fritillary, or Snake's-<br>head Lily | <i>Fritillaria Meleagris</i>                 | Damp meadows. Scarce                    | "          |
| Wood Hairy-Rush.                     | <i>Luzula pilosa</i>                         | Woods                                   | "          |
| Field do.                            | " <i>campestris</i>                          | Heaths and dry pastures                 | "          |
| Glaucous Sedge                       | <i>Carex stricta</i>                         | Marshes                                 | "          |
| Vernal do.                           | " <i>præcox</i>                              | Dry heaths and pastures                 | "          |
| Fox-tail Grass                       | <i>Alopecurus pratensis</i>                  | Pastures                                | "          |
| Bulbous Meadow-grass                 | <i>Poa bulbosa</i>                           | Sandy ground                            | "          |
| Annual do.                           | " <i>annua</i>                               | Waste ground                            | Annual.    |
|                                      | <i>Knappia agrostidea</i>                    | Sandy sea-side pastures.                | "          |
| FERNS.                               |  |   |            |
| Black Maidenhair                     | { <i>Asplenium</i> <i>Adian-</i>             | Shady places                            | Perennial. |
| Spleenwort                           | { <i>tum-nigrum.</i>                         |   |            |



# THE HISTORY OF THE

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## MAY.

### GENERAL HINTS.

FALINGS and tree-trunks as in April, only you must be up earlier, as the moths seldom remain on the fences after the sunbeams have touched them.

Pupa-digging may be abandoned during this month, but roots of weeds and grasses must be examined.

In May you may begin to beat for caterpillars as well as use the sweep-net.

In April beating would be comparatively valueless, as the trees are not in full leafage, and consequently could not harbour caterpillars. Spread a sheet beneath the branches to be beaten, and do not thrash promiscuously among the leaves, but strike the branches themselves smartly, and the caterpillars will mostly be dislodged by the sudden shock.

Shaking is often as good as beating, and is neater. Cut a tolerably stout forked stick, and tie it firmly to the end of a long rod. If you place the fork of the stick under the branch to be shaken, and then jerk it sharply upwards, the insects will be dislodged quite as effectually as if the branch were struck.

It is as well to have four or five rods which can be tied together. But a common fishing-rod, such as can be bought for a few pence in the Lowther Arcade or any similar place, will answer admirably for shaking branches. If such a rod be used, the top joint can be removed, and the forked stick substituted for it.

Grass-feeding caterpillars are now becoming plentiful, but as a rule should be taken by hand, and not by sweeping.

Whatever may be the caterpillars, you must watch them carefully, lest any of the cannibal species should be among them. The havoc which cannibals will make among both caterpillars and pupæ is appalling, and the collector must eject such creatures without delay. The worst of them seems to be that of the Dunbar Moth (*Cosmia trapezina*), but there are others, such as the Sprawler (*Petasia cassinea*), the Streak (*Chesias spartiata*), and the large Chestnut Moth (*Scopelosoma satellitia*), which are nearly as bad.

Treacling is generally so unproductive in this month that it may be abandoned. There is, however, another mode of attracting moths which is very effective, as far as male specimens are concerned, and which is popularly called "Sembling."

With all moths the males are powerfully attracted to the female, and have the power of discovering her at great distances. Some entomologists have thought that the moths possess a peculiar sense, unknown to us, by which they discover the female; but I doubt whether this is the case, inasmuch as the males never seem to fly with the wind towards the female, but always against it.

If the collector happens to breed a female Emperor, Oak-eggar, or the Vapourer, he should at once isolate her. The two last species, by the way, are summer moths.

Then let him put her in a box covered with gauze—a gauze cage is better still—



and take her out in the fields, especially if woods be near. The number of males which will come after her is astonishing, and so fearless are they when in search of the female that they have been known to crawl into a pocket in which was a box containing a female.

The splendid Kentish Glory (*Endromis versicolor*), now scarcely ever found in Kent, is one of the sembling species, and when a collector is fortunate enough to breed a female larva, he may make tolerably sure of securing a number of males by sembling. That happy hunting-ground of entomologists, Rannoch Wood in Perthshire, is a favourite haunt of the Kentish Glory.

In May the net begins its work. Outsiders seem to think that every moth and butterfly which they see in a collection is caught by the net, whereas, as I have shown, the pill-box takes many more insects than the net. Butterflies, however, are too active for the pill-box, and for them we must use the net.

Much depends on the kind of net. It is as impossible to catch a swift butterfly with a heavy clumsy net, as to hit an eight-inch bull's-eye at a thousand yards with an old flint musket. In order to enable the butterfly-hunter to make the sharp, quick stroke on which success depends, his net must be light, springy, and strong. Cane nets are just the reverse, and besides are always working themselves loose in the Y in which they are inserted, whether it be brass or tin.

The umbrella net is a great improvement on the cane net, but it is needlessly costly, and there is too much elaboration about it. True, it can be shut up and put into a case, so as to delude people into the idea that it is an umbrella, but no real entomologist ought to be ashamed of his net, or want to deceive people by making it on the semblance of an umbrella.

Yet it has the advantages of lightness and strength, though not to such an extent as a net which any one with the use of his hands can make in half an hour or less with the same materials.

Old umbrellas are common enough, and so are common oak walking-sticks, such as can be bought for fourpence each. Now, an umbrella has eight ribs, and with one umbrella and four sticks, four net-frames can be made.

First, bind the end of the stick with fine copper wire, so as to prevent it from splitting. Then bore a hole through the stick rather more than half an inch from the end, and a corresponding hole a foot below it.

Take one of the umbrella spokes, having of course removed the central swivel, bend it, and push one end through each hole, making them project about a quarter of an inch. Do the same with a second spoke, but on the opposite side, and you will have the rough framework of the net. It will not be circular, but oval, which is a very much better form.

Drive little wooden wedges as firmly as possible into the holes, so as to tighten the spokes, and secure them with the fine copper wire. The strength combined with lightness of such a frame is delightful, and it is as elastic as it is strong.

The net itself should be longer than is usually made. For example, a very excellent net now before me is four feet four inches in circumference, and two feet six inches in depth. The reason for this depth will presently be seen, and the net should be cut so as to have no corners.

As for the material, there is nothing which can be even compared with mosquito net, which can be purchased at almost any good draper's shop. No one who has ever tried mosquito net will use anything else. It is light, so strong that it is not readily torn, and if torn can be mended on the spot even without a needle



and thread. Its mesh is so large that the air has a free passage through it, and the insect when captured can be easily seen.

It has also the advantage of cheapness, for the best mosquito net (and I do not recommend any but the best) is fifteen pence per yard, and the yard is two yards and a half in width.

As to the "leno" which is almost invariably the material in purchased nets, it is, in my opinion, about the very worst that could have been devised, especially if it be green. Dealers always recommend the green nets because they are thought to be not so conspicuous as white nets; but then the dealers are not, as a rule, practical entomologists. The colour of the net matters nothing, as far as capturing the insect goes, but the less colour the better, as it prevents the entomologist from seeing the insect when it is captured.

Then leno is a peculiarly fragile fabric. It has no definite meshes like mosquito net, and when torn cannot be mended without much trouble. Gauze is nearly but not quite as troublesome as leno.

Do not fasten the net directly upon the frame, but cover the latter loosely with stout tape, and sew the net to the tape. Otherwise the net will be worn away by the friction against the frame. In case of a new net, it will be advisable to soak it in boiling water, and rub it well between the hands as soon as the water is cool enough. This will make the net soft and pliable, a new net being mostly stiff and awkward at first.

A few words must be said about the stroke, which is exactly opposite to that which is employed in sweeping.

Do not strike at all, in the sense of delivering a blow, but get the net as near the insect as possible, just strike, as the angler strikes when he hooks a fish, and with a quick turn of the wrist—easily learned but not to be described—double the end of the net over the ring. It will lie quite flat, the insect will be kept from fluttering by the pressure of the net, and if the handle be put under the arm, both hands will be at liberty to kill or release the creature, as the case may be.

As a rule, butterfly-hunters use far more exertion than they need, just as is the case with young tennis-players. At least three-quarters of the running may be saved by understanding the ways of the insect, and there are some which are so swift and agile that no human legs can keep pace with them. Several butterflies will fly swiftly in one direction, and then, without any apparent reason, double on their track and come back again.

Even if the insect should fly over a hedge or a wall, there is no reason for despairing of it, as it may probably return in a few minutes. I remember one case, where a lad saw a Camberwell Beauty in a garden near my house. He had no net with him, and it flew away. He went into the house, fetched his net, and before very long the insect came back and was caught.

Avoid windy days for butterfly-hunting. The wings of the insect are so large and the body so small, that it is whirled away by every gust, and the net has no chance against it. Bright, sunny days with very little wind are the best, but we do not have many of them in the course of an ordinary summer. Dull days, however, can be utilised, as the butterflies are apt to hang on the under surface of leaves and can be shaken off, while the moths lurk in the grass and can be kicked out. Even at night the butterflies may be taken as they hang upon the leaves.

If there be a hedge, always keep to the leeward of it, and if the sun and wind be opposite to each other, so much the better.



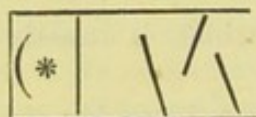
Look out for Clearwing Moths on leaves, especially those of the currant. They are fond of basking in the sunshine, and can be easily taken.

Lamps and light will be very attractive in this month, and there is a most effective self-acting instrument called the American Moth Trap, which moths can enter, but from which they cannot, or at least do not, escape. The principle is simple enough.—There is a lamp, for attracting the moths, placed in a box. Then there are plates of glass arranged diagonally, through which the lamp can be seen. The moths fly to the light, flutter along the first diagonal glass until they reach the end, when they come against another glass which lands them in the trap. They never think of flying away from the light, and are consequently secured.

This trap is rather expensive, costing from thirty shillings to two guineas. The price is not excessive, as it is a complicated piece of machinery. But a friend of mine has invented a very simple moth trap, the cost of which is only five shillings, exclusive of a lamp and reflector, and which is so effective that he has found more than forty moths in it when he inspected it in the morning.

It is a box, about three times as long as broad, with one end open. It lies on its side, and at the back is the lamp with its reflector.

A plate of glass is fixed upright in front of the lamp, so as to keep the moths from making their way into it. At the mouth of the trap are the three diagonal plates. They are set on their edges, reach from top to bottom of the box, and are arranged thus:  
 reflector behind upright glass Two diagonals



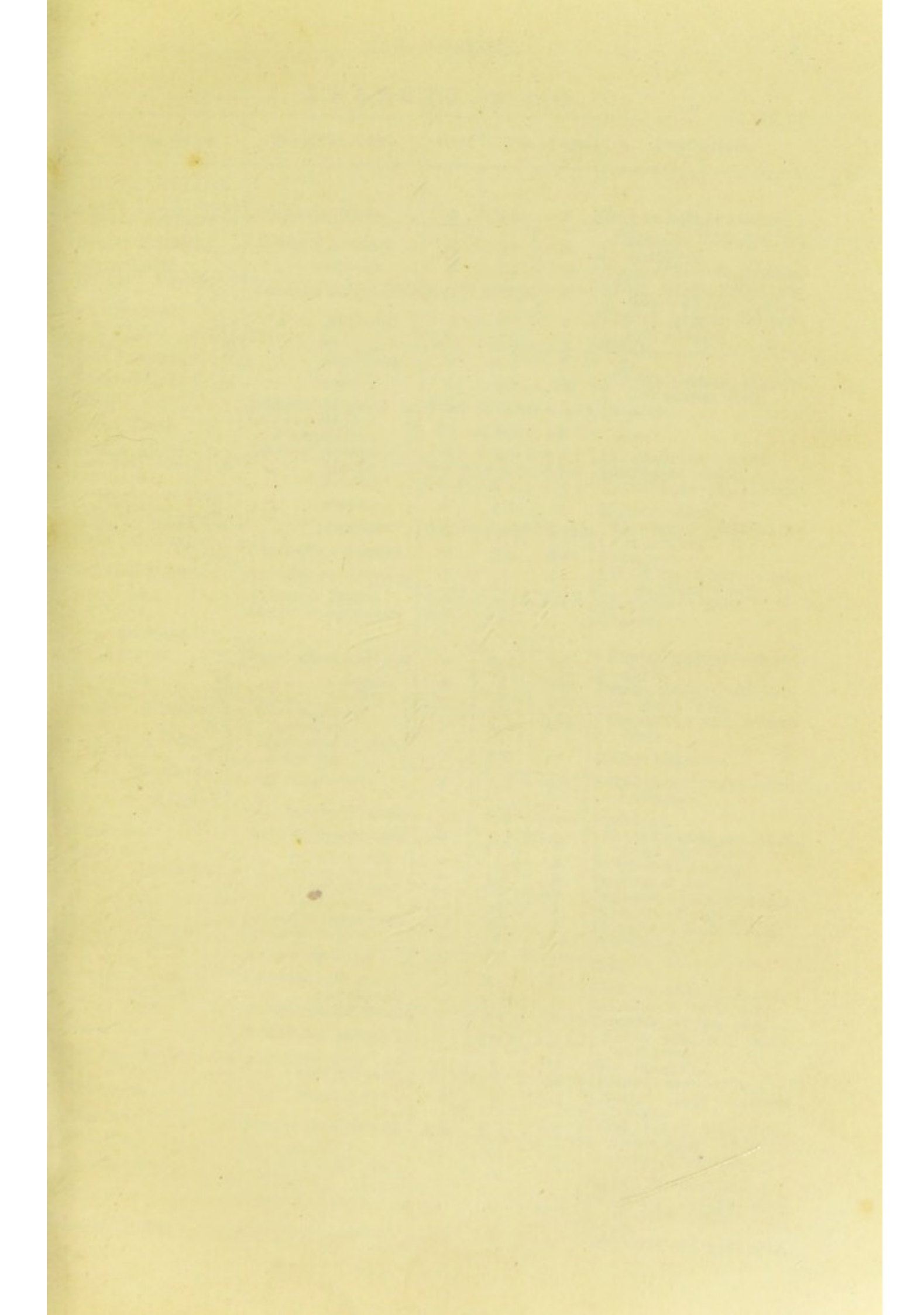
The asterisk represents the lamp with the it. The line in front of it represents the plate, and the others the diagonal plates. were tried, but the third was added for

the sake of safety.  
 May is the very best month for bird's eggs, and if the collector will spend the time in bird-nesting which he would have employed in pupa-digging, he ought to add largely to his cabinet.

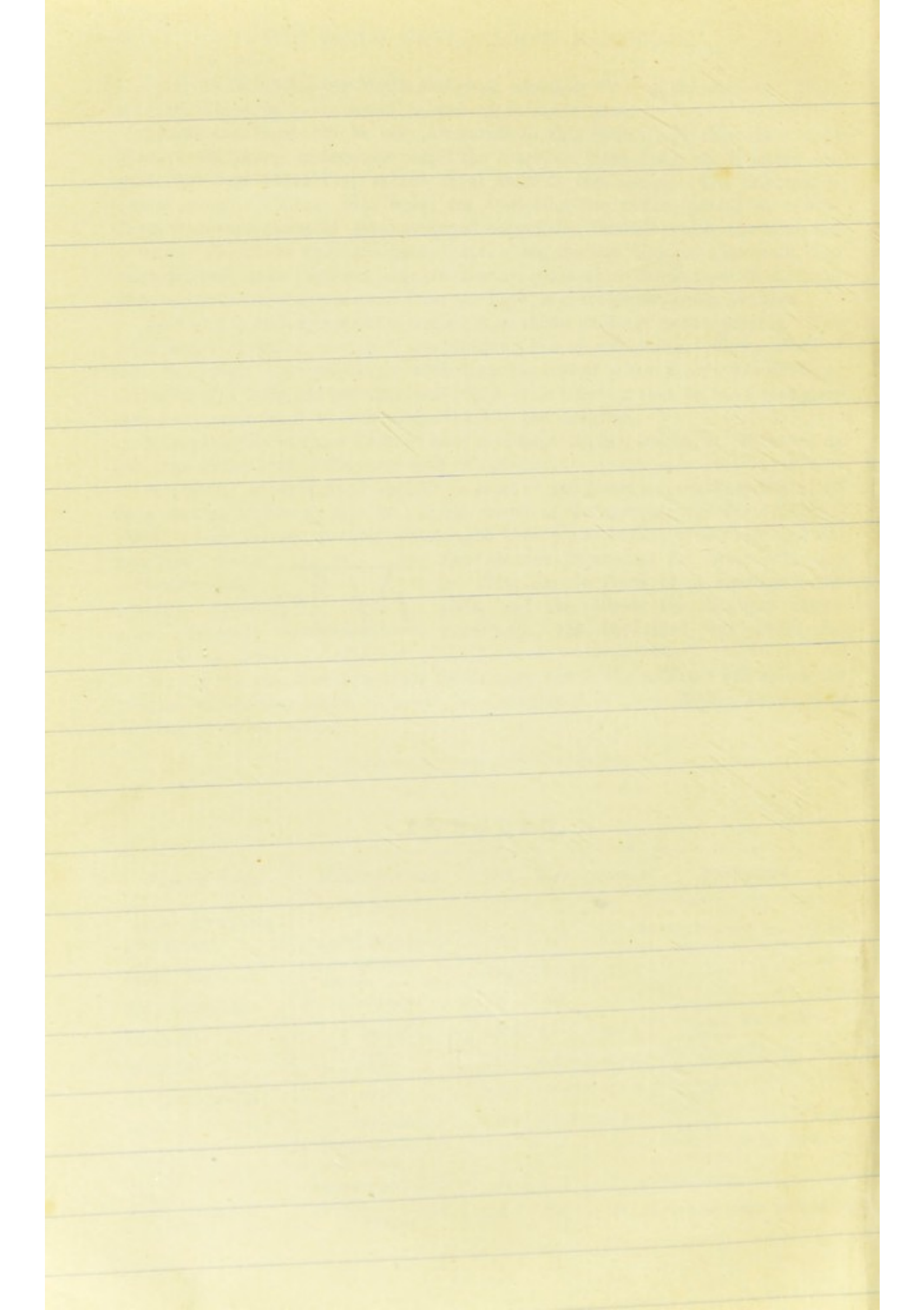
## INSECTS.

| Popular Name.               | Scientific Name.                                | Ova.     | Larva.    | Pupa.   | Food-plants.                                   |
|-----------------------------|---|----------|-----------|---------|--|
| <b>BUTTERFLIES.</b>         |   |          |           |         |  |
| Swallowtail . E             | <i>Papilio Machaon</i> .                        | 6        | 6-8       | 8-4     | { Wild carrot, fennel, and marsh milk-parsley. |
| Wood White . .              | { <i>Leucophasia si-</i><br><i>napis</i> . . }  | 5, 6 & 8 | 6 & 9, 10 | 7 & 9-4 | { Bird's-foot trefoil, and tufted vetch.       |
| Blackveined do. .           | <i>Pieris crataegi</i> .                        | 6        | 8-4       | 5       | { Hawthorn, sloe, and fruit trees.             |
| Large do. . .               | „ <i>brassicæ</i> .                             | 5 & 8    | 6 & 9     | 7 & 9-4 | { Cabbage, &c., and nasturtium.                |
| Small do. . .               | „ <i>rapæ</i> .                                 | 5 & 8    | 6 & 9     | 7 & 9-4 | { Turnip, cabbage, &c., and nasturtium.        |
| Greenveined do. .           | „ <i>napi</i> .                                 | 5 & 8    | 6 & 9     | 7 & 9-4 | { Rape, and other cruciferae.                  |
| Bath do. . .                | „ <i>Daplidice</i> .                            | 5 & 8    | 6 & 9     | 7 & 9-4 | { Weld and wild mignonne.                      |
| Orange Tip . .              | { <i>Anthocharis car-</i><br><i>damines</i> . } | 5        | 7         | 7-4     | { Lady's-smock, treacle-mustard.               |
| Brimstone or Sulphur .      | <i>Gonepteryx rhamni</i>                        | 4        | 6, 7      | 7       | { Buckthorn.                                   |
| Pearl-bordered Fritillary . | { <i>Argynnis Euph-</i><br><i>rosyne</i> . }    | 6        | 7-4       | 4       | { Dog and other violets.                       |











## INSECTS (continued).

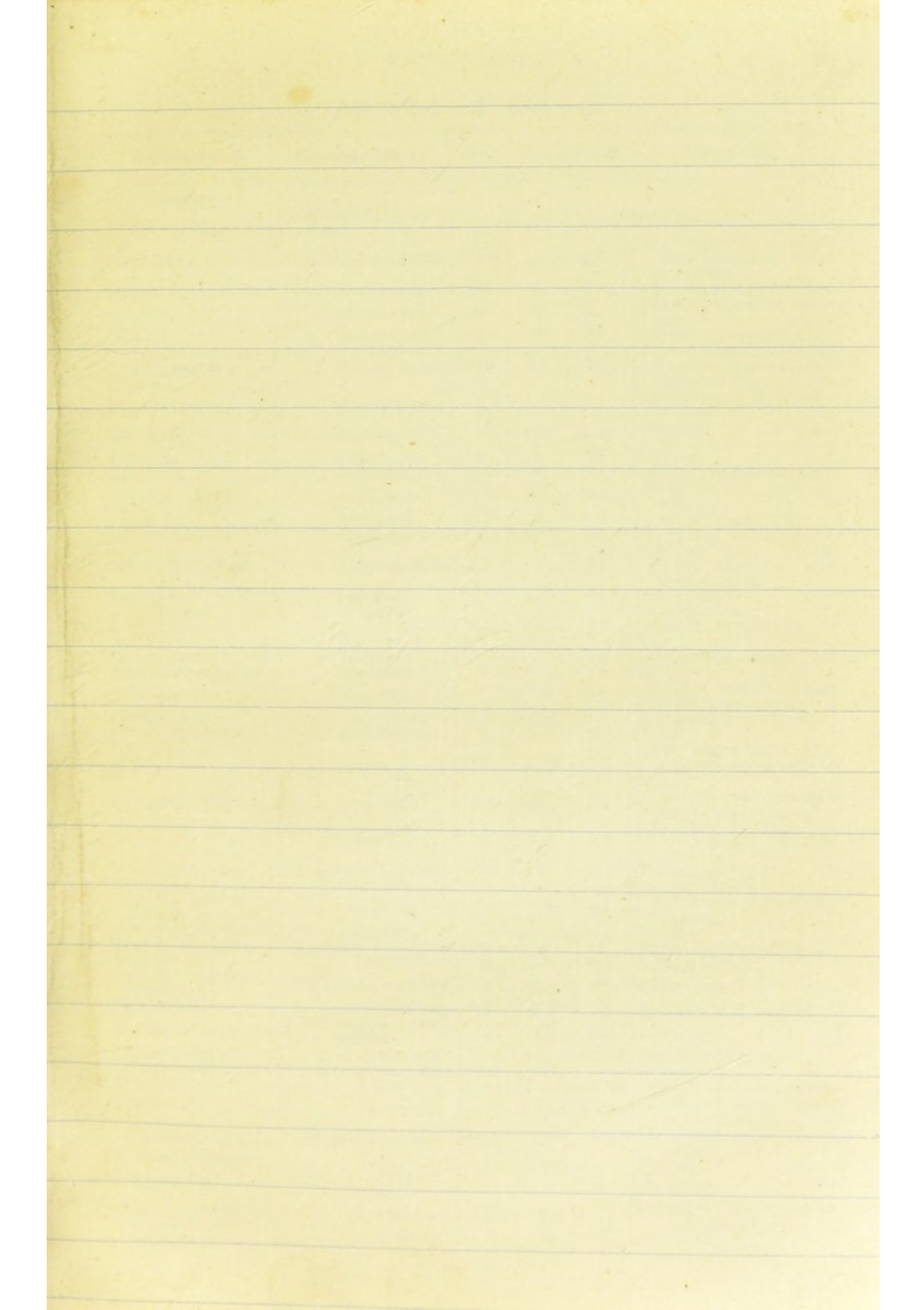
| Popular Name.                   | Scientific Name.                              | Ova.     | Larva.     | Pupa.    | Food-plants.  |
|---------------------------------|---|----------|------------|----------|---|
| <b>BUTTERFLIES.</b>             |   |          |            |          |   |
| Small Pearl-bordered Fritillary | <i>Argynnis Selene</i>                        | 6        | 7-5        | 5        | Dog and other violets.                              |
| Greasy Fritillary               | <i>Melitæa Artemis</i>                        | 6        | 8-1        | 4        | { Plantain, devil's-bit<br>scabious.                |
| Glanville do.                   | „ <i>Cinxia</i>                               | 6        | 7-5        | 5        | Narrow-leaved plantain.                             |
| Large Tortoise-shell            | <i>Vanessa polychloros</i>                    | 5, s. 10 | s. 10-5, 6 | 7        | { Elm, aspen, osier, wil-<br>low, and fruit trees.  |
| Camberwell Beauty               | „ <i>Antiope</i>                              | 5        | 6, 7       | 7        | { Birch, poplar, willow,<br>and nettle.             |
| Peacock                         | „ <i>Io</i>                                   | 4, 5     | 6, 7       | 7        | Nettle.   |
| Red Admiral                     | „ <i>Atalanta</i>                             | 5        | 6, 7       | 7        | Do.   |
| Painted Lady                    | „ <i>cardui</i>                               | 6        | 6-9        | 7-9      | { Thistles, nettle, mallow<br>and scarlet bean.     |
| Wall                            | <i>Satyrus Megæra</i>                         | 5 & 8    | 6, 7 & 9-1 | 4 & 7    | Grasses.  |
| Small Heath                     | { <i>Cænonympha</i><br><i>Pamphilus</i> }     | 5-7      | 5, 6 & 8   | 4 & 7    | Do.   |
| Brown Argus                     | <i>Lycæna Agestis</i>                         | 5 & 8    | 7, & 9-1   | 4 & 7    | Hemlock stork's bill.                               |
| Common Blue                     | „ <i>Alexis</i>                               | 5 & 9    | 4 & 8      | 5 & 8    | Bird's-foot trefoil, &c.                            |
| Clifton do.                     | „ <i>Adonis</i>                               | 5 & 10   | 5 & 7, 8   | 5 & 8    | Tufted horse-shoe vetch.                            |
| Little do., or Bedford Blue     | „ <i>Alsus</i>                                | 6        | 7-3        | 4        | Kidney vetch.                                       |
| Holly or Azure do.              | „ <i>Argiolus</i>                             | 5 & 8    | 6 & 9      | 7 & 10-1 | { Flowers of holly, buck-<br>thorn, ivy.            |
| Duke of Burgundy                | <i>Nemeobius Lucina</i>                       | 6        | 7-9        | 8-5      | Primrose.   |
| Grizzled Skipper                | <i>Syrichthus Alveolus</i>                    | 5        | 6          | —        | { Wild raspberry, bram-<br>ble, silver weed.        |
| Dingy do.                       | <i>Thanaos Tages</i>                          | 5 & 8    | 7 & 9-1    | 5 & 8    | Bird's-foot trefoil.                                |
| Large do.                       | <i>Hesperia sylvanus</i>                      | 5 & 7    | 5 & 7      | —        | Grasses.  |
| <b>MOTHS.</b>                   |   |          |            |          |   |
| Eyed Hawk                       | <i>Smerinthus ocellatus</i>                   | —        | 8, 9       | 9-5      | { Poplar, willow, willow,<br>apple.                 |
| Poplar do.                      | „ <i>populi</i>                               | 5        | 8          | 9-5      | Poplar, willow, willow.                             |
| Lime do.                        | „ <i>tiliæ</i>                                | —        | 8          | 9-5      | Elm, lime, beech.                                   |
| Small Elephant do.              | { <i>Chærocampa</i><br><i>porcellus</i> }     | —        | 8, 9       | 10-5     | { Bedstraws and willow<br>herbs.                    |
| Humming-bird Hawk               | { <i>Macroglossa stel-</i><br><i>atarum</i> } | 5        | 8, 9       | —        | Hedge bedstraw.                                     |
| Broad-bordered Bee Hawk         | „ <i>fuciformis</i>                           | 6        | 7, 8       | 9-5      | { Scabious, honeysuckle,<br>bedstraw.               |
| Narrow-bordered do.             | „ <i>bombyliformis</i>                        | —        | 7, 8       | —        | Scabious.   |
| Apple do.                       | <i>Sesia Myopæformis</i>                      | —        | 4, 5       | 5        | { In stems of apple, pear,<br>plum, hawthorn.       |
| Birch do.                       | „ <i>culiciformis</i>                         | —        | 4          | 5        | In birch and alder.                                 |
| Yellow Belted do.               | „ <i>cynipiformis</i>                         | —        | 4, 5       | 5        | In bark of oak, &c.                                 |
| Alder do.                       | „ <i>sphegiformis</i>                         | —        | 4          | 5        | In young shoots of alder.                           |
| Hornet do.                      | „ <i>apiformis</i>                            | —        | 9-1        | 5        | In stems of poplar.                                 |
| Livid Swift                     | <i>Hepialus lupulinus</i>                     | 6, 7     | 8-5        | 5        | In roots of dead nettle.                            |
| Scarce Forester                 | <i>Procris Geryon</i>                         | —        | 5          | 5, 6     | Sun Cistus.   |
| Least Black Arches              | <i>Nola cristulalis</i>                       | —        | 5          | 5        | Oak.  |
| Orange Footman                  | <i>Lithosia aureola</i>                       | —        | 9-5        | —        | Lichens on larch & oak.                             |
| Red-necked do.                  | „ <i>rubricollis</i>                          | —        | 8-10       | 3        | Lichens on larch, &c.                               |
| Wood Tiger                      | <i>Chelonia plantaginis</i>                   | —        | 8-1        | 5        | Plantain, violets, &c.                              |
| Ruby do.                        | <i>Arctia fuliginosa</i>                      | —        | 4 & 8      | 5 & 8    | { Nettle, plantain, dock,<br>and grasses.           |
| Spotted Muslin                  | „ <i>mendica</i>                              | —        | 8          | 9-1      | Sloe, plantain.                                     |
| Buff Ermine                     | „ <i>lubricipeda</i>                          | —        | 8          | 9-5      | Plantain and nettle.                                |
| White do.                       | „ <i>menthastri</i>                           | —        | 8          | 9-5      | { Nettle, and various<br>plants.                    |
| Hop Dog                         | <i>Orgyia pudibunda</i>                       | 5, 6     | 8, 9       | 9-1      | { Oak, beech, nut, haw-<br>thorn, hop.              |
| Fox Moth                        | <i>Bombyx Rubi</i>                            | —        | 9-5        | —        | Heath and bramble.                                  |
| Small Lappet                    | { <i>Lasiocampa ili-</i><br><i>cifolia</i> }  | —        | 8          | —        | Sallow & whortleberry.                              |
| Emperor                         | <i>Saturnia carpini</i>                       | 5        | 8          | 10-1     | { Sallow, hawthorn,<br>bramble, heath, sloe,<br>&c. |
| Little Thorn                    | <i>Epione advenaria</i>                       | 5, 6     | 8          | —        | Dogwood and wild rose.                              |



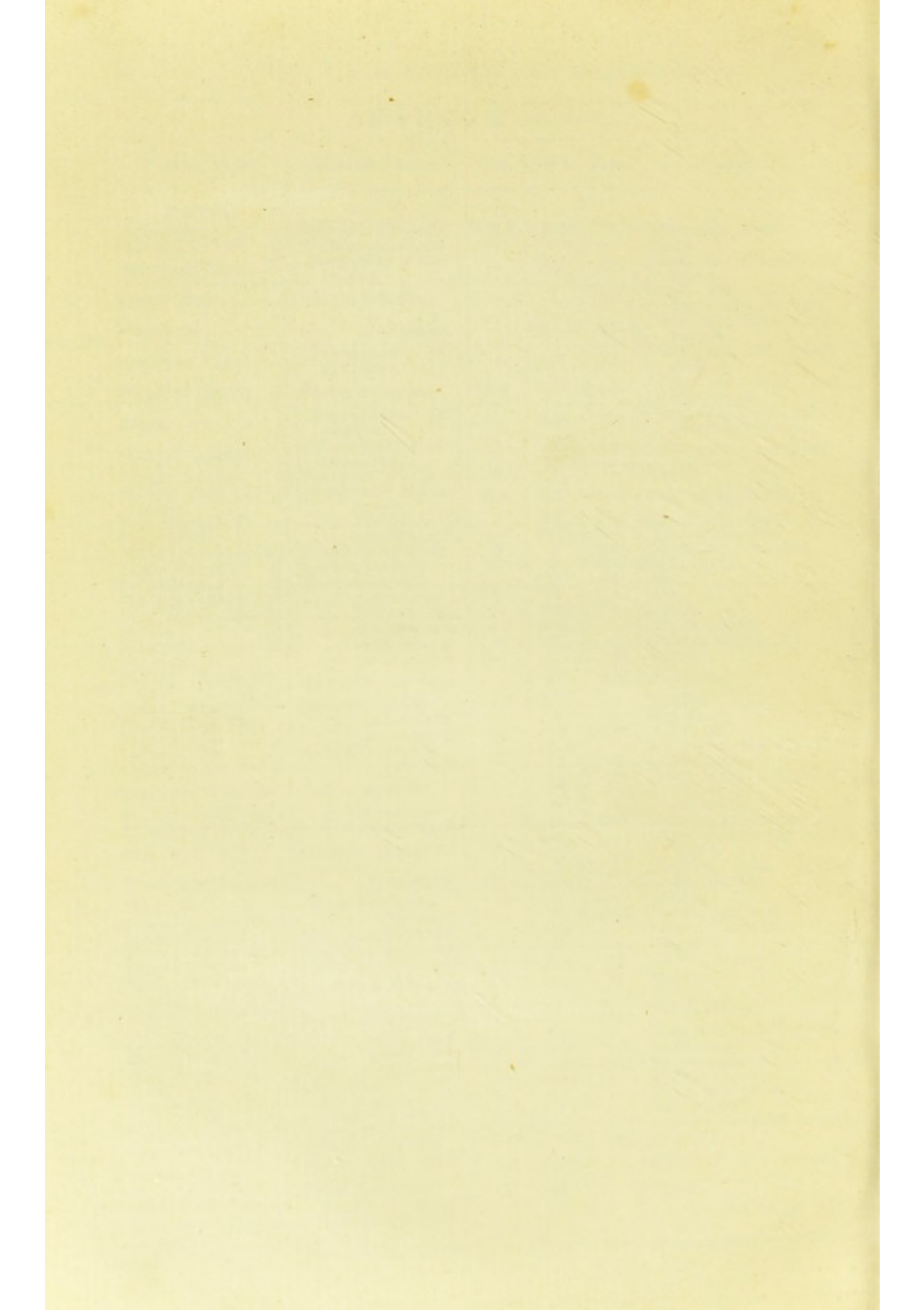
## INSECTS (continued).

| Popular Name.                        | Scientific Name.                                 | Ova.  | Larva.    | Pupa.    | Food-plants.                                  |
|--------------------------------------|--|-------|-----------|----------|---|
| <b>MOTHS.</b>                        |  |       |           |          |   |
| Brimstone . . .                      | <i>Rumia crataegata</i> .                        | 4 & 9 | 6 & 9-3   | —        | Hawthorn, sloe.                               |
| Spotted Yellow . .                   | <i>Venilia maculata</i> .                        | —     | 9         | —        | Nettle.                                       |
| Scorched Wing . .                    | <i>Eurymene dolo-</i><br><i>braria</i> . . .     | —     | 8, 9      | 10-5     | { Oak, beech, birch, and<br>aspens.           |
| Lunar Thorn . . .                    | <i>Selenia lunaria</i> .                         | —     | 8         | 8-4      | { Oak, elm, ash, nut,<br>hawthorn, sloe, &c.  |
| Purple do. . . .                     | „ <i>illustraria</i> .                           | —     | 6 & 9, 10 | 7 & 11-4 | { Oak, ash, birch, beech,<br>maple.           |
| Scalloped Hazel . .                  | <i>Odontopera bi-</i><br><i>dentata</i> . . .    | —     | 8, 9      | 9-4      | { Oak, ash, nut, willow,<br>sloe.             |
| Brindled Beauty B                    | <i>Biston hirtaria</i> .                         | 4, 5  | 6, 7      | 9-3      | { Elm, ash, lime, and<br>fruit trees.         |
| Pepper . . . . .                     | <i>Amphidasis be-</i><br><i>tularia</i> . . .    | —     | 8-10      | 10-4     | { Oak, elm, birch, beech,<br>alder, hawthorn. |
| Waved Umber . . .                    | <i>Hemerophila ab-</i><br><i>ruptaria</i> . . .  | —     | 6         | 9-4      | Lilac, privet, and rose.                      |
| Ringed Beauty . .                    | <i>Boarmia cinctaria</i> .                       | 6     | 9         | —        | Heath.  |
| Square Spot En-<br>grailed . . . . . | <i>Tephrosia conso-</i><br><i>naria</i> . . . .  | 5, 6  | 7-9       | 10-4     | Oak, beech, birch.                            |
| Pale Engrailed . .                   | „ <i>biundularia</i> .                           | 5     | 6-9       | 10-3     | Oak, birch, &c.                               |
| Grey Birch . . . .                   | „ <i>punctulata</i> .                            | —     | 8, 9      | 10-4     | Birch and alder.                              |
| Small Grass Emerald                  | <i>Nemoria viridata</i> .                        | 6     | 8         | 9-4      | Hawthorn, bramble.                            |
| Little Emerald E                     | <i>Iodis lactearia</i> .                         | —     | 9         | 10-5     | Oak, birch.                                   |
| False Mocha . . M                    | <i>Ephyra porata</i> .                           | —     | 9         | 9-4      | Oak.  |
| Maiden's Blush M                     | „ <i>punctaria</i> .                             | 6     | 7-9       | 8-4      | Do.   |
| Clay Treble-lines M                  | „ <i>trilinearia</i> .                           | —     | 8-10      | 9-4      | Beech.  |
| Mocha . . . . . M                    | „ <i>omicronaria</i> .                           | —     | 8-10      | —        | Maple, beech.                                 |
| Dingy do. . . . M                    | „ <i>orbicularia</i> .                           | —     | 8         | —        | Sallow, alder.                                |
| Birch do. . . . .                    | „ <i>pendularia</i> .                            | —     | 7         | 8-4      | Birch.  |
| Purple Bordered<br>Gold . . . . .    | <i>Hyria auroraria</i> .                         | —     | 8-5       | 5, 6     | Plantain.                                     |
| Small Yellow Wave                    | <i>Asthena luteata</i> .                         | —     | 8-10      | —        | Maple.  |
| Small White do. .                    | „ <i>candidata</i> .                             | —     | 4         | —        | Hornbeam                                      |
| Blomer's do. . . .                   | „ <i>Blomeraria</i> .                            | —     | 8, 9      | 10-6     | Wych elm.                                     |
| Lace Border . . .                    | <i>Acidalia ornata</i> .                         | 7     | 7 s. 4    | —        | Marjoram, thyme.                              |
| Cream Wave . . E                     | „ <i>remutata</i> .                              | —     | 8-4       | —        | Low plants.                                   |
| Common White do.                     | <i>Cabera pusaria</i> .                          | —     | 7-9       | —        | { Oak, birch, nut, alder,<br>and willow.      |
| Round-winged do. .                   | „ <i>rotundaria</i> .                            | —     | 9         | —        | Birch, willow.                                |
| Dingy White do. .                    | „ <i>exanthemaria</i> .                          | —     | 10        | 10-5     | Sallow and alder.                             |
| Clouded Silver . .                   | <i>Corycia temerata</i> .                        | 6     | 7, 8      | 9-4      | { Sloe, wild cherry, buck-<br>thorn.          |
| Spotted Pinion Wave                  | „ <i>taminata</i> .                              | —     | 7         | —        | { Sallow, wild cherry,<br>buckthorn.          |
| Peacock . . . . .                    | <i>Macaria notata</i> .                          | —     | 9         | —        | Sallow.                                       |
| Tawny-barred Angle                   | „ <i>liturata</i> .                              | —     | 9         | 10-4     | Larch, Scotch fir.                            |
| Latticed Heath . .                   | <i>Strenia clathrata</i> .                       | —     | 10-4      | —        | Lucerne, sainfoin.                            |
| Brown Silver Line                    | <i>Panagra petriaria</i> .                       | 5     | 6         | —        | Bracken.                                      |
| Barred Umber . .                     | <i>Numeria pulveraria</i> .                      | —     | 7, 8      | 9-4      | Sallow, nut, privet.                          |
| Grey Scalloped<br>Bar . . . . . E    | <i>Scodiona Belgiaria</i> .                      | 6, 7  | 8-4       | 5        | Heath.  |
| Netted Mountain<br>Moth . . . . .    | <i>Fidonia carbonaria</i> .                      | —     | 7         | 8-4      | Birch, willow.                                |
| Common Heath M                       | „ <i>atomaria</i> .                              | —     | 7-4       | —        | Knapweeds and trefoils.                       |
| Bordered White . .                   | „ <i>pinaria</i> .                               | 6     | 8, 9      | 10-3     | Larch and Scotch fir.                         |
| Drab Looper . . .                    | <i>Minoa euphorbiata</i> .                       | 7     | 8, 9      | 10-5     | Cypress spurge.                               |
| Belle . . . . . M                    | <i>Sterrhia sacraria</i> .                       | 8     | 6 & 9     | —        | Dock, chamomile.                              |
| Purple Bar . . . .                   | <i>Lythria purpuraria</i> .                      | —     | 8?        | —        | Dock, knotgrass.                              |
| Rest Harrow . . E                    | <i>Aplasta ononaria</i> .                        | —     | 4 & 9     | —        | Rest harrow.                                  |
| Yellow Belle . . M                   | <i>Aspilates citraria</i> .                      | 5 & 8 | 7 & 10    | 8        | Trefoils and wild carrot.                     |
| Scorched Carpet . .                  | <i>Ligdia adustata</i> .                         | 5-7   | 5, 6, 7   | 9-4      | Spindle.                                      |
| Clouded Border . .                   | <i>Lomaspilis mar-</i><br><i>ginata</i> . . . .  | —     | 6 & 9     | —        | Sallow, willow, poplar.                       |
| Horse-Chestnut . .                   | <i>Pachynemina</i><br><i>hippocastanaria</i> .   | —     | 9-5       | —        | Heath.  |
| Mottled Green<br>Carpet . . . . .    | <i>Larentia pectini-</i><br><i>taria</i> . . . . | —     | 8, 9      | —        | { Alder and hedge bed-<br>straw.              |
| Grass Rivulet . .                    | <i>Emmelesia albulata</i> .                      | 6     | 8, 9      | 10-4     | Seeds of yellow rattle.                       |











## INSECTS (continued).

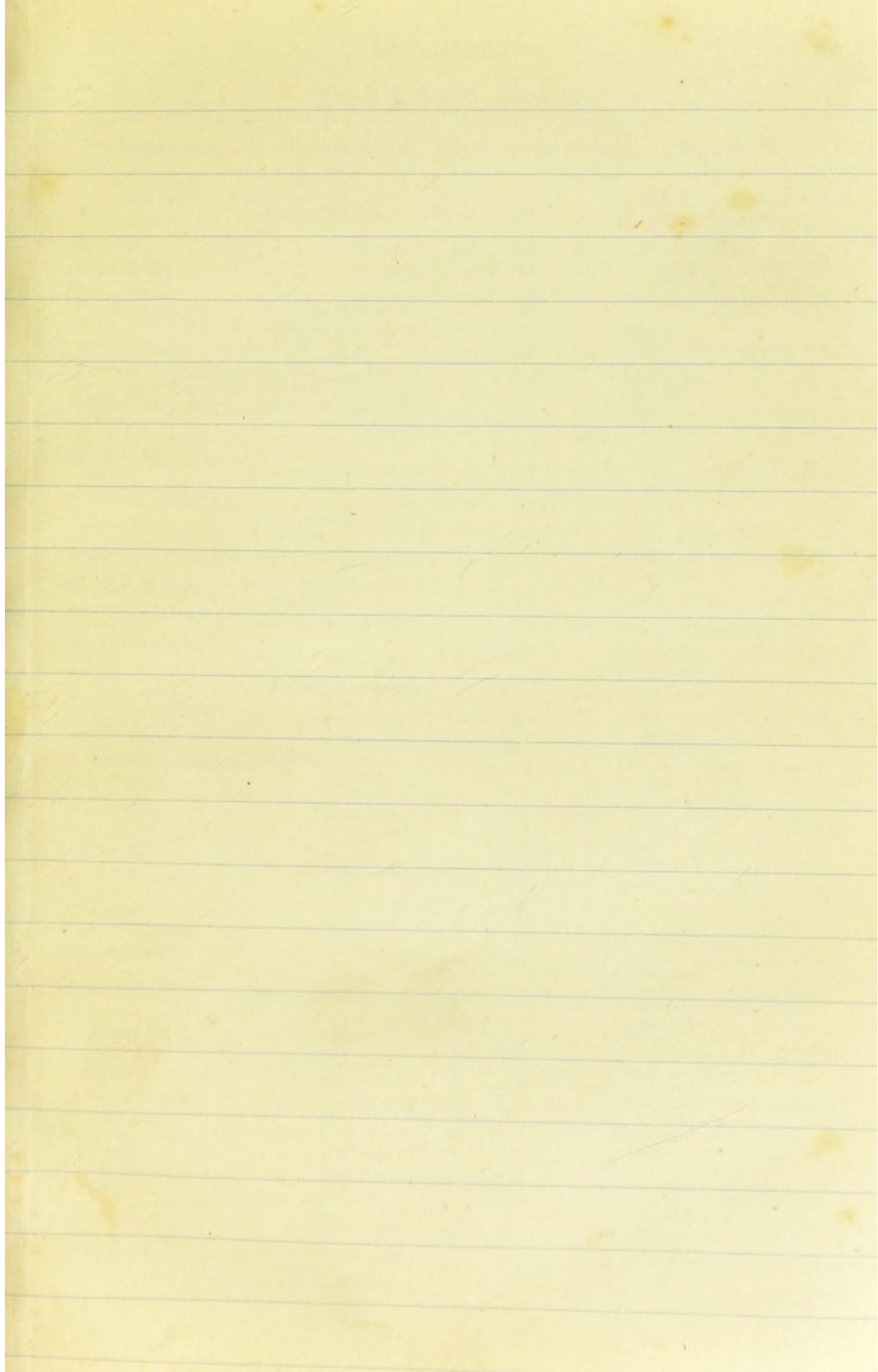
| Popular Name.                         | Scientific Name.                                  | Ova.  | Larva.   | Pupa.   | Food-plants.  |
|---------------------------------------|---|-------|----------|---------|---|
| <b>MOTHS.</b>                         |   |       |          |         |   |
| Pretty Pinion . . .                   | { <i>Emmelesia blan-</i><br><i>diata</i> . . . }  | —     | 9        | —       | Eyebright.  |
| Netted Pug . . .                      | <i>Eupithecia venosata</i>                        | 5 & 6 | 7        | 8-5     | { Seed-capsules of blad-<br>der campion & white<br>campion.               |
| Pinion Spotted do.                    | „ <i>consignata</i> .                             | 5, 6  | 6        | 9-4     | Oak, nut, and fruit trees.  |
| Beautiful do. . .                     | „ <i>linariata</i> .                              | 6     | 8        | 9-4     | { Flowers of yellow toad-<br>flax.  |
| Red do. . . . .                       | „ <i>pulchellata</i> .                            | 6     | 7        | 9-4     | Flowers of foxglove.  |
| Lime Speck do. .                      | „ <i>centaureata</i> .                            | 5, 6  | 8, 9     | 9-5     | { Flowers and seeds of<br>yarrow, ragwort, gol-<br>den-rod, angelica, &c. |
| Lead do. . . . E                      | „ <i>plumbeolata</i>                              | 5     | 7, 8     | 7-5     | { Flowers of yellow cow-<br>wheat.  |
| Dwarf do. . . .                       | „ <i>pygmæata</i> .                               | 6     | 6, 7     | 5, 6    | { Flowers of greater<br>stitchwort.                                       |
| Swiss do. . . .                       | „ <i>helveticata</i> .                            | 6     | 9        | 9-6     | Juniper.  |
| Beech do. . . .                       | „ <i>satyrata</i> .                               | 5, 6  | 9        | 9-6     | Scabious and bedstraws.   |
| Grey do. . . . .                      | „ <i>castigata</i> .                              | 5, 6  | 8-10     | 9-5     | { Heath, nettle, golden-<br>rod, &c.                                      |
| Larch do. . . .                       | „ <i>lariciata</i> .                              | 6, 7  | 7        | 9-6     | Larch and spruce fir.   |
| Golden Rod do. .                      | „ <i>virgaureata</i> .                            | 6     | 8, 9     | 9-6     | Flowers of golden rod.  |
| White Spotted do. .                   | „ <i>albipunctata</i>                             | 6, 7  | 9        | 9-6     | { Flowers and seeds of<br>wild angelica and<br>cow parsley.               |
| Spruce do. . . .                      | „ <i>pusillata</i> .                              | 5, 6  | 6, 7     | 7-5     | Spruce fir.   |
| Marbled do. . .                       | „ <i>irriguata</i> .                              | 6     | 6        | 7-6     | Oak and sloe.   |
| Burnet do. . . .                      | „ <i>pimpinellata</i>                             | 6, 7  | 6 & 9    | 9-6     | Seeds of pimpernels.  |
| Ash do. . . . . E                     | „ <i>fraxinata</i> .                              | 8     | 8, 9     | 10-4    | Ash.  |
| Ochreous do. . .                      | „ <i>indigata</i> .                               | 5, 6  | 7        | 7-5     | Juniper and Scotch fir.   |
| Narrow-winged do.                     | „ <i>nanata</i> .                                 | 7     | 8, 9     | 9-5     | Flowers of heath.   |
| Common do. . .                        | „ <i>vulgata</i> .                                | 5     | 7-9      | 8-5     | { Willow, hawthorn, rag-<br>wort, golden-rod.                             |
| Currant do. . . .                     | „ <i>assimilata</i> .                             | 6, 7  | 9, 10    | 9-6     | Hop and black currant.  |
| Brindled Brown do.                    | „ <i>dodoneata</i> .                              | 5     | 6, 7     | 7-5     | Oak.  |
| Mottled do. . . .                     | „ <i>exiguata</i> .                               | 6     | 9, 10    | 9-6     | { Ash, alder, hawthorn,<br>black currant, willow,<br>&c.                  |
| Double Striped do. .                  | „ <i>pumilata</i> .                               | 6-8   | 6 & —    | 8-6     | { Flowers of chervil,<br>gorse, clematis, &c.                             |
| V. do. . . . .                        | „ <i>coronata</i> .                               | 6     | 7, 8     | 8-6     | { Flowers of bramble,<br>golden-rod, clematis,<br>&c.                     |
| Small Seraphim .                      | <i>Lobophora sexalata</i>                         | —     | 9        | 10-5    | Willow and willow.  |
| Seraphim . . . .                      | „ <i>hexapterata</i>                              | —     | 8        | —       | Poplar, willow.   |
| Brindle-barred<br>Yellow . . . . M    | „ <i>viretata</i> .                               | —     | 7, 8     | 9-5     | { Privet and herb Chris-<br>topher.                                       |
| Grey Juniper Carpet                   | <i>Thera simulata</i> .                           | —     | 6 & 10   | —       | Juniper.  |
| March Highflyer .                     | <i>Ypsipetes ruberata</i>                         | —     | 6        | 4       | Alder, willow, bilberry.  |
| May do. . . . .                       | „ <i>impluviata</i>                               | —     | 8, 9     | 3, 4    | Sallow, alder.  |
| Purple Barred<br>Carpet . . . .       | <i>Melanthia ocellata</i>                         | 6     | 7, 8     | 8-5     | Bedstraws.  |
| Beautiful do. . .                     | „ <i>albicillata</i>                              | 5     | 8, 9     | 9-5     | Bramble and raspberry.  |
| Bordered Chalk do.                    | { <i>Melanippe pro-</i><br><i>cellata</i> . . . } | 7     | 8, 9     | 10-5    | Clematis.   |
| Common do. . .                        | „ <i>subtristata</i>                              | —     | 6 & 9    | 6 & 9-4 | Hedge bedstraw.   |
| Silver Ground do. .                   | „ <i>montanata</i>                                | 6-8   | 10-3     | 4       | Primrose.   |
| Bedstraw do. . .                      | „ <i>galiata</i> .                                | —     | 7 & 9    | 8 & 9-4 | Smooth heath bedstraw.  |
| Garden do. . . .                      | „ <i>fluctuata</i> .                              | —     | 6, 7 & 9 | 8 & —   | { Cabbage, horse-radish,<br>nasturtium, &c.                               |
| Streamer . . . .                      | <i>Anticlea derivata</i> .                        | 3, 4  | 6        | 7-3     | { Dog-rose and honey-<br>suckle.  |
| Barberry Carpet .                     | „ <i>berberata</i> .                              | —     | 6 & 9    | —       | Barberry.   |
| Flame do. . . .                       | { <i>Coremia propug-</i><br><i>nata</i> . . . }   | —     | 9        | —       | Primrose.   |
| Red Twin-spot do. .                   | „ <i>ferrugata</i> .                              | 5 & 8 | 7 & 9    | —       | { Bedstraws, chickweed,<br>and ground ivy.                                |
| Dark-barred Twin-<br>spot do. . . . } | „ <i>unidentata</i> .                             | —     | 8        | 4       | Bedstraws.  |



## INSECTS (continued).

| Popular Name.                  | Scientific Name.              | Ova.  | Larva.   | Pupa.    | Food-plants.  |
|--------------------------------|-------------------------------|-------|----------|----------|---|
| <b>MOTHS.</b>                  |                               |       |          |          |   |
| Gem . . . . H                  | <i>Camptogramma fluviata</i>  | 7     | 8        | 9        | { Spotted persicaria, groundsel, &c.                        |
| Oblique Striped Carpet . . . E | <i>Phibalapteryx lignata</i>  | 7 & 9 | 8 & 10-4 | —        | White water bedstraw.                                       |
| Small Waved Umber . . . .      | " <i>vitalbata</i>            | —     | —        | —        | Clematis.   |
| Tissue . . . .                 | <i>Scotosia certata</i>       | —     | 6, 7     | —        | Barberry.   |
| Autumn Green Carpet . . . H    | <i>Cidaria miata</i>          | —     | 8        | 9        | { Oak, birch, poplar, willow, and alder.                    |
| Broken Bar . . . .             | " <i>corylata</i>             | 6     | 8, 9     | —        | Lime, sloe, and nut.  |
| Marbled Carpet . . . .         | " <i>russata</i>              | 5 & 8 | 7 & 10-4 | 7 & 5    | { Birch, hawthorn, sal-low, and strawberry.                 |
| Water do. . . .                | " <i>suffumata</i>            | —     | 9, 10    | 3        | { Ragwort and hedge bedstraw.                               |
| Small Phoenix . . . .          | " <i>silaceata</i>            | —     | 7 & 9    | 7 & 10-6 | { Willow herbs, and enchanter's nightshade.                 |
| Phoenix . . . .                | " <i>prunata</i>              | 7-4   | 5, 6     | 6        | { Sloe, currant, gooseberry.                                |
| Oblique Striped . . . .        | <i>Eubolia lineolata</i>      | 5 & 8 | 5, 6 & 9 | 7 & 10-5 | Yellow bedstraw.  |
| Treble Barred . . . .          | <i>Anaitis plagiata</i>       | —     | 7 & 10-4 | —        | { Perforated St. John's wort.                               |
| Chevron . . . .                | <i>Chesias obliquaria</i>     | —     | 7-9      | 9-4      | Broom.  |
| Scalloped Hook Tip             | <i>Platypteryx la-certula</i> | 6     | 6 & s.   | —        | Birch.  |
| Scarce do. . . . E             | " <i>sicula</i>               | —     | 5, 6     | —        | Oak, birch, and lime.                                       |
| Pebble do. . . .               | " <i>falcula</i>              | —     | 7 & 10   | —        | { Birch, oak, poplar, willow, and alder.                    |
| Oak do. . . .                  | " <i>hamula</i>               | —     | 6 & 9    | —        | Oak, birch.   |
| Beech do. . . .                | " <i>unguicula</i>            | 6     | 7 & 9-10 | —        | Beech.  |
| Goose Egg . . . .              | <i>Cilix spinula</i>          | —     | 5, 6 & 7 | 6 & 7    | { Hawthorn, sloe, mountain ash.                             |
| Scarce Kitten . . . .          | <i>Dicranura bicuspis</i>     | —     | 8-10     | 10-5     | Birch, beech, and alder.                                    |
| Common do. . . .               | " <i>furcula</i>              | 6     | 6-9      | 9-5      | Sallow, willow, poplar.                                     |
| Broad Barred do. . . .         | " <i>bifida</i>               | 6     | 7-9      | 9-5      | Poplar.   |
| Puss . . . .                   | " <i>vinula</i>               | 6     | 7, 8     | 8-5      | Willow, poplar, sal-low, oak, beech, nut.                   |
| Buff Tip . . . .               | <i>Pygæra bucephala</i>       | 6     | 7-9      | 10-5     | Poplar, willow, sal-low, oak, beech, nut.                   |
| Chocolate Tip . . . .          | <i>Clostera curtula</i>       | 4 & 7 | 5 & 8, 9 | 6 & 9-3  | Poplar, willow, sal-low, oak, beech, nut.                   |
| Small do. do. . . .            | " <i>reclusa</i>              | —     | 7 & 9    | —        | Poplar, willow, sal-low, oak, beech, nut.                   |
| Dusky Prominent . . . .        | <i>Gluphisia crenata</i>      | —     | 8        | —        | Poplar.   |
| Pale do. . . .                 | <i>Ptilodontis palpina</i>    | —     | 7 & 9    | 7 & 10-6 | { Willow, sal-low, birch, poplar.                           |
| Cock's Comb do. . . .          | <i>Notodonta camolina</i>     | 6 & — | 7 & 9    | 10-5     | { Oak, beech, birch, alder, aspen, maple, sal-low, nut, &c. |
| Maple do. . . .                | " <i>cucullina</i>            | —     | 8, 9     | 10-5     | Sycamore and maple.   |
| Swallow do. . . .              | " <i>dictæa</i>               | —     | 6 & 9    | 7 & 10-5 | Poplar, willow, sal-low, oak, beech, nut.                   |
| Small Swallow do. . . .        | " <i>dictæoides</i>           | 6     | 7-9      | 10-5     | Birch.  |
| Iron do. . . .                 | " <i>dromedarius</i>          | 6     | 7, 8     | 10-5     | Birch, alder, and nut.                                      |
| Dark do. . . .                 | " <i>trilophus</i>            | —     | 7-9      | —        | Poplar and birch.   |
| Pebble do. . . .               | " <i>ziczac</i>               | —     | 6 & 9    | 7 & 10-5 | { Poplar, willow, sal-low, alder.                           |
| Great do. . . .                | " <i>trepida</i>              | —     | 8        | 9-5      | Oak.  |
| Lunar Marbled . . . .          | " <i>chaonia</i>              | —     | 6-8      | 8-5      | Do.   |
| Marbled Brown . . . .          | " <i>dodonea</i>              | 6     | 7-9      | 10-5     | Oak and birch.  |
| Peach Blossom E                | <i>Thyatira batis</i>         | 6, 7  | 8, 9     | 10-5     | { Bramble and rasp-berry.                                   |
| Lesser Satin Carpet            | <i>Cymatophora duplaris</i>   | —     | 8, 9     | 10-5     | Birch.  |
| Figure of 80 . . . .           | " <i>ocularis</i>             | —     | 7-9      | 9-5      | Poplar.   |
| Grey Dagger . . . .            | <i>Acronycta Psi.</i>         | 6, 7  | 8, 9     | 10-5     | { Poplar, elm, lime, hawthorn, and pear.                    |
| Miller . . . .                 | " <i>leporina</i>             | 5, 6  | 7-9      | 10-5     | { Birch, poplar, sal-low, alder.                            |
| Sycamore . . . .               | " <i>aceris</i>               | 7     | 8, 9     | 10-5     | { Sycamore, oak, maple, birch, horse-chestnut.              |
| Poplar Grey . . . .            | " <i>megacephala</i>          | —     | 6-8      | 9-4      | Poplar.   |







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## INSECTS (continued).

| Popular Name.                           | Scientific Name.                                  | Ova. | Larva.           | Pupa.   | Food-plants.  |
|---|---|------|------------------|---------|---|
| MOTHS.                                  |   |      |                  |         |   |
| Alder. . . . .                          | <i>Acronycta alni</i> .                           | —    | 7-9              | 9-4     | { Alder, willow, oak,<br>lime, elm, nut, beech,<br>birch, &c. |
| Coronet . . . . .                       | „ <i>ligustri</i>                                 | 6, 7 | 8, 9             | 10-5    | Ash and privet.   |
| Knot Grass . . . . .                    | „ <i>rumicis</i>                                  | 6    | 6-8              | 9-4     | { Bramble, plantain,<br>knotgrass.                            |
| Sweet Gale . . . . .                    | „ <i>myricæ</i> .                                 | —    | 8, 9             | —       | Sweet gale, sallow, birch.                                    |
| Flame Wainscot . . . . .                | <i>Meliana flammea</i> .                          | —    | —                | —       | —   |
| Bordered Brindle E                      | <i>Xylophasia rurea</i> .                         | —    | 4                | 4, 5    | Grasses.  |
| Silver Cloud . . . . .                  | { <i>Xylomiges con-</i><br><i>spicillaris</i> . } | —    | 6-8              | 9-3     | { Bird's-foot trefoil, and<br>other low plants.               |
| Bordered Gothic E                       | <i>Neuria saponariæ</i> .                         | —    | 7, 8             | —       | Campions.   |
| Feathered Ear . . . . .                 | <i>Pachetra leucophaea</i>                        | —    | 10-4             | 5, 6    | Grasses.  |
| Large Nutmeg . . . . .                  | <i>Mamestra albicolon</i>                         | —    | 7, 8             | 9-4     | Orache and goosefoot.   |
| Cabbage . . . . .                       | „ <i>brassicæ</i>                                 | —    | 5, 6 &<br>8, 9   | 9-4 & 7 | { Cabbage, dock, goose-<br>foot, &c.                          |
| Rustic Shoulder-<br>knot . . . . .      | <i>Apamea basilinea</i> .                         | —    | 8-3              | 4, 5    | { Wheat in summer,<br>various plants after<br>hibernation.    |
| Uniform Rustic E                        | „ <i>unanimis</i> .                               | 7, 8 | 9-4              | 4-6     | Grasses.  |
| Triple Lines . . . . .                  | { <i>Grammesia tri-</i><br><i>linea</i> . }       | —    | 4, 5             | 5, 6    | Great plantain.   |
| Gold Line . . . . .                     | <i>Hydrilla palustris</i>                         | —    | 7, 8             | —       | { Plantain and other low<br>plants.                           |
| Mottled Beauty . . . . .                | { <i>Caradrina cubi-</i><br><i>cularis</i> . }    | 8    | 9-4              | 5-7     | Grasses, &c.  |
| Brown Feathered<br>Rustic . . . . . E   | <i>Rusina tenebrosa</i> .                         | —    | 9-3              | 4-6     | Violets, knotgrass, &c.                                       |
| Shuttle-shaped<br>Dart . . . . . E      | <i>Agrotis puta</i> . . .                         | 8    | 9-12             | —       | { Dandelion, knotgrass,<br>lettuce, &c.                       |
| Great Yellow<br>Underwing . . . . . E   | <i>Triphaena pronuba</i>                          | 7    | 8-4, 5           | 5-7     | Dock, &c.   |
| Setaceous Hebrew<br>Character . . . . . | <i>Noctua C-nigrum</i> .                          | —    | 4 & 10           | —       | { Pea - stems and low<br>plants.                              |
| Small Square Spot . . . . .             | „ <i>rubi</i> . . . . .                           | —    | 6, 7             | —       | Low plants.   |
| Hebrew Character B                      | { <i>Tæniocampa</i><br><i>gothica</i> }           | 4    | 5-8              | 7-3     | { Oak, sallow, broom,<br>lilac, and dock.                     |
| Red Quaker . . . . . B                  | „ <i>rubricosa</i> .                              | 4    | 5-7              | 8-3     | Elm and dock.   |
| Clouded Drab . . . . . B                | „ <i>instabilis</i> .                             | 4    | 5-7              | 8-3     | { Oak, willow, sallow,<br>dock.                               |
| Northern Drab . . . . . B               | „ <i>opima</i> . . . . .                          | 4    | 5-7              | 8-3     | Willow, sallow, rose.   |
| Intermediate . . . . . B                | „ <i>populeti</i> . . . . .                       | 4    | 6, 7             | 7-3     | Poplar.   |
| Tawny Shears . . . . .                  | { <i>Dianthæcia car-</i><br><i>pophaga</i> . }    | 6    | 7, 8 s.<br>9, 10 | 10-4    | Seeds of campions.  |
| Lychnis . . . . .                       | „ <i>capsincola</i> .                             | 6    | 7-9              | 8-5     | Do.   |
| Campion . . . . .                       | „ <i>cucubali</i> . . . . .                       | 6    | 7, 8             | —       | Do.   |
| Scarce Coronet . . . . .                | „ <i>compta</i> . . . . .                         | —    | 7                | —       | Seeds of garden pinks.  |
| Angle Shades . . . . .                  | { <i>Phlogophora me-</i><br><i>ticulosa</i> . }   | —    | 11-4             | —       | { Broom, and many low<br>plants.                              |
| Small do. . . . .                       | <i>Euplexia lucipara</i> .                        | 6    | 8, 9             | —       | { Bracken, male fern,<br>sallow, nettle, plan-<br>tain, &c.   |
| Dark Brocade . . . . .                  | <i>Hadena adusta</i> .                            | 7    | 7-9              | 4       | { Sallow, hawthorn, and<br>low plants.                        |
| Shears . . . . .                        | „ <i>dentina</i> . . . . .                        | —    | 5, 6             | —       | Roots of dandelion.   |
| Nutmeg . . . . .                        | „ <i>chenopodii</i>                               | 6    | 7-9              | 9-5     | Goosefoot.  |
| Dingy Brocade . . . . .                 | „ <i>suasa</i> . . . . .                          | —    | 7, 8             | —       | { Plantain, knotgrass,<br>lettuce, &c.                        |
| Broom Moth . . . . .                    | „ <i>pisi</i> . . . . .                           | —    | 8-10             | 10-5    | Bracken, broom, &c.   |
| Pale - shouldered<br>Brocade . . . . .  | „ <i>thalassina</i>                               | —    | 7, 8             | 8-5     | { Sallow, broom, honey-<br>suckle, knotgrass, &c.             |
| Beautiful do. . . . .                   | „ <i>contigua</i> . . . . .                       | —    | 8, 9             | —       | Oak, birch, nut, &c.  |
| Light do. . . . .                       | „ <i>genistæ</i> . . . . .                        | —    | 7-9              | —       | { Broom, chickweed,<br>campion, &c.                           |
| Northern do. . . . .                    | „ <i>rectilinea</i> .                             | 6    | 8-3              | —       | Sallow, bramble, bil-<br>berry.                               |
| Purple Cloud . . . . .                  | { <i>Cloantha perspi-</i><br><i>cillaris</i> }    | —    | 7, 8             | —       | Perforated St. John's<br>wort.                                |
| Mullein . . . . .                       | <i>Cucullia verbasci</i> .                        | 5    | 6, 7             | 9-4     | Mulleins and figworts.  |



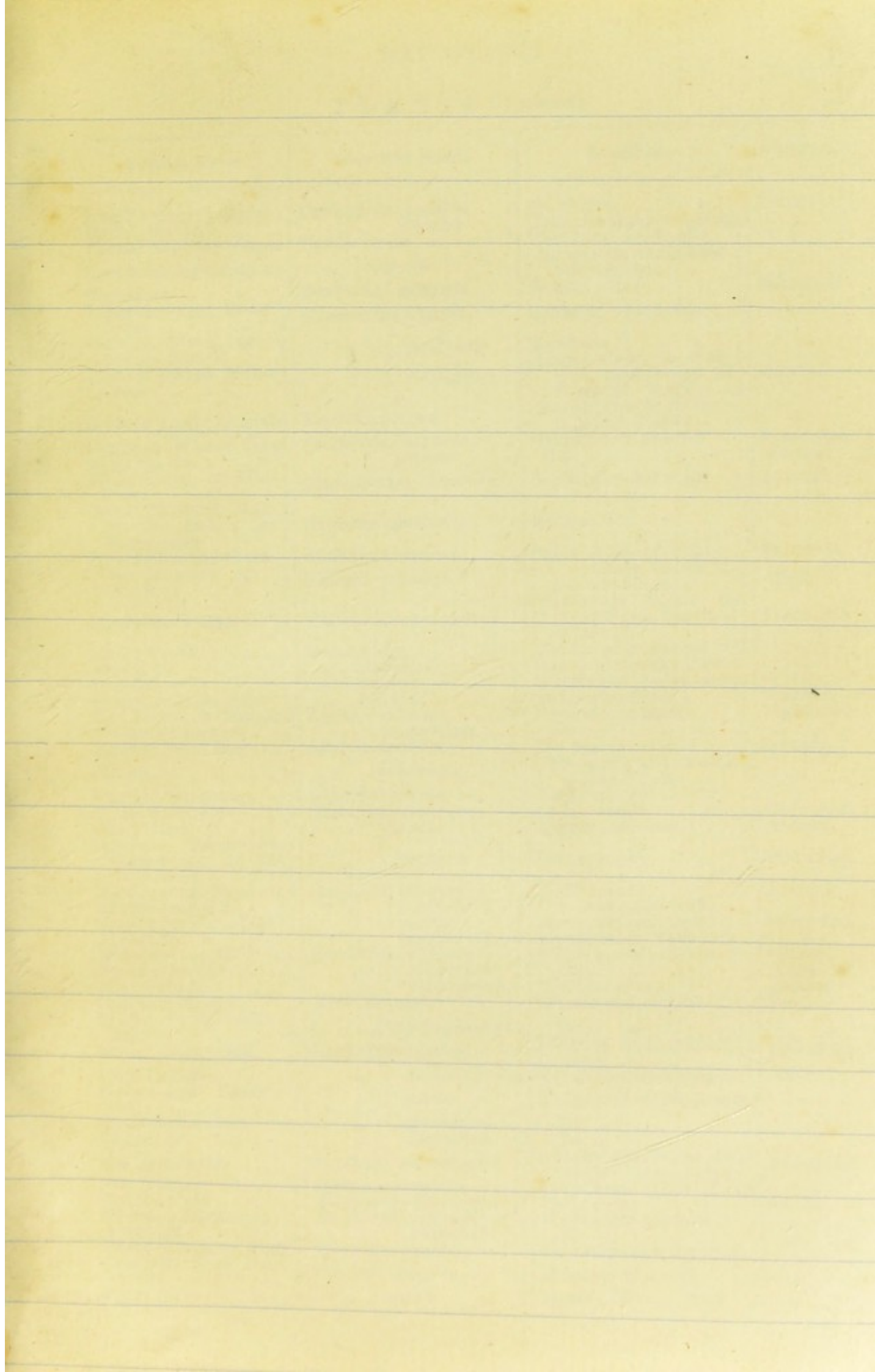
## INSECTS (continued).

| Popular Name.             | Scientific Name.                                 | Ova. | Larva.   | Pupa.   | Food-plants.                                 |
|---------------------------|--|------|----------|---------|--|
| MOTHS                     |  |      |          |         |  |
| Water Betony.             | { <i>Cucullia scrophulariæ</i> }                 | 5    | 6, 7     | —       | Mulleins and figworts.                       |
| Starwort . . .            | „ <i>asteris</i> . . .                           | —    | 8, 9     | 9-5     | { Golden-rod, sea starwort, and china-aster. |
| Chamomile Shark .         | „ <i>chamomillæ</i> .                            | —    | 5, 6 & 8 | 7 & 9-1 | { Chamomile and flowers of feverfew.         |
| Bordered Sallow E         | { <i>Heliothis mar-</i><br><i>ginata</i> . . . } | —    | 7, 8     | 9-6     | { Rest-harrow, henbane, knotgrass.           |
| Scotch Yellow Underwing . | { <i>Anarta cordigera</i> .                      | —    | 8        | —       | Bilberry, whortleberry.                      |
| Beautiful do. do. .       | „ <i>myrtilli</i> . . .                          | —    | 7-10     | —       | Heath.                                       |
| Dwarf do. do. . .         | <i>Heliodes arbuti</i> .                         | —    | 6, 7     | —       | { Forget-me-not, and field chickweed.        |
| Four Spot . . .           | <i>Acontia luctuosa</i> .                        | 6    | 7        | —       | Small convolvulus.                           |
| Rosy Marbled . .          | <i>Erastria venustula</i>                        | —    | 8        | 9-5     | { Flowers of trailing tormentil.             |
| Silver Y . . . .          | <i>Plusia gamma</i> . .                          | —    | 4 & 7-9  | —       | { Nettle, hop, and low plants.               |
| Scarce do. . . .          | „ <i>ni</i> . . . .                              | —    | —        | —       | —  |
| Alchymist . . .           | { <i>Catephia alchy-</i><br><i>mista</i> . . . } | —    | 8        | —       | Oak.   |
| Lunar Double Stripe       | <i>Ophiodes lunaris</i> .                        | —    | 7        | —       | Do.  |
| Mother Shipton .          | <i>Euclidia mi</i> . . .                         | —    | 5        | —       | Melflot.                                     |
| Burnet Companion.         | „ <i>glyphica</i> . . .                          | —    | 5        | —       | Clover.                                      |
| Small Purple Barred       | <i>Phytometra cænea</i> .                        | —    | 8, 9     | 10-5    | Milkwort.                                    |

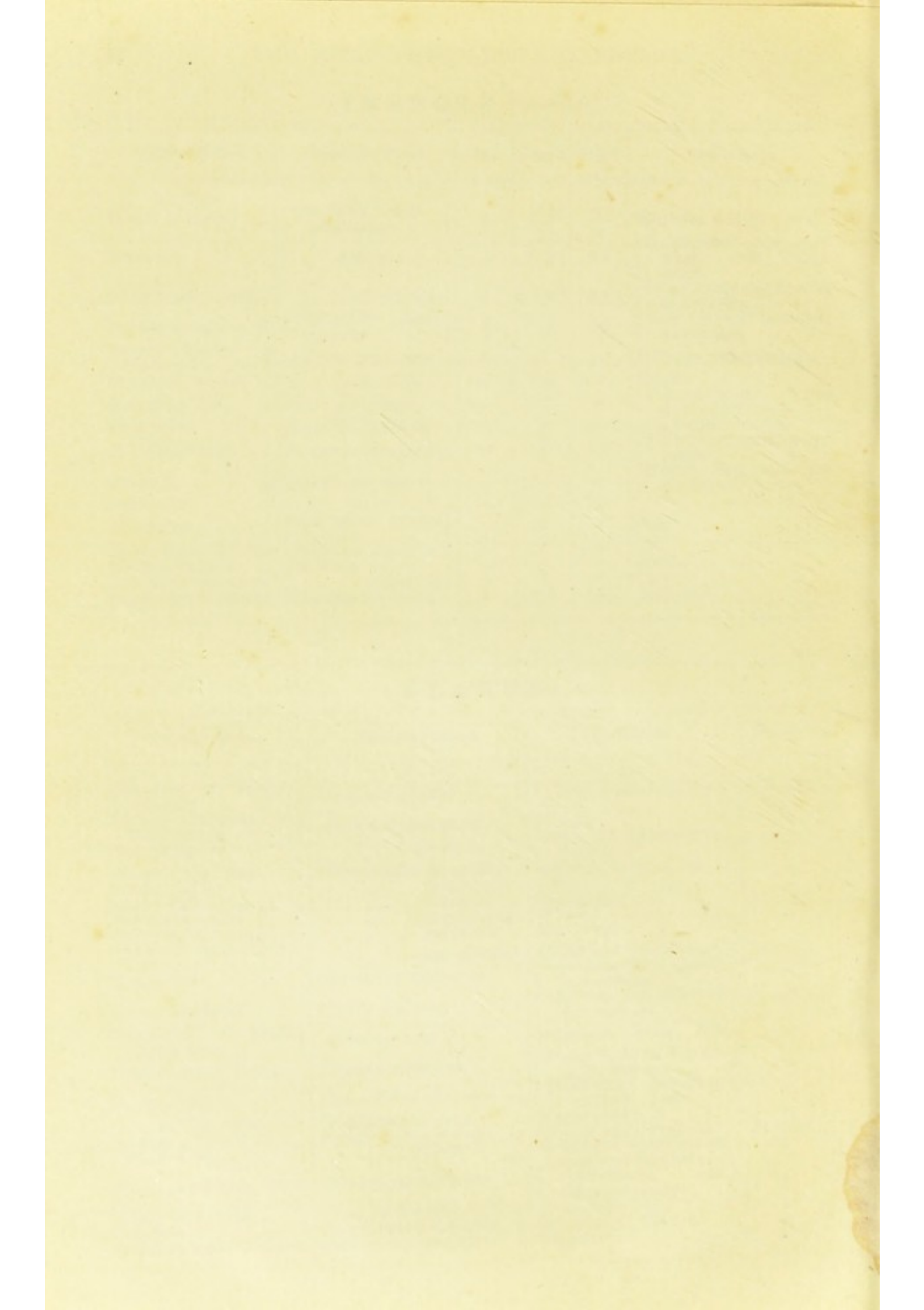
## PLANTS.

| Popular Name.                       | Scientific Name.                | Localities.   | Duration.  |
|-------------------------------------|---------------------------------|---|------------|
| Clematis, or Traveler's Joy . . .   | <i>Clematis vitalba</i> . .     | Limestone and chalk soil                                    | Perennial. |
| Wood Anemone, or Windflower. . .    | <i>Anemone nemorosa</i> .       | Woods   | „          |
| Pasque-flower . . .                 | „ <i>pulsatilla</i> . . .       | { High chalky pastures. }                                   | „          |
| Water Crowfoot . .                  | <i>Ranunculus aquatilis</i> .   | { Scarce . . . }  | „          |
| Ivy-leaved do. . . .                | „ <i>hederaceus</i> . . .       | Streams, ditches, &c. .                                     | „          |
| Lesser Celandine . .                | „ <i>Ficaria</i> . . . .        | Do. . . . .   | „          |
| Wood Crowfoot . . .                 | „ <i>auricomus</i> . . .        | Banks, &c. . . . .  | „          |
| Bulbous Buttercup .                 | „ <i>bulbosus</i> . . . .       | Woods . . . . .   | „          |
| Small-flowered Crow-foot . . .      | „ <i>parviflorus</i> . . .      | Meadows . . . . .   | „          |
| Mouse-tail . . . .                  | <i>Myosurus minimus</i> .       | Fields and waste places.                                    | Annual.    |
| Marsh Marigold . .                  | <i>Caltha palustris</i> . .     | { Gravelly or chalky corn-fields . . . }                    | „          |
| Baneberry, or Herb Christopher. . . | <i>Actæa spicata</i> . . .      | { Marshes and sides of streams, &c. . . }                   | Perennial. |
| Entire-leaved Peony .               | <i>Pæonia corallina</i> . .     | Mountain woods. Rare  | „          |
| Barrenwort . . . .                  | <i>Epimedium alpinum</i> .      | { Steep Holmes Island, in the Severn . . . }                | „          |
| Greater Celandine. .                | <i>Chelidonium majus</i> .      | { Mountain woods in Scotland. Rare . }                      | „          |
| Ramping Fumitory .                  | <i>Fumaria capreolata</i> .     | Waste places . . . .  | „          |
| Common do. . . .                    | „ <i>officinalis</i> . . .      | Hedges and corn-fields .                                    | Annual.    |
| Perfoliate Penny Cress              | <i>Thlaspi perfoliatum</i> .    | Fields and waste places.                                    | „          |
| Shepherd's Purse . .                | <i>Capsella Bursa-pastoris</i>  | { Limestone pastures in Oxfordshire and Gloucestershire . } | „          |
| Teesdalia . . . .                   | <i>Teesdalia nudicaulis</i> .   | A common weed . . .   | „          |
| Common Scurvy Grass                 | <i>Cochlearia officinalis</i> . | Dry banks. Scarce. . .                                      | „          |
|                                     |                                 | Sea-shores . . . . .  | „          |











## PLANTS (continued).

| Popular Name.            | Scientific Name.            | Localities.                | Duration.  |
|--------------------------|-----------------------------|----------------------------|------------|
| English Scurvy Grass .   | <i>Cochlearia Anglica</i>   | Sea-shores .               | Annual.    |
| Danish do. do.           | <i>Danica</i>               | Cliffs and hedges near sea | "          |
| Vernal Whitlow Grass     | <i>Draba verna</i>          | Walls and dry banks        | "          |
| Speedwell-leaved do. do. | " <i>muralis</i>            | { Limestone mountains.     | "          |
| Coral-root               | <i>Dentaria bulbifera</i>   | { Not common .             | Perennial. |
| Large-flowered Bitter    | <i>Cardamine amara</i>      | Woods. Rare .              | "          |
| Cress                    | " <i>pratensis</i>          | Banks of rivers, &c.       | "          |
| Cuckoo - flower, or      | " <i>impatiens</i>          | Meadows .                  | "          |
| Ladies' Smock            | " <i>impatiens</i>          | { Damp rocks in Scot-      | Annual.    |
| Narrow-leaved Bitter     | " <i>impatiens</i>          | land and North of          | "          |
| Cress . . . .            | " <i>impatiens</i>          | England. Rare .            | Perennial. |
| Smooth Tower Mustard     | <i>Turritis glabra</i>      | { Banks, chiefly in Nor-   | Biennial.  |
| Common Winter Cress      | <i>Barbarea vulgaris</i>    | folk and Suffolk .         | "          |
| Early do. do. . .        | " <i>præcox</i>             | Damp waste ground          | Annual.    |
| Thale Cress, or Wall     | <i>Sisymbrium thalianum</i> | Do. . . . .                | "          |
| Cress                    | <i>Alliaria officinalis</i> | Dry banks and walls        | "          |
| Garlic Mustard, Jack-    | <i>Matthiola incana</i>     | Hedges, &c. . . .          | Perennial. |
| by - the - hedge, or     | <i>Sinapis arvensis</i>     | Shore of Isle of Wight     | Annual.    |
| Sauce-alone .            | <i>Sinapis arvensis</i>     | { A common weed in         | "          |
| Hoary Shrubby Stock      | <i>Helianthemum canum</i>   | corn-fields, &c. .         | Perennial. |
| Wild Mustard, or         | <i>Viola hirta</i>          | { Mountain rocks in        | "          |
| Cherlock . . . .         | <i>Viola hirta</i>          | Wales and North of         | Annual.    |
| Hoary Rock Rose .        | <i>Viola hirta</i>          | England .                  | "          |
| Hairy Violet . . .       | <i>Viola palustris</i>      | Chalk and limestone soil   | "          |
| Marsh do. . . . .        | " <i>canina</i>             | Bogs and marshy ground     | "          |
| Dog do. . . . .          | " <i>tricolor</i>           | Woods and hedge-banks      | Annual.    |
| Pansy, or Heartsease     | <i>Lychnis diurna</i>       | Cultivated fields          | Perennial. |
| Red Robin, or Campion    | <i>Lychnis diurna</i>       | Hedges and banks           | "          |
| Evening Campion .        | <i>Sagina apetala</i>       | Do. . . . .                | Annual.    |
| Annual Pearl-wort        | " <i>maritima</i>           | Dry places .               | "          |
| Sea do. . . . .          | <i>Moenchia erecta</i>      | { Sea-shore, and summit    | "          |
| Upright Moenchia .       | <i>Stellaria nemorum</i>    | of Ben Nevis .             | Perennial. |
| Wood Starwort . .        | " <i>media</i>              | Sandy places . . .         | Annual.    |
| Chickweed . . . .        | " <i>Holostea</i>           | Damp woods . . .           | "          |
| Greater Stitchwort,      | <i>Arenaria trinervis</i>   | A common weed . .          | Perennial. |
| Satin-flower, or Ad-     | " <i>serpyllifolia</i>      | Hedge-banks . . .          | "          |
| der's Meat               | " <i>serpyllifolia</i>      | Moist woods . . .          | Annual.    |
| Three-nerved Sandwort    | " <i>serpyllifolia</i>      | Dry banks and walls        | Perennial. |
| Thyme-leaved do. .       | " <i>serpyllifolia</i>      | Mountain pastures .        | "          |
| Spring, or Vernal do.    | " <i>rubella</i>            | Mountains. Very rare       | Annual.    |
| Alpine do. . . . .       | <i>Cerastium vulgatum</i>   | Fields and road-sides      | Perennial. |
| Broad-leaved Mouse-ear   | " <i>viscosum</i>           | Do. . . . .                | Annual.    |
| Narrow-leaved do. .      | " <i>tetrandrum</i>         | Walls near sea . .         | "          |
| Four-cleft do. . .       | <i>Acer campestre</i>       | Woods and hedges .         | Tree.      |
| Common Maple . .         | " <i>Pseudo-platanus</i>    | Do. . . . .                | "          |
| Sycamore, or Greater     | <i>Geranium phœum</i>       | { Woods and thickets.      | Perennial. |
| Maple . . . . .          | " <i>Robertianum</i>        | Rare . . . . .             | Annual.    |
| Dusky Crane's-bill       | " <i>molle</i>              | Road-sides and hedges      | "          |
| Herb Robert . . .        | " <i>pusillum</i>           | Fields and waste places    | "          |
| Dove's-foot Crane's-     | " <i>dissectum</i>          | Do. . . . .                | "          |
| bill . . . . .           | <i>Erodium maritimum</i>    | Do. . . . .                | "          |
| Small-flowered do.       | <i>Oxalis Acetosella</i>    | { Sandy sea-shores, and    | Perennial. |
| Jagged do. . . . .       | <i>Euonymus Europæus</i>    | at Dartmoor. Scarce        | "          |
| Sea Stork's-bill . .     | <i>Rhamnus catharticus</i>  | Woods and shady places     | Shrub.     |
| Wood Sorrel . . . .      | <i>Frangula</i>             | Hedges, &c. . . .          | "          |
| Spindle Tree . . .       | <i>Ulex Europæus</i>        | Woods and thickets         | "          |
| Common Buckthorn         | <i>Genista Anglica</i>      | Do. . . . .                | "          |
| Alder do. . . . .        | " <i>pilosa</i>             | Commons and thickets       | "          |
| Furze, Gorse, or Whin    | " <i>pilosa</i>             | Heaths and moors .         | "          |
| Green-weed, or Petty     | " <i>pilosa</i>             | Heathy places. Rare        | "          |
| Whin . . . . .           | " <i>pilosa</i>             | "                          | "          |
| Hairy do. . . . .        | " <i>pilosa</i>             | "                          | "          |



## PLANTS (continued).

| Popular Name.  | Scientific Name.   | Localities.                                       | Duration.   |
|--|--|---|-------------|
| Broom . . . . .  | <i>Cytisus scoparius</i> . . . . .                             | Woods and heaths . . . . .                        | Shrub.      |
| Spotted Medick . . . . .                                       | <i>Medicago maculata</i> . . . . .                             | Fields . . . . .                                  | Annual.     |
| White or Dutch<br>Clover, or Trefoil . . . . .                 | <i>Trifolium repens</i> . . . . .                              | Meadows . . . . .                                 | Perennial.  |
| Purple do. . . . .   | " <i>pratense</i> . . . . .                                    | Do. . . . .                                       | "           |
| Subterraneous Trefoil . . . . .                                | " <i>subterraneum</i> . . . . .                                | Dry banks and fields . . . . .                    | Annual.     |
| Wood Bitter Vetch . . . . .                                    | <i>Vicia orobus</i> . . . . .                                  | Rocky woods in North . . . . .                    | Perennial.  |
| Spring do. . . . .   | " <i>lathyroides</i> . . . . .                                 | Dry places . . . . .                              | Annual.     |
| Bush do. . . . .   | " <i>sepium</i> . . . . .                                      | { Woods and shady<br>hedges . . . . . }           | Perennial.  |
| Bitter Vetch . . . . .   | <i>Orobus tuberosus</i> . . . . .                              | Woods . . . . .                                   | "           |
| Horse-shoe Vetch . . . . .                                     | <i>Hippocrepis comosa</i> . . . . .                            | Chalky banks . . . . .                            | "           |
| Sloe, or Blackthorn . . . . .                                  | <i>Prunus communis</i> . . . . .                               | Woods and hedges . . . . .                        | Small tree. |
| Bullace, or Wild<br>Plum . . . . .                             |  |   |             |
| Bird Cherry . . . . .  | " <i>Padus</i> . . . . .                                       | Do. . . . .                                       | "           |
| Wild Cherry . . . . .  | " <i>avium</i> . . . . .                                       | Do. . . . .                                       | Tree.       |
| Red do. . . . .  | " <i>Cerasus</i> . . . . .                                     | Do. . . . .                                       | Shrub.      |
| Spring Cinquefoil . . . . .                                    | <i>Potentilla verna</i> . . . . .                              | Dry pastures . . . . .                            | Perennial.  |
| Trifid do. . . . .   | " <i>tridentata</i> . . . . .                                  | Mountains. Very rare . . . . .                    | "           |
| Strawberry-leaved do. . . . .                                  | " <i>Fragariastrum</i> . . . . .                               | Banks and hedges . . . . .                        | "           |
| Wood Strawberry . . . . .                                      | <i>Fragaria vesca</i> . . . . .                                | Woods and thickets . . . . .                      | "           |
| Raspberry . . . . .  | <i>Rubus Idæus</i> . . . . .                                   | Rocky woods . . . . .                             | Shrub.      |
| Field Lady's Mantle,<br>or Parsley Piert . . . . .             | <i>Alchemilla arvensis</i> . . . . .                           | A common weed . . . . .                           | Annual.     |
| Burnet Rose . . . . .  | <i>Rosa spinosissima</i> . . . . .                             | Waste places . . . . .                            | Shrub.      |
| Wild Pear . . . . .  | <i>Pyrus communis</i> . . . . .                                | Woods and hedges . . . . .                        | Tree.       |
| Crab Apple . . . . .   | " <i>Malus</i> . . . . .                                       | Do. . . . .                                       | "           |
| Wild Service Tree . . . . .                                    | " <i>torminalis</i> . . . . .                                  | Do. . . . .                                       | "           |
| Mountain Ash,<br>Quicken, Rowan, or<br>Fowler's Tree . . . . . | " <i>aucuparia</i> . . . . .                                   | Mountainous woods . . . . .                       | "           |
| Medlar . . . . .   | <i>Mespilus Germanica</i> . . . . .                            | Hedges . . . . .                                  | "           |
| Hawthorn, White-<br>thorn, or May . . . . .                    | <i>Cratægus Oxyacantha</i> . . . . .                           | Thickets and hedges . . . . .                     | "           |
| White Bryony . . . . .   | <i>Bryonia dioica</i> . . . . .                                | Hedges . . . . .                                  | Perennial.  |
| Four-leaved All-seed . . . . .                                 | { <i>Polycarpon tetra-</i><br><i>phyllum</i> . . . . . }       | { South coast. Not com-<br>mon . . . . . }        | Annual.     |
| Mossy Tillœa . . . . .   | <i>Tillœa muscosa</i> . . . . .                                | Sandy wastes . . . . .                            | "           |
| Red Currant . . . . .  | <i>Ribes rubrum</i> . . . . .                                  | Woods in the North . . . . .                      | Shrub.      |
| Rock do. . . . .   | " <i>petraeum</i> . . . . .                                    | Do. . . . .                                       | "           |
| Acid Mountain do. . . . .                                      | " <i>spicatum</i> . . . . .                                    | Yorkshire mountains . . . . .                     | "           |
| Tasteless Mountain<br>do. . . . .                              | " <i>alpinum</i> . . . . .                                     | Mountain woods . . . . .                          | "           |
| Gooseberry . . . . .   | " <i>grossularia</i> . . . . .                                 | Woods and thickets . . . . .                      | "           |
| Meadow Saxifrage . . . . .                                     | <i>Saxifraga granulata</i> . . . . .                           | Meadows . . . . .                                 | Perennial.  |
| Rue-leaved do. . . . .   | " <i>tridactylites</i> . . . . .                               | Walls and dry places . . . . .                    | Annual.     |
| Moss do. . . . .   | " <i>muscidosa</i> . . . . .                                   | Highland mountains . . . . .                      | Perennial.  |
| Palmate do. . . . .  | " <i>cæspitosa</i> . . . . .                                   | Mountains . . . . .                               | "           |
| Broad-flowered do. . . . .                                     | " <i>platypetala</i> . . . . .                                 | Do. . . . .                                       | "           |
| Ladies' Cushion . . . . .                                      | " <i>hypnoides</i> . . . . .                                   | Do. . . . .                                       | "           |
| Long-stalked Saxifrage . . . . .                               | " <i>elongella</i> . . . . .                                   | Damp rocks. Rare . . . . .                        | "           |
| Geranium-leaved do. . . . .                                    | " <i>pedatifida</i> . . . . .                                  | Scotch mountains . . . . .                        | "           |
| Opposite-leaved Gol-<br>den do. . . . .                        | { <i>Chrysosplenium op-</i><br><i>positifolium</i> . . . . . } | Damp places . . . . .                             | "           |
| Marsh Pennywort, or<br>White-rot . . . . .                     | <i>Hydrocotyle vulgaris</i> . . . . .                          | Do. . . . .                                       | "           |
| Wood Sanicle . . . . .   | <i>Sanicula Europæa</i> . . . . .                              | Woods . . . . .                                   | "           |
| Honewort . . . . .   | <i>Trinia glaberrima</i> . . . . .                             | Limestone rocks . . . . .                         | "           |
| Masterwort . . . . .   | <i>Peucedanum Ostruthium</i> . . . . .                         | { Damp pastures. Doubt-<br>ful native . . . . . } | "           |
| Knotted Hedge Parsley . . . . .                                | <i>Torilis nodosa</i> . . . . .                                | Fields and banks . . . . .                        | Annual.     |
| Chervil, or Cow Parsley . . . . .                              | <i>Anthriscus sylvestris</i> . . . . .                         | Hedge-banks . . . . .                             | Perennial.  |
| Common Chervil . . . . .                                       | " <i>vulgaris</i> . . . . .                                    | Banks and road-sides . . . . .                    | Annual.     |
| Sweet Cicely . . . . .   | <i>Myrrhis odorata</i> . . . . .                               | North of England . . . . .                        | Perennial.  |
| Alexanders . . . . .   | <i>Smyrniolum Olusatrum</i> . . . . .                          | { Sea-side and waste<br>ground . . . . . }        | Biennial.   |
| Mistletoe . . . . .  | <i>Viscum album</i> . . . . .                                  | { Parasitic, chiefly on<br>apple . . . . . }      | Perennial.  |



## PLANTS (continued).

| Popular Name.                                | Scientific Name.                                       | Localities.                                | Duration.  |
|--|--|--|------------|
| Perfoliate Honeysuckle                       | <i>Lonicera Caprifolium</i>                            | Woods. Rare                                | Shrub.     |
| Linnea                                       | <i>Linnea Borealis</i>                                 | Northern pine woods                        | Perennial. |
| Goosegrass, or Cleavers                      | <i>Galium Aparine</i>                                  | Hedge-banks                                | Annual.    |
| Corn Salad                                   | <i>Fedia olitoria</i>                                  | A common weed                              | "          |
| Purple Goat's-beard, }<br>or Salsify . . . } | <i>Tragopogon porrifolius</i>                          | { Damp meadows. Not<br>native . . . }      | Biennial.  |
| Dandelion                                    | <i>Leontodon Taraxacum</i>                             | A common weed                              | Perennial. |
| Mouse-ear Hawkweed.                          | <i>Hieracium Pilosella</i>                             | Dry places                                 | "          |
| Butter-bur . . .                             | <i>Petasites vulgaris</i>                              | { River-banks and wet<br>meadows . . . }   | "          |
| Groundsel . . .                              | <i>Senecio vulgaris</i>                                | A common weed                              | Annual.    |
| Field Fleawort . . .                         | <i>Cineraria campestris</i>                            | Fields                                     | Perennial. |
| Greater Leopard's-bane                       | { <i>Doronicum plantagi-</i><br><i>neum</i> . . . }    | { Damp woods. Doubt-<br>ful native . . . } | "          |
| Daisy . . .                                  | <i>Bellis perennis</i>                                 | Pastures                                   | "          |
| Golden Milfoil . . .                         | <i>Achillea tomentosa</i>                              | { Dry hill pastures.<br>Scarce . . . }     | "          |
| Bilberry, or Whortle-<br>berry . . . }       | <i>Vaccinium Myrtillus</i>                             | Heaths . . .                               | Shrub.     |
| Bog Whortleberry . . .                       | " <i>uliginosum</i>                                    | Northern bogs . . .                        | "          |
| Cowberry . . .                               | " <i>Vitis Idæa</i>                                    | Dry heaths                                 | "          |
| Black Bearberry . . .                        | <i>Arctostaphylos alpina</i>                           | Dry mountain heaths                        | Perennial. |
| Red do. . .                                  | " <i>Uva-ursi</i>                                      | Stony heaths                               | "          |
| Holly . . .                                  | <i>Ilex Aquifolium</i>                                 | Woods and thickets                         | Tree.      |
| Lesser Periwinkle . . .                      | <i>Vinca minor</i>                                     | Thickets. Not common                       | Perennial. |
| Greater do. . .                              | " <i>major</i>   | Hedges                                     | "          |
| Jacob's Ladder . . .                         | <i>Polemonium cæruleum</i>                             | Bushy places. Rare                         | "          |
| Lungwort . . .                               | <i>Pulmonaria officinalis</i>                          | Woods                                      | "          |
| Narrow-leaved do. . .                        | " <i>angustifolia</i>                                  | Do. Rare                                   | "          |
| Corn Gromwell . . .                          | <i>Lithospermum arvense</i>                            | Fields . . .                               | Annual.    |
| Sea do. . .                                  | " <i>maritimum</i>                                     | Sandy coasts . . .                         | Perennial. |
| Field Forget-me-not                          | <i>Myosotis arvensis</i>                               | Dry places . . .                           | Annual.    |
| Early do. . .                                | " <i>collina</i>                                       | Dry fields and walls                       | "          |
| Changeable do. . .                           | " <i>versicolor</i>                                    | Dry places . . .                           | "          |
| Evergreen Alkanet . . .                      | <i>Anchusa sempervirens</i>                            | Waste ground. Local                        | Perennial. |
| Comfrey . . .                                | <i>Symphytum officinale</i>                            | Watery places . . .                        | "          |
| Broom Rape . . .                             | <i>Orobanche major</i>                                 | Roots of broom and furze                   | "          |
| Tooth-wort . . .                             | <i>Lathræa Squamaria</i>                               | Parasitic on tree-roots                    | "          |
| Common Speedwell                             | <i>Veronica officinalis</i>                            | Dry places . . .                           | "          |
| Mountain do. . .                             | " <i>montana</i>                                       | Shady woods. Scarce                        | "          |
| Germander do. . .                            | " <i>Chamædrys</i>                                     | Banks                                      | "          |
| Ivy-leaved do. . .                           | " <i>hederifolia</i>                                   | A common weed . . .                        | Annual.    |
| Germander Chickweed                          | " <i>agrestis</i>                                      | Do. . .                                    | "          |
| Grey Speedwell . . .                         | " <i>polita</i>  | Do. . .                                    | "          |
| Wall do. . .                                 | " <i>Buxbaumii</i>                                     | Fields . . .                               | "          |
| Vernal do. . .                               | " <i>arvensis</i>                                      | A common weed . . .                        | "          |
| Trifid do. . .                               | " <i>verna</i>   | Dry fields. Rare                           | "          |
| Yellow Figwort . . .                         | " <i>triphyllos</i>                                    | Sandy fields. Rare                         | "          |
| Bugle . . .                                  | <i>Scrophularia vernalis</i>                           | Shady places. Local                        | Biennial.  |
| Yellow do., or Ground<br>Pine . . . }        | <i>Ajuga reptans</i>                                   | Woods . . .                                | Perennial. |
| Weasel-snout . . .                           | " <i>Chamæpitys</i>                                    | Chalky fields. Local                       | Annual.    |
| White Dead-nettle . . .                      | <i>Galeobdolon luteum</i>                              | Hedges and thickets                        | Perennial. |
| Spotted do. . .                              | <i>Lamium album</i>                                    | Hedges and way-sides                       | "          |
| Red do. . .                                  | " <i>maculatum</i>                                     | Hedge-banks. Rare                          | "          |
| Cut-leaved do. . .                           | " <i>purpureum</i>                                     | A common weed . . .                        | Annual.    |
| Henbit do. . .                               | " <i>incisum</i>                                       | Fields . . .                               | "          |
| Ground Ivy . . .                             | " <i>amplexicaule</i>                                  | Waste places . . .                         | "          |
| Large-flowered But-<br>terwort . . . }       | <i>Glechoma hederacea</i>                              | Hedge-banks . . .                          | Perennial  |
| Primrose . . .                               | <i>Pinguicula grandiflora</i>                          | Marshes. Rare                              | "          |
| Cowslip . . .                                | <i>Primula vulgaris</i>                                | Woods and banks . . .                      | "          |
| Wood Pimpernel . . .                         | " <i>veris</i>   | Meadows . . .                              | "          |
| Moneywort . . .                              | <i>Lysimachia nemorum</i>                              | Woods . . .                                | "          |
| Scarlet Pimpernel . . .                      | " <i>Nummularia</i>                                    | { Ditch-banks and shady<br>places . . . }  | "          |
| Wild Spinach . . .                           | <i>Anagallis arvensis</i>                              | A common weed . . .                        | Annual.    |
|  | { <i>Chenopodium Bonus-</i><br><i>Henricus</i> . . . } | Waste places . . .                         | Perennial. |



## P L A N T S (continued).

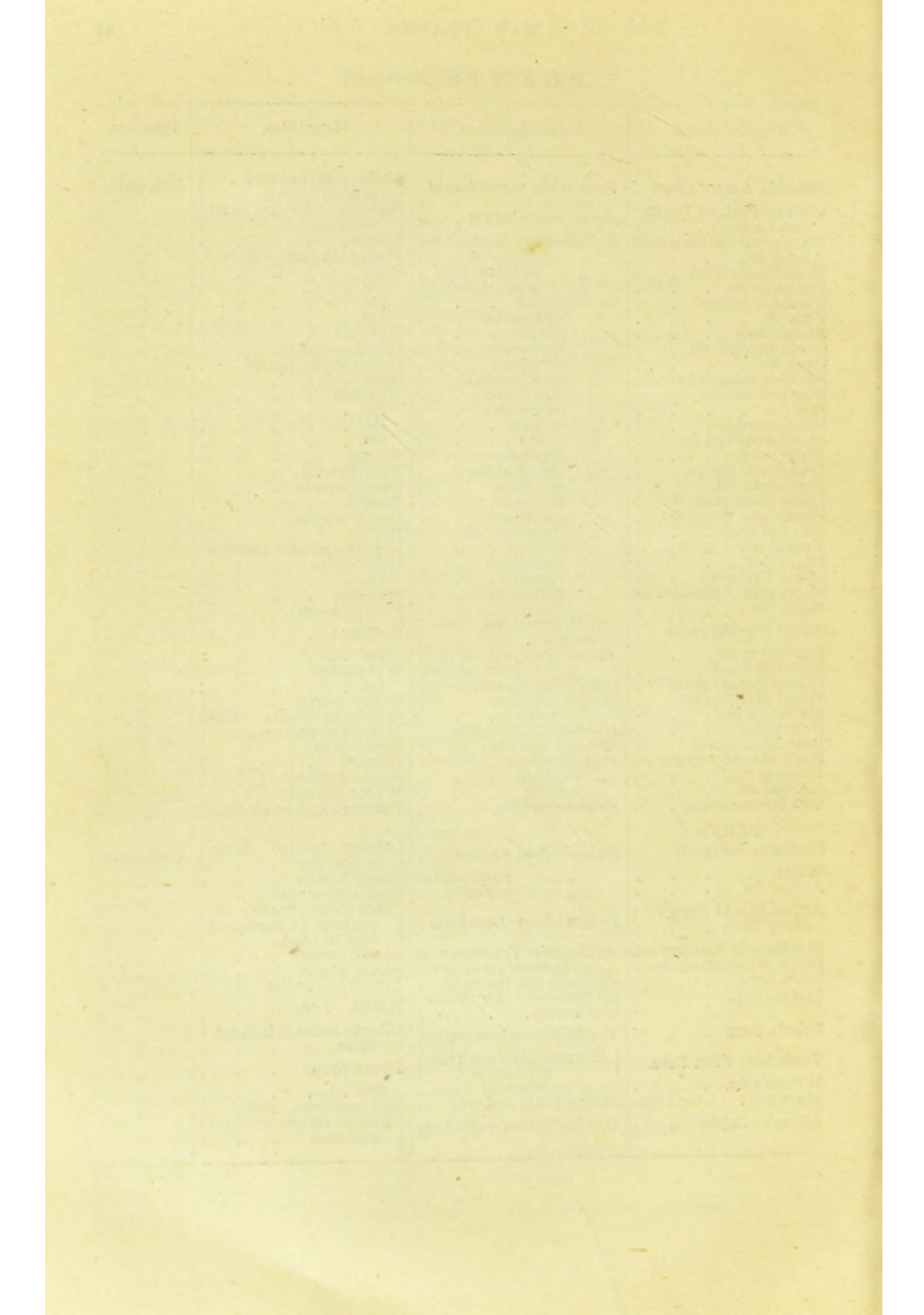
| Popular Name.                        | Scientific Name.                           | Localities.  | Duration.  |
|--------------------------------------|--|--|------------|
| White Goosefoot . . .                | <i>Chenopodium album</i> . . .             | A common weed . . .                                  | Annual     |
| Knot-grass . . .                     | <i>Polygonum aviculare</i> . . .           | Do. . . . .  | "          |
| Sorrel . . .                         | <i>Rumex acetosa</i> . . .                 | Meadows . . . . .                                    | Perennial  |
| Flax-leaved Toad-flax . . .          | <i>Thesium linophyllum</i> . . .           | Chalky pastures . . .                                | "          |
| Asarabacca . . .                     | <i>Asarum Europæum</i> . . .               | Mountain woods. Rare                                 | "          |
| Crowberry, or Crake-<br>berry . . .  | <i>Empetrum nigrum</i> . . .               | Bogs . . . . .                                       | "          |
| Mercury . . .                        | <i>Mercurialis perennis</i> . . .          | Woods and thickets . . .                             | "          |
| Irish Spurge . . .                   | <i>Euphorbia hiberna</i> . . .             | Thickets . . . . .                                   | "          |
| Wood do. . .                         | <i>amygdaloides</i> . . .                  | Woods . . . . .                                      | "          |
| Spring Water Starwort                | <i>Callitriche verna</i> . . .             | Pools . . . . .                                      | Annual     |
| Sallow Thorn . . .                   | <i>Hippophaë rhamnoides</i> . . .          | { Sand-hills and cliffs on }<br>East coast . . . . . | Shrub.     |
| Sweet Gale . . .                     | <i>Myrica gale</i> . . .                   | Spongy bogs . . . . .                                | "          |
| White Birch . . .                    | <i>Betula alba</i> . . .                   | Woods . . . . .                                      | Tree.      |
| Dwarf do. . .                        | <i>nana</i> . . .                          | Highland mountains . . .                             | "          |
| Smooth Willow . . .                  | <i>Salix triandra</i> . . .                | Wet woods and osier beds                             | "          |
| Almond do. . .                       | <i>amygdalina</i> . . .                    | River-sides . . . . .                                | "          |
| Sweet do. . .                        | <i>pentandra</i> . . .                     | Do. . . . .  | "          |
| Crack do. . .                        | <i>fragilis</i> . . .                      | Marshy ground . . . . .                              | "          |
| Bedford do. . .                      | <i>Russelliana</i> . . .                   | Marshy woods . . . . .                               | "          |
| White do. . .                        | <i>alba</i> . . .                          | Woods and wet places . . .                           | "          |
| Creeping do. . .                     | <i>fusca</i> . . .                         | Heaths . . . . .                                     | "          |
| Common Osier . . .                   | <i>viminialis</i> . . .                    | Marshes . . . . .                                    | "          |
| Round-eared Sallow . . .             | <i>aurita</i> . . .                        | Thickets . . . . .                                   | "          |
| Great do. . .                        | <i>caprea</i> . . .                        | Thickets and hedges . . .                            | "          |
| Green Mountain do. . .               | <i>Andersoniana</i> . . .                  | Scotch mountains . . . . .                           | "          |
| Dark Rock Willow . . .               | <i>petraea</i> . . .                       | Scotland . . . . .                                   | "          |
| Laurel-leaved do. . .                | <i>laurina</i> . . .                       | Woods . . . . .                                      | "          |
| Tea-leaved do. . .                   | <i>radicans</i> . . .                      | Scotland . . . . .                                   | "          |
| Apple-leaved do. . .                 | <i>hastata</i> . . .                       | Mountains . . . . .                                  | "          |
| Beech . . .                          | <i>Fagus sylvatica</i> . . .               | Woods . . . . .                                      | "          |
| Spanish Chestnut . . .               | <i>Castanea vulgaris</i> . . .             | Do. . . . .  | "          |
| Oak . . .                            | <i>Quercus pedunculata</i> . . .           | Woods and hedgerows . . .                            | "          |
| Hornbeam . . .                       | <i>Carpinus betulus</i> . . .              | Woods . . . . .                                      | "          |
| Scotch Fir, or Pine . . .            | <i>Pinus sylvestris</i> . . .              | Northern forests . . . . .                           | "          |
| Juniper . . .                        | <i>Juniperus communis</i> . . .            | Hills and heathy downs                               | Shrub.     |
| Herb Paris . . .                     | <i>Paris quadrifolia</i> . . .             | Woods. Scarce . . . . .                              | Perennial. |
| Water Thyme . . .                    | <i>Eudorea Canadensis</i> . . .            | Canals . . . . .                                     | "          |
| Green-winged Orchis . . .            | <i>Orchis Morio</i> . . .                  | Meadows . . . . .                                    | "          |
| Early do. . .                        | <i>mascula</i> . . .                       | Do. . . . .  | "          |
| Brown-winged do. . .                 | <i>fusca</i> . . .                         | Chalky hills . . . . .                               | "          |
| Man do. . .                          | <i>militaris</i> . . .                     | Do. . . . .  | "          |
| Monkey do. . .                       | <i>tephrosanthos</i> . . .                 | Do. . . . .  | "          |
| Marsh do. . .                        | <i>latifolia</i> . . .                     | Marshes . . . . .                                    | "          |
| Late Spider do. . .                  | <i>Ophrys arachnites</i> . . .             | Chalk hills. Rare . . . . .                          | "          |
| Spider do. . .                       | <i>aranifera</i> . . .                     | Do. . . . .  | "          |
| Fly do. . .                          | <i>muscifera</i> . . .                     | Chalk hills . . . . .                                | "          |
| Bird's Nest . . .                    | <i>Listera Nidus-Avis</i> . . .            | Parasitic on roots of beech                          | "          |
| Narrow-leaved Helle-<br>borine . . . | <i>Epipactis ensifolia</i> . . .           | Woods. Rare . . . . .                                | "          |
| Red do. . .                          | <i>rubra</i> . . .                         | Mountain woods. Rare                                 | "          |
| Snake-head Iris . . .                | <i>Iris tuberosa</i> . . .                 | Not native. . . . .                                  | "          |
| Pheasant's-eye Nar-<br>cissus . . .  | <i>Narcissus poeticus</i> . . .            | Heaths and pastures . . .                            | "          |
| Pale do. . .                         | <i>biflorus</i> . . .                      | Sandy fields . . . . .                               | "          |
| Summer Snowdrop . . .                | <i>Leucōjum aestivum</i> . . .             | Marshes . . . . .                                    | "          |
| Lily of the Valley . . .             | <i>Convallaria majalis</i> . . .           | Hill woods . . . . .                                 | "          |
| Wild Hyacinth, or<br>Hare-bell . . . | <i>Hyacinthus non-scriptus</i> . . .       | Woods and thickets . . .                             | "          |
| Grape Hyacinth . . .                 | <i>Muscari racemosum</i> . . .             | Naturalised . . . . .                                | "          |
| Ramsons . . .                        | <i>Allium ursinum</i> . . .                | Woods and hedge-banks . . .                          | "          |
| Star of Bethlehem . . .              | <i>Ornithogalum umbel-<br/>latum</i> . . . | { Meadows and pas- }<br>tures. Naturalised }         | "          |
| Drooping do. . .                     | <i>nutans</i> . . .                        | Naturalised . . . . .                                | "          |
| Great Hairy-rush . . .               | <i>Luzula sylvatica</i> . . .              | Woods and hills . . . . .                            | "          |
| Wood do. . .                         | <i>pilosa</i> . . .                        | Woods . . . . .                                      | "          |
| Narrow-leaved do. . .                | <i>Fosteri</i> . . .                       | Do. . . . .  | "          |
| Field do. . .                        | <i>campestris</i> . . .                    | Heaths and dry pastures                              | "          |



## PLANTS (continued):

| Popular Name.                       | Scientific Name.                           | Localities.  | Duration.  |
|-------------------------------------|--|--|------------|
| Sea-side Arrow-grass .              | <i>Triglochin maritimum</i> .              | { Salt marshes and muddy shores }                      | Perennial. |
| Cuckoo Pint, or Lords and Ladies .  | <i>Arum maculatum</i> .                    | { Hedges, banks, and thickets }                        | "          |
| Hare's-tail Cotton-grass .          | <i>Eriophorum vaginatum</i> .              | Moors .  | "          |
| Alpine do. .                        | " <i>alpinum</i> .                         | Mountain bogs. Rare .                                  | "          |
| Broad-leaved do. .                  | " <i>polystachion</i> .                    | Bogs .   | "          |
| Common do. .                        | " <i>angustifolium</i> .                   | Do. .  | "          |
| Creeping Sedge .                    | <i>Carex dioica</i> .                      | Do. .  | "          |
| Flea do. .                          | " <i>pulicaris</i> .                       | Do. .  | "          |
| Marsh do. .                         | " <i>divisa</i> .                          | Marshes .  | "          |
| Great Prickly do. .                 | " <i>muricata</i> .                        | Damp pastures .  | "          |
| Grey do. .                          | " <i>divulsa</i> .                         | Damp shady places .                                    | "          |
| Smaller Panicked do. .              | " <i>teretiuscula</i> .                    | Bogs .   | "          |
| Star-headed do. .                   | " <i>stellulata</i> .                      | Marshes .  | "          |
| Bog do. .                           | " <i>cæspitosa</i> .                       | Do. .  | "          |
| Glaucous do. .                      | " <i>stricta</i> .                         | Do. .  | "          |
| Slender-spiked do. .                | " <i>acuta</i> .                           | Do. .  | "          |
| Fingered do. .                      | " <i>digitata</i> .                        | Woods .  | "          |
| Dwarf Silvery do. .                 | " <i>clandestina</i> .                     | Near Bristol .   | "          |
| Pendulous do. .                     | " <i>pendula</i> .                         | Damp woods .   | "          |
| Loose Pendulous do. .               | " <i>strigosa</i> .                        | Woods .  | "          |
| Pendulous Wood do. .                | " <i>sylvatica</i> .                       | Damp woods .   | "          |
| Starved do. .                       | " <i>depauperata</i> .                     | Dry do. .  | "          |
| Vernal do. .                        | " <i>præcox</i> .                          | Dry heaths and pastures .                              | "          |
| River do. .                         | " <i>paludosa</i> .                        | River-sides .  | "          |
| Great River do. .                   | " <i>riparia</i> .                         | Do. .  | "          |
| Short-spiked Bladder do. .          | " <i>vesicaria</i> .                       | Marshes .  | "          |
| Hairy do. .                         | " <i>hirta</i> .                           | Damp places .  | "          |
| Sweet Vernal-grass .                | { <i>Anthoxanthum odoratum</i> . }         | Pastures .   | "          |
| Fox-tail grass .                    | <i>Alopecurus pratensis</i> .              | Do. .  | "          |
| Floating do. do. .                  | " <i>geniculatus</i> .                     | Wet places .   | "          |
| Water Whorl-grass .                 | <i>Catabrosa aquatica</i> .                | Do. .  | "          |
| Wood Melic-grass .                  | <i>Melica uniflora</i> .                   | Shady woods .  | "          |
| Mountain do. .                      | " <i>nulans</i> .                          | Mountain woods. Rare .                                 | "          |
| Holy-grass .                        | <i>Hierochloë borealis</i> .               | Mountain pastures .                                    | "          |
| Blue Moor-grass .                   | <i>Sesleria cærulea</i> .                  | Mountains .  | "          |
| Reed Meadow-grass .                 | <i>Poa aquatica</i> .                      | Ditches .  | "          |
| Bulbous do. .                       | " <i>bulbosa</i> .                         | Sandy ground .   | "          |
| Annual do. .                        | " <i>annua</i> .                           | Waste ground .   | Annual.    |
| Soft Brome-grass .                  | <i>Bromus mollis</i> .                     | Pastures and road-sides .                              | "          |
| FERNS.                              |  |  |            |
| Common Polypody .                   | <i>Polypodium vulgare</i> .                | { Mossy banks, damp rocks, &c. }                       | Perennial. |
| Welsh do. .                         | " <i>cambricum</i> .                       | Shady banks .  | "          |
| Alpine do. .                        | " <i>alpestre</i> .                        | Scotch mountains .                                     | "          |
| Alpine Shield Fern, or Holly Fern . | <i>Polystichum Lonchitis</i> .             | { Mountain rocks, especially in Scotland and Ireland } | "          |
| Maidenhair Spleenwort .             | <i>Asplenium Trichomanes</i> .             | Shady rocks .  | "          |
| Black Maidenhair do. .              | " <i>Adiantum-nigrum</i> .                 | Shady places .   | "          |
| Scale Fern .                        | <i>Ceterach officinarum</i> .              | Limestone rocks .                                      | "          |
| Maidenhair .                        | { <i>Adiantum Capillus-Veneris</i> . }     | Rocks. Local .   | "          |
| Bristle Fern .                      | <i>Trichomanes brevisetum</i> .            | { Damp rocks in Ireland. Rare }                        | "          |
| Tunbridge Film Fern .               | { <i>Hymenophyllum Tunbridgensense</i> . } | Damp rocks .   | "          |
| Wilson's do. .                      | " <i>Wilsoni</i> .                         | Do. .  | "          |
| Moonwort .                          | <i>Botrychium lunaria</i> .                | Hill pastures. Local .                                 | "          |
| Adder's-tongue .                    | <i>Ophioglossum vulgatum</i> .             | { Damp meadows and pastures }                          | "          |







## JUNE.

### GENERAL HINTS.

As eggs may be found throughout the year, I shall not again mention them.

Very little to be done with pupæ; which is perhaps fortunate, as there is so much to be done in other ways.

Palings and tree-trunks as before.

Butterflies are now plentiful, and so are flying moths, so that the entomologist ought never to go out unless he has his net with him.

They can be met with everywhere, but as they have a special love for certain flowers, I will mention a few of their favourites.

Clover, sainfoin, lucerne, and the like, are often crowded with insect visitors. So are heaths, ragwort, and thistles. The blackberry is also a favourite, but the entomologist must take care of his net. The lime is a much favoured tree, as much, I fancy, from the honey-dew which is found so plentifully on it as for the flowers.

Clematis, honeysuckle, and jessamine are, of course, sought for, and so is the willow herb. Ivy I hardly need mention, inasmuch as it rivals treacle in its attractions; and privet and the sweet-scented syringa will mostly furnish moths. The former is rather a favourite resort for some of the smaller Clearwings.

Try them in the evening (not by moonlight) as well as by day, and many moths will be taken.

The appearance of Noctuas on flowers is most graphically described by Mr. Newman, whose valuable work all entomologists ought to possess:—

“At night, Noctuas swarm in the blossoms of honeysuckles, jessamine, red valerian, and a number of other plants. It is, indeed, a beautiful sight to see the Noctuas revelling on the plant last named. If you take a bull's-eye lantern, and then let the light fall on a party of moths feasting on the saccharine flowers of the valerian, the sight is not one soon to be forgotten. The glare of the lamp is reflected from a hundred pairs of the brightest eyes, and as these change their position in moving from flower to flower, the scene is almost magical. Sallow-bloom in the spring and ivy-bloom in the autumn are quite as attractive as valerian in the summer.”

Geometers are very plentiful on the wing. Sometimes you may catch an insect which looks in the dusk just like a whitish moth when flying. But, if you touch it, a most abominable odour proclaims the fact that you have caught a Lacewing.

Treacling, as mentioned in the preceding months.

When describing the method of treacling, I stated that, as a rule, moths which are captured in this way ought to be left alone for four-and-twenty hours. There are, however, exceptions to every rule, and when we capture a very “noisy” moth at treacle, it must be killed at once. Two of these moths are to be found at treacle in June. They are the conspicuously pretty Peach-blossom (*Thyatira batis*), and its plainer relative the Buff Arches (*Thyatira derasa*). These, then, must be killed as soon as they are captured, and the collector must take his chance for their future.

Birds' eggs are still to be found. Many birds hatch, under favourable circum-



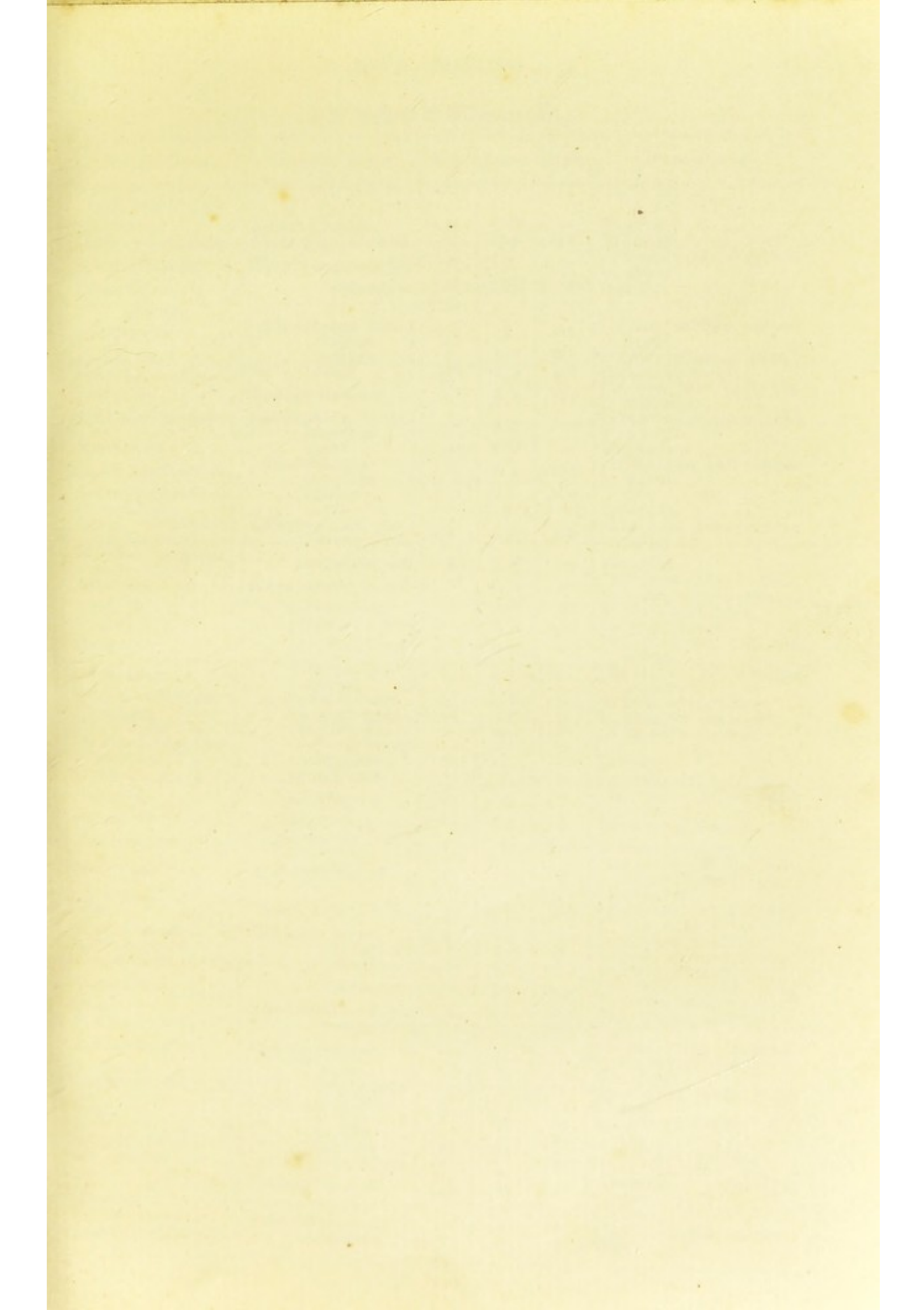
stances, more than one brood, and during June we may find the late eggs of the first brood or the very early eggs of the second.

As May is the best month for birds' eggs, so is June the best for plants, as the reader may see by reference to the list. Caterpillars also are very abundant in this month as in the next, which see for further particulars.

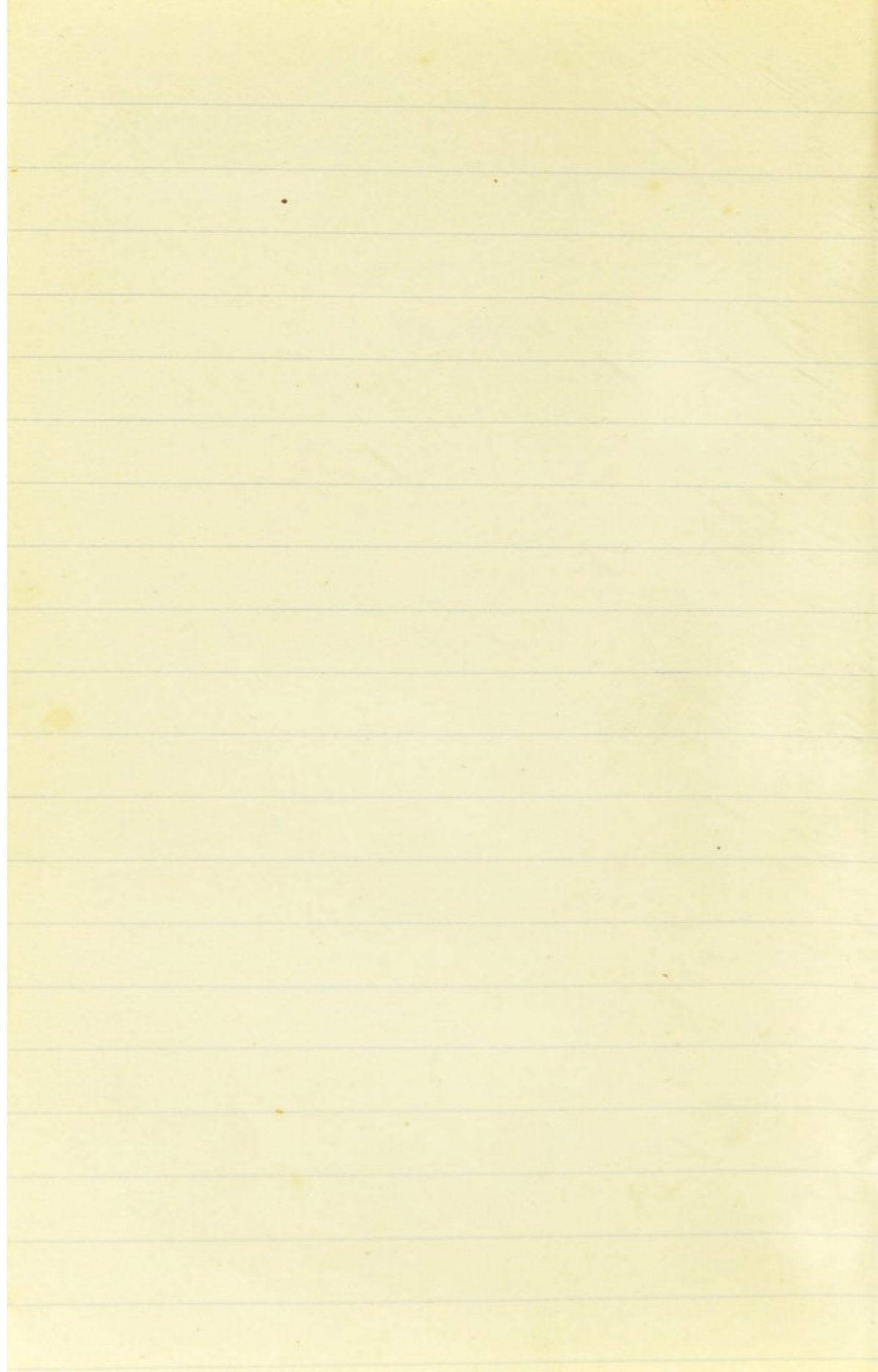
## I N S E C T S .

| Popular Name.                         | Scientific Name.                                | Ova.     | Larva.        | Pupa.   | Food-plants.   |
|---------------------------------------|---|----------|---------------|---------|--|
| <b>BUTTERFLIES.</b>                   |   |          |               |         |  |
| Swallow Tail . . .                    | <i>Papilio Machaon</i> .                        | 6        | 6-8           | 8-5     | { Wild carrot, fennel, and marsh milk-parsley.       |
| Black-veined White                    | <i>Pieris crataegi</i> .                        | 6        | 8-5           | 6       | { Hawthorn, sloe, and fruit trees.                   |
| Large do. . . . .                     | „ <i>brassicæ</i> .                             | 5 & 8    | 6 & 9         | 7 & 9-4 | { Cabbage, &c., and nasturtium.                      |
| Small do. . . . .                     | „ <i>rapæ</i> .                                 | 5 & 8    | 6 & 9         | 7 & 9-4 | { Turnip, cabbage, &c., and nasturtium.              |
| Green-veined do. .                    | „ <i>napi</i> .                                 | 5 & 8    | 6 & 9         | 7 & 9-4 | { Rape, and other <i>cruciferae</i> .                |
| Orange Tip . . .                      | { <i>Anthochavis car-</i><br><i>damines</i> . } | 5        | 7             | 7-5     | { Lady's-smock, treacle-mustard.                     |
| Silver-washed Fri-<br>tillary . . . } | <i>Argynnis Paphia</i> .                        | 7        | 8-6           | 6       | { Dog and other violets, wild raspberry, nettle.     |
| Dark Green do. .                      | „ <i>Aglais</i> .                               | 7, 8     | 8-6           | 6       | { Dog and other violets, and wild heartsease.        |
| Niobe do. . . . .                     | „ <i>Niobe</i> .                                | 7, 8     | 8-5           | 6       | Do. do.  |
| High Brown do. .                      | „ <i>Adippe</i> .                               | 7, 8     | 8-6           | 6       | Do. do.  |
| Pearl Bordered do.                    | „ <i>Euphrosyne</i> .                           | 6        | 7-5           | 4, 5    | Dog and other violets.                               |
| Small Pearl Bor-<br>dered do. . . }   | „ <i>Selene</i> .                               | 6        | 7-5           | 5       | Do.  |
| Greasy do. . . .                      | <i>Melitæa Artemis</i> .                        | 6        | 8-4           | 4       | { Plantain, devil's-bit, scabious.                   |
| Glanville do. . .                     | „ <i>Cinxia</i> .                               | 6        | 7-5           | 5       | Narrow-leaved plantain.                              |
| Wood do. . . . .                      | „ <i>Athalia</i> .                              | 7        | 8-5           | 6       | { Do., foxglove, wild germander.                     |
| Comma . . . . E                       | <i>Vanessa C-album</i> .                        | 5 & 7    | 5 & 8         | 6 & 9   | { Elm, willow, sloe, hop, currant, nettle.           |
| Small Tortoise-<br>shell . . . . E }  | „ <i>urticæ</i> .                               | 4, 5 & 7 | 5, 6 & 8      | 6 & 8   | Nettle.  |
| White Admiral .                       | <i>Limenitis Sibylla</i> .                      | 7        | 8-5           | 6       | Honeysuckle.   |
| Mountain Ringlet .                    | <i>Erebia Epiphron</i> .                        | —        | 8-5           | —       | { Annual meadow-grass, sheep's fescue-grass, &c.     |
| Meadow Brown .                        | <i>Satyrus Janira</i> .                         | 7        | 8-5           | 6       | Grasses, &c.   |
| Ringlet . . . . .                     | „ <i>hyperanthus</i> .                          | 7        | 8-6           | 6       | Do.  |
| Large Heath . . .                     | { <i>Cænonympha</i><br><i>Davus</i> }           | 6        | 8-5           | 6       | White beak rush.                                     |
| Small do. . . . .                     | „ <i>Pamphilus</i> .                            | 5        | 5, 6 & 8      | 4 & 7   | Grasses.   |
| Green Hair-streak .                   | <i>Thecla rubi</i> .                            | 5        | 7 & 10        | 8-4     | { Bramble, broom, birch, greenwood, creeping willow. |
| White Letter do. .                    | „ <i>W-album</i> .                              | 7-4      | 5, 6          | 6       | Wych elm, elm.                                       |
| Black do. . . . .                     | „ <i>pruni</i> .                                | 7-3      | 5, 6          | 6       | Sloe.  |
| Small Copper . .                      | { <i>Polyommatus</i><br><i>Phleas</i> . }       | 6 & 10   | 5-8 &<br>10-4 | 4 & 10  | Ragwort, dock, sorrel.                               |
| Scotch Argus . .                      | <i>Lycæna Artaxerxes</i> .                      | 6        | 9-5           | 5, 6    | Sun cistus.  |
| Brown do. . . . .                     | „ <i>Agestis</i> .                              | 6 & 8    | 7 & 9-4       | 4 & 7   | Hemlock, stork's-bill.                               |
| Common Blue . .                       | „ <i>Alexis</i> .                               | 5 & 9    | 4 & 8         | 5 & 8   | Bird's-foot trefoil, &c.                             |
| Clifton do. . . .                     | „ <i>Adonis</i> .                               | 10       | 5 & 7-8       | 5 & 8   | { Tufted horse-shoe vetch, &c.                       |
| Mazarine do. . .                      | „ <i>Acis</i> .                                 | —        | —             | —       | Flower-heads of thrift.                              |
| Little do. . . . .                    | „ <i>alsus</i> .                                | 6        | 7             | 4       | Kidney-vetch.  |











## INSECTS (continued).

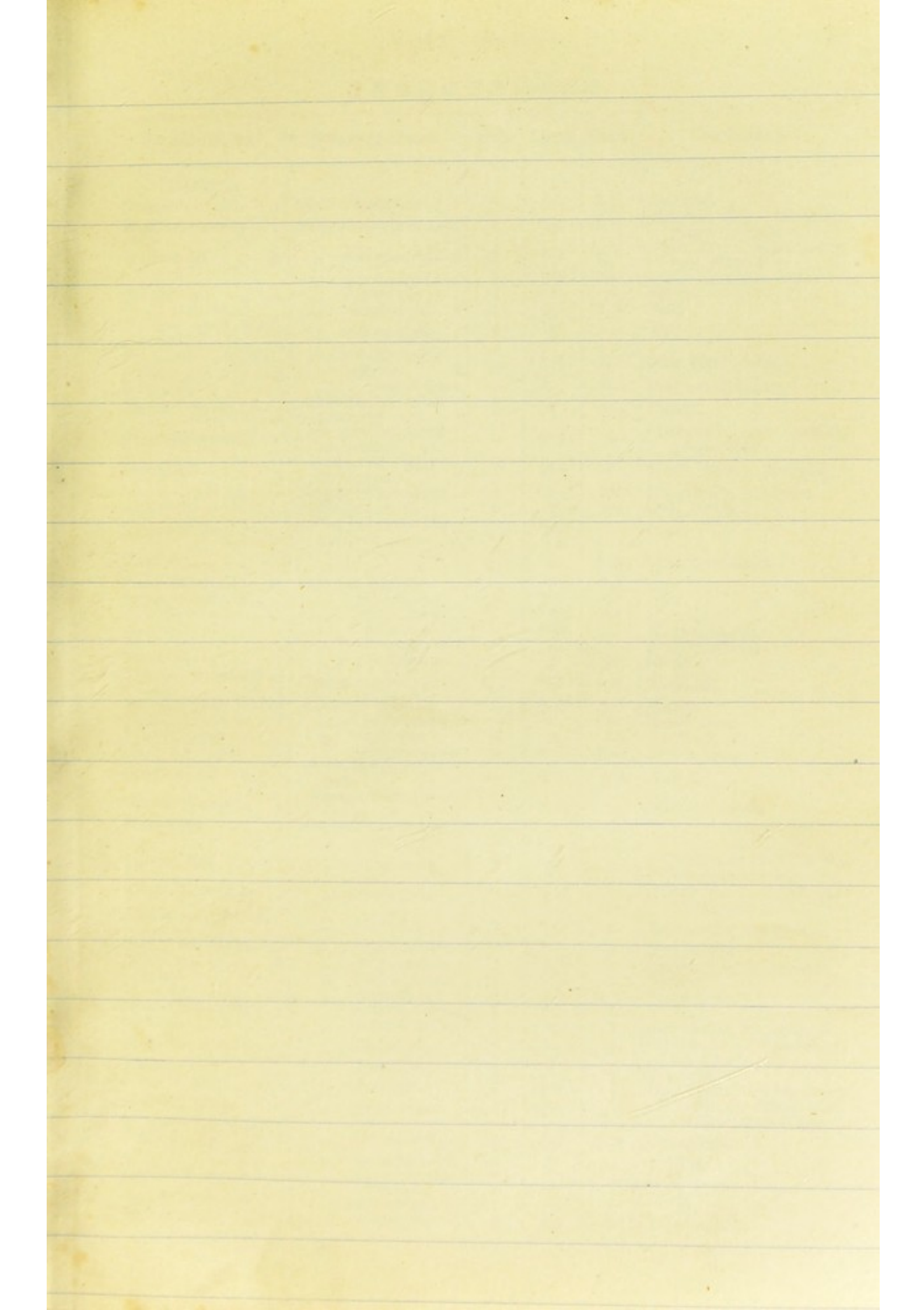
| Popular Name.                     | Scientific Name.           | Ova.  | Larva. | Pupa.    | Food-plants.                |
|-----------------------------------|----------------------------|-------|--------|----------|-----------------------------|
| <b>BUTTERFLIES.</b>               |                            |       |        |          |                             |
| Large Blue . . .                  | <i>Lycæna Arion</i> . .    | 6     | 7-4?   | —        | Thyme.                      |
| Duke of Burgundy .                | <i>Nemeobius Lucina</i> .  | 6     | 7-9    | 8-5      | Primrose.                   |
| Spotted Skipper . .               | <i>Hesperia paniscus</i> . | 6     | 9      | —        | { Plantain and dog's-tail   |
| Large do. . . . .                 | „ <i>sylvanus</i> . .      | 7 & 9 | 5 & 7  | 5, 6 & 8 | { grass.                    |
|                                   |                            |       |        |          | Grasses.                    |
| <b>MOTHS.</b>                     |                            |       |        |          |                             |
| Eyed Hawk . . . .                 | { <i>Smerinthus ocel-</i>  | 5, 6  | 8      | 9-5      | { Poplar, willow, saw, low, |
|                                   | <i>latus</i> . . . . .     |       |        |          | apple.                      |
| Poplar do. . . . .                | „ <i>populi</i> . . . .    | 5     | 8, 9   | 9-5      | Poplar, saw, low, willow.   |
| Lime do. . . . .                  | „ <i>tiliæ</i> . . . . .   | 5, 6  | 8, 9   | 9-5      | Elm, lime, beech.           |
| Privet do. . . . .                | <i>Sphinx ligustri</i> . . | 6, 7  | 8, 9   | 10-5     | { Privet, lilac, ash, lau-  |
|                                   |                            |       |        |          | rustinus.                   |
| Spotted Elephant } do. . . . .    | { <i>Deilephila eu-</i>    | —     | 8, 9   | —        | { Cypress spurge and sea    |
|                                   | <i>phorbicæ</i> . . . .    |       |        |          | spurge.                     |
| Madder do. . . . .                | <i>galii</i> . . . . .     | —     | 8-10   | —        | Bedstraws.                  |
| Small Elephant do.                | { <i>Chærocampa</i> . .    | —     | 8, 9   | 10-5     | { Bedstraws and willow      |
|                                   | <i>porcellus</i> . . .     |       |        |          | herbs.                      |
| Large Elephant do.                | „ <i>elpenor</i> . . . .   | 6, 7  | 8, 9   | 10-5     | Do. do.                     |
| Oleander do. . . .                | <i>nerii</i> . . . . .     | —     | 9      | —        | Oleander.                   |
| Broad Bordered } Bee Hawk . . . . | { <i>Macroglossa fu-</i>   | 6     | 7, 8   | 9-5      | { Scabious, honeysuckle,    |
|                                   | <i>ciformis</i> . . . .    |       |        |          | bedstraw.                   |
| Narrow Bordered } do. . . . .     | „ <i>bombylifformis</i>    | 6     | 7, 8   | —        | Scabious.                   |
| Apple do. . . . .                 | <i>Sesia myopæformis</i>   | —     | 4, 5   | 5        | { In stems of apple, pear,  |
| Birch do. . . . .                 | „ <i>culiciformis</i> . .  | —     | 4      | 5        | { plum, and hawthorn.       |
| Willow do. . . . .                | „ <i>formicæformis</i>     | —     | 4, 5   | 5        | In birch and alder.         |
| Ruby do. . . . .                  | „ <i>chrysidiformis</i>    | —     | 5, 6   | —        | In withy stems.             |
| Ichneumon do. . .                 | { „ <i>ichneumoni-</i>     | —     | 6, 7   | —        | { In roots of dock and      |
|                                   | <i>formis</i> . . . . .    |       |        |          | sorrel.                     |
| Yellow Belted do. .               | „ <i>cynipiformis</i> . .  | —     | 4, 5   | 5        | { In stems of stinking      |
| Thrift do. . . . .                | „ <i>muscæformis</i> . .   | —     | 7-9    | 5        | { hellebore.                |
| Currant do. . . . .               | „ <i>tipuliformis</i> . .  | —     | 10-4   | 5        | In bark of oak, &c.         |
| Orange Tailed do. .               | „ <i>andreniformis</i>     | —     | —      | —        | In stems of sea thrift.     |
| Orange do. . . . .                | „ <i>scolicæformis</i> . . | —     | 4      | —        | In stems of currant.        |
| Alder do. . . . .                 | „ <i>sphegiformis</i> . .  | —     | 4      | 5        | —                           |
| Dusky do. . . . .                 | „ <i>asiliformis</i> . . . | —     | 4      | 5        | In birch.                   |
| Hornet do. . . . .                | „ <i>apiformis</i> . . . . | —     | 9-4    | 5        | In young shoots of alder.   |
| Fen Leopard . . .                 | { <i>Macrogaster</i> . .   | 7     | 4      | 5, 6     | { In roots of ash and       |
|                                   | <i>arundinis</i> . . .     |       |        |          | poplar.                     |
| Wood do. . . . .                  | <i>Zeuzera Æsculi</i> . .  | 7     | 8-5    | 6        | In stems of poplar.         |
| Goat . . . . .                    | <i>Cossus ligniperda</i> . | 7     | 9, 10  | 11-5     | In stems of reed.           |
| Golden Swift . . E                | <i>Hepialus hectus</i> . . | 6     | 8-5    | 6        | { In stems of elm, ash,     |
| Livid do. . . . .                 | „ <i>lupulinus</i> . . .   | 6, 7  | 8-5    | 5        | { horse-chestnut, pear,     |
| Northern do. . . .                | „ <i>velleda</i> . . . .   | 6, 7  | 8-5    | 5        | { oak, &c.                  |
| Ghost do. . . . .                 | „ <i>humuli</i> . . . . .  | 6, 7  | 8-4    | 5, 6     | In trunks of oak, ash,      |
| Tinsel . . . . .                  | <i>Limacodes asellus</i> . | 6, 7  | 8, 9   | 10-6     | { elm, willow, &c.          |
| Festoon . . . . .                 | „ <i>testudo</i> . . . .   | 6     | 9      | 10-6     | In roots of bracken.        |
| Green Forester . .                | <i>Procris statice</i> . . | —     | 5      | 6        | In roots of dead nettle.    |
| Scarce do. . . . .                | „ <i>geryon</i> . . . . .  | —     | 5      | 5, 6     | In roots of bracken.        |
| Blue-green do. . M                | „ <i>globulariæ</i> . . .  | —     | 5      | 6        | { In roots of nettle, dead  |
| Irish Burnet . . .                | <i>Zygæna nubigena</i> .   | 6     | 7-4    | 5, 6     | { nettle, burdock, &c.      |
| Trefoil do. . . . .               | „ <i>trifolii</i> . . . .  | 6     | 7-5    | 6        | Oak, poplar, beech.         |
| New Forest do. . E                | „ <i>meliloti</i> . . . .  | —     | 5      | 6        | Oak.                        |
| Five Spot do. . . .               | „ <i>loniceræ</i> . . . .  | 6     | 7-5    | 6        | { Sorrel, and narrow-       |
| Six Spot do. . . .                | „ <i>filipendulæ</i> . .   | 6     | 7-5    | 6        | { leaved bitter-cress.      |
|                                   | <i>Syntomis phegea</i> . . | 7, 8  | 9-5    | 6        | Sun cistus.                 |
| Handmaid . . . .                  | <i>Nactia ancilla</i> . .  | —     | 4, 5   | —        | Great knapweed.             |
| Ribbon Bar . . .                  | <i>Nola cucullatella</i> . | —     | 5      | 5        | Thyme.                      |
| Least Black Arches                | „ <i>cristulalis</i> . . . | —     | 5      | 5        | Trefoil and vetch.          |
|                                   |                            |       |        |          | Do.                         |
|                                   |                            |       |        |          | Clover and grasses.         |
|                                   |                            |       |        |          | Crowfoot, trefoil, &c.      |
|                                   |                            |       |        |          | { Scabious, plantain,       |
|                                   |                            |       |        |          | dandelion.                  |
|                                   |                            |       |        |          | Lichens.                    |
|                                   |                            |       |        |          | Hawthorn, sloe, apple,      |
|                                   |                            |       |        |          | Oak.                        |



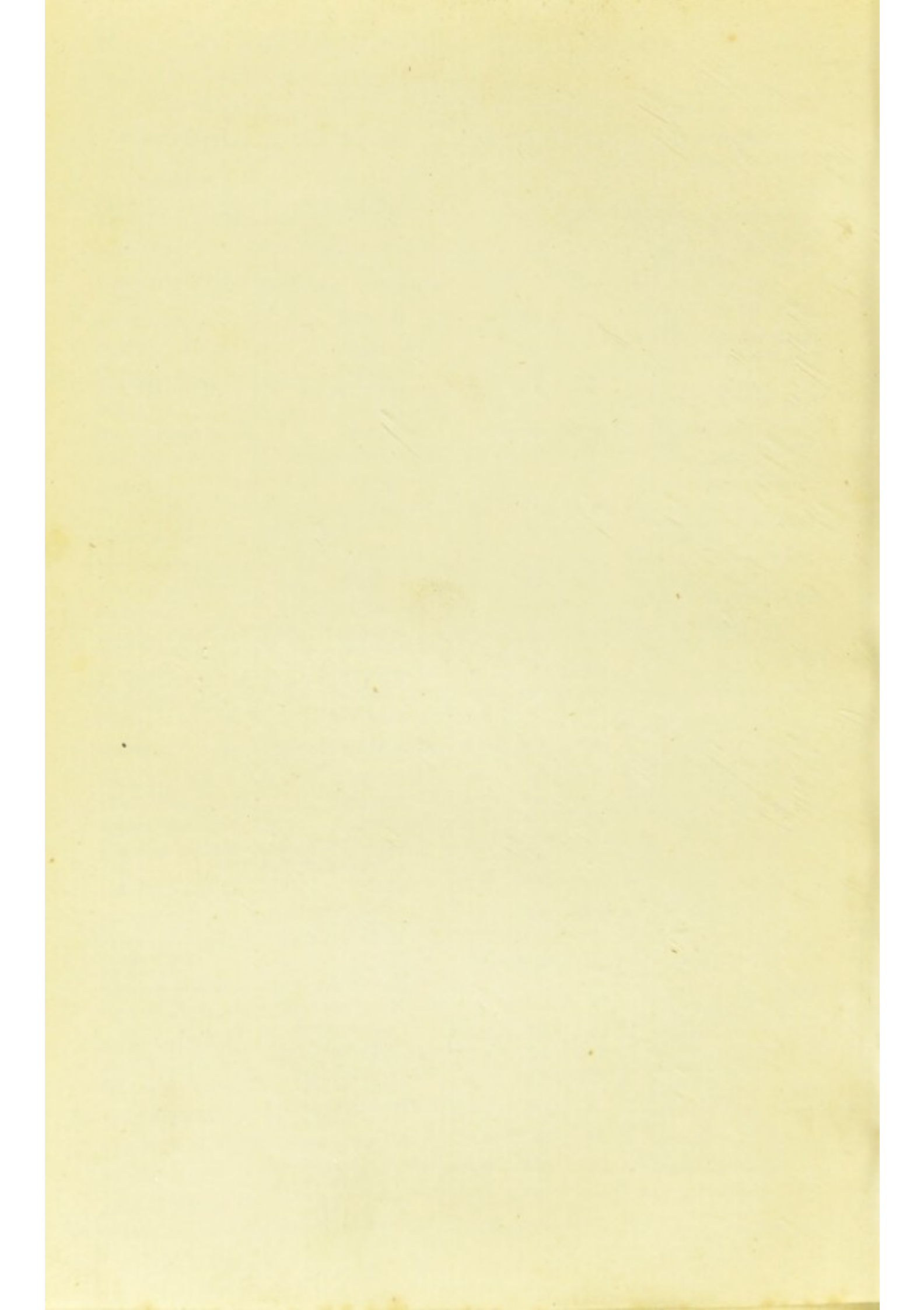
## INSECTS (continued).

| Popular Name.                   | Scientific Name.                              | Ova.  | Larva.     | Pupa. | Food-plants.   |
|---------------------------------|---|-------|------------|-------|--|
| MOTHS.                          |   |       |            |       |  |
| Scarce Dotted Bar .             | <i>Nola strigula</i> .                        | —     | 5          | 6     | Oak.   |
| Small Dew Lackey.               | <i>Setina irrorella</i> .                     | —     | 5          | 5, 6  | Ground lichens near sea.                                       |
| Rose Wing . . .                 | <i>Calligenia miniata</i>                     | 7     | 8-5        | 5, 6  | { Lichens on oaks, also<br>withered oak, alder,<br>and willow. |
| Four-spotted Foot-<br>man . . . | <i>Lithosia mesomella</i>                     | —     | 8-5        | 5, 6  | Heath and lichens.   |
| Orange do. . . .                | „ <i>aureola</i> .                            | —     | 9-5        | —     | { Lichens on larch and<br>oak.                                 |
| Buff do. . . . .                | „ <i>deplana</i> .                            | —     | 6          | 6     | { Lichens on oak, beech,<br>yew, and spruce fir.               |
| Common do. . . .                | „ <i>lurideola</i> .                          | —     | 8-5        | 5, 6  | Lichens.   |
| Dun do. . . . .                 | „ <i>griseola</i> .                           | —     | 8-6        | 6     | Lichens on poplar.   |
| Straw do. . . . .               | „ <i>stramineola</i>                          | —     | 8-6        | 6, 7  | { Lichens on oak, sloe,<br>&c.                                 |
| Red Necked do. .                | „ <i>rubricollis</i> .                        | —     | 8-10       | 3, 4  | Lichens on larch, &c.  |
| Feathered do. . .               | <i>Eulepia grammica</i>                       | —     | 5          | —     | { Heath, mugwort,<br>fescue-grass.                             |
| Cinnabar . . . E                | { <i>Callimorpha Ja-</i><br><i>cobea</i> }    | —     | 5          | —     | Ragwort, groundsel.  |
| Scarlet Tiger . .               | „ <i>dominula</i> .                           | 6     | 8-5        | 5, 6  | Houndstongue.  |
| Clouded Buff . .                | { <i>Euthemonia rus-</i><br><i>sula</i> }     | 6     | 9-5        | —     | { Plantain, dandelion,<br>heath, &c.                           |
| Wood Tiger . . .                | { <i>Chelonia planta-</i><br><i>ginis</i> }   | 6     | 8-4        | 5     | Plantain, violets, &c.   |
| Cream Spot do. .                | „ <i>villica</i> .                            | 7     | 8-5        | 5, 6  | Chickweed, furze.  |
| Ruby do. . . . .                | <i>Arctia fuliginosa</i> .                    | —     | 4 & 8      | 5 & 8 | { Nettle, plantain, dock,<br>and grasses.                      |
| Spotted Muslin .                | „ <i>mendica</i> .                            | —     | 8          | 9-4   | Sloe, plantain.  |
| Buff Ermine . . .               | „ <i>lubricipeda</i>                          | —     | 8          | 9-4   | Plantain and nettle.   |
| White do. . . . .               | „ <i>menthastri</i> .                         | —     | 8          | 9-4   | { Nettle and various<br>plants.                                |
| Water do. . . . .               | „ <i>urticæ</i> .                             | —     | 8          | 10-4  | Willow herb.   |
| Gipsy . . . . . E               | <i>Liparis dispar</i> .                       | 8-3   | 5          | 6     | { Willow, hawthorn,<br>sloe, sweet gale.                       |
| Hop Dog . . . . .               | <i>Orgyia pudibunda</i>                       | 5, 6  | 8, 9       | 9-4   | { Oak, beech, nut, haw-<br>thorn, hop.                         |
| Dark Tussock . .                | „ <i>fascelina</i> .                          | 6     | 9-5        | 5, 6  | { Sallow, broom, heath,<br>flowers of furze, &c.               |
| Whittlesea Ermine.              | „ <i>cænosa</i> .                             | 7, 8  | 8          | —     | Reed and sedge.  |
| Scarce Vapourer .               | „ <i>gonostigma</i>                           | 6, 7  | 9-5        | 6     | { Oak, beech, bramble,<br>sloe, nut, &c.                       |
| Nut-tree Tussock .              | <i>Demas Coryli</i> .                         | —     | 6, 7 s. 10 | 10    | Beech, and other trees.  |
| Fox . . . . .                   | <i>Bombyx rubi</i> .                          | 6     | 9-5        | 5     | Heath and bramble.   |
| Oak Eggar . . . .               | „ <i>roboris</i> .                            | 7, 8  | 9-6        | 6, 7  | { Hawthorn, broom,<br>bramble, heath, &c.                      |
| Lappet . . . . .                | { <i>Lasiocampa</i><br><i>quercifolia</i> }   | 6     | 9-5        | 5, 6  | { Bramble, willow, sal-<br>low, sloe, &c.                      |
| Bordered Beauty .               | <i>Epione vespertaria</i>                     | 7-4   | 5, 6       | 6     | Nut.   |
| Little Thorn . . .              | „ <i>advenaria</i> .                          | 5, 6  | 8          | —     | Dogwood and wild rose.   |
| Brimstone . . . .               | <i>Rumia cratægata</i> .                      | 4 & 9 | 6 & 9-3    | 3-5   | Hawthorn, sloe.  |
| Spotted Yellow .                | <i>Venilia maculata</i> .                     | —     | 9          | —     | Nettle.  |
| Orange Moth . . .               | <i>Angerona prunaria</i>                      | 7     | 10-4       | 5     | { Beech, sloe, willow,<br>broom, plum, &c.                     |
| Pale Emerald . . .              | { <i>Metrocampa</i><br><i>margaritata</i> }   | 7, 8  | 9-5        | 6     | { Oak, birch, beech, horn<br>beam, &c.                         |
| Barred Red . . .                | <i>Ellopiæ fasciaria</i> .                    | 7, 8  | 9-4        | 5, 6  | Scotch fir.  |
| Scorched Wing . B               | { <i>Eurymene dolo-</i><br><i>braria</i> }    | 6, 7  | 8, 9       | 10-5  | { Oak, beech, birch, and<br>aspen.                             |
| Lilac Beauty . . .              | { <i>Pericallia syrin-</i><br><i>garia</i> }  | 6, 7  | 9-6        | 6     | { Lilac, privet, elder,<br>honeysuckle.                        |
| Lunar Thorn . . . B             | <i>Selenia lunaria</i> .                      | 5, 6  | 8          | 8-4   | { Oak, elm, ash, nut,<br>hawthorn, sloe, &c.                   |
| Pepper . . . . .                | { <i>Amphidasis be-</i><br><i>tularia</i> }   | 5, 6  | 8-10       | 10-4  | { Oak, elm, birch, beech,<br>alder, hawthorn.                  |
| Waved Umber . B                 | { <i>Hemerophila ab-</i><br><i>ruptaria</i> } | 5, 6  | 6          | 9-4   | Lilac, privet, and rose.                                       |
| Widower . . . . .               | <i>Cleora viduaria</i> .                      | —     | —          | —     | —  |











## INSECTS (continued).

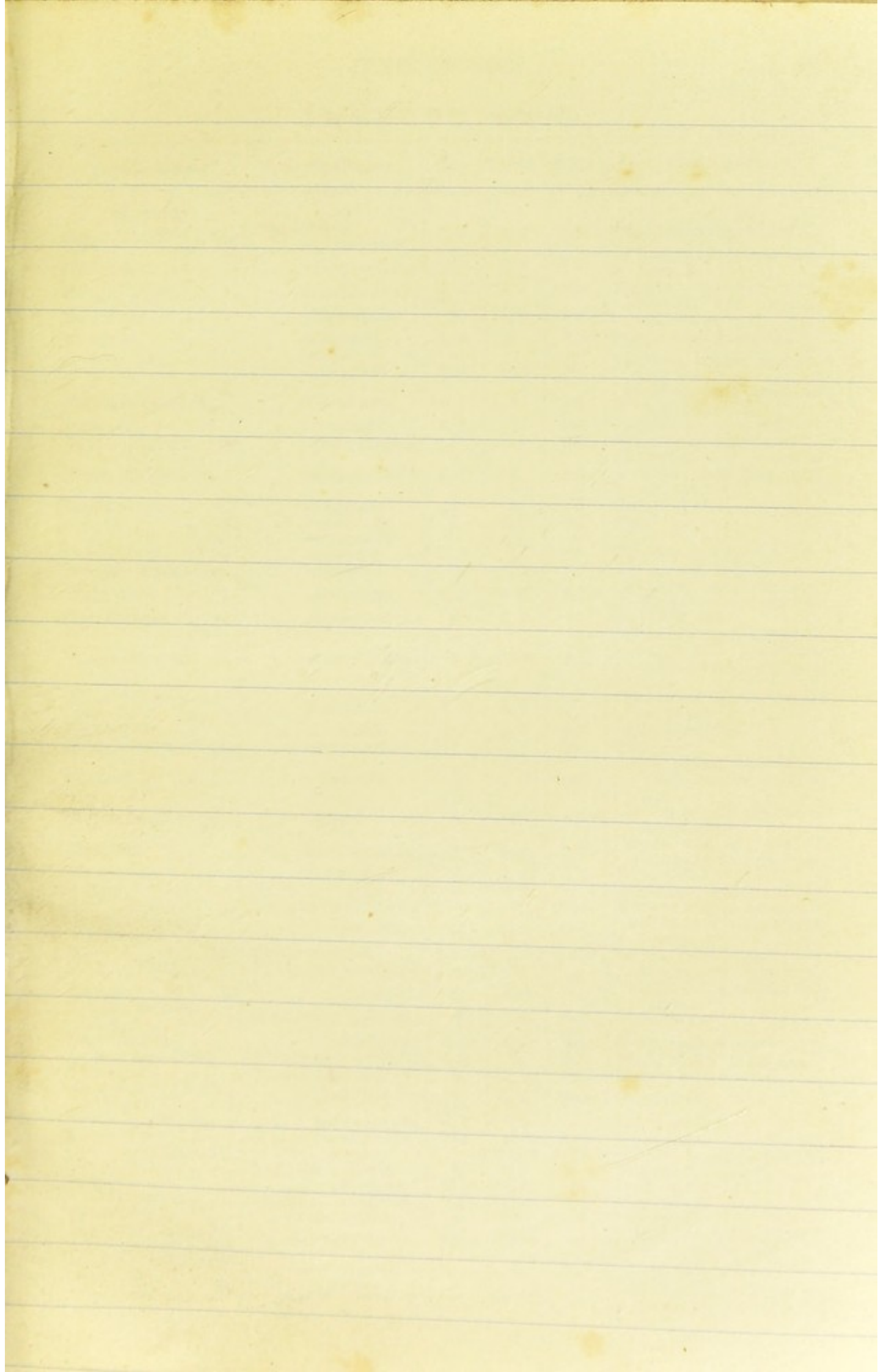
| Popular Name.                          | Scientific Name.                             | Ova. | Larva. | Pupa. | Food-plants.                                       |
|--|--|------|--------|-------|--|
| <b>MOTHS.</b>                          |  |      |        |       |  |
| Brussels Lace . . .                    | <i>Cleora lichenaria</i> .                   | —    | 9-5    | 5, 6  | Lichens.   |
| Mottled Beauty . . .                   | <i>Boarmia repandata</i>                     | 7    | 9-4    | 5, 6  | { Birch, sloe, bramble,<br>plum, spindle, &c.      |
| Willow do. . . E                       | „ <i>rhomboidaria</i>                        | 7    | 9-4    | 5, 6  | { Oak, birch, lilac, elder,<br>ivy, plum, &c.      |
| Ringed do. . . . .                     | „ <i>perfumaria</i> .                        | 7    | 9-6    | 6     | Lilac, clematis, ivy.                              |
| Great Oak do. . . . .                  | „ <i>cinctaria</i> .                         | 7    | 9      | —     | Heath.   |
| Square Spot En-<br>grailed . . . . .   | „ <i>roboraria</i> .                         | 7    | 9-5    | 5, 6  | Oak.   |
| Brindled White<br>Spot . . . . .       | „ <i>consortaria</i> .                       | 7    | 8      | —     | Do.  |
| Grey Birch . . . . .                   | { <i>Tephrosia exter-</i><br><i>saria</i>    | —    | 8, 9   | 10-5  | Oak, birch, beech.                                 |
| Obscure Birch . . . . .                | { „ <i>punctulata</i>                        | —    | 8, 9   | 10-4  | Birch and alder.                                   |
| Grass Emerald . . . . .                | { <i>Boletobia fuli-</i><br><i>ginaria</i> . | 6    | 7      | —     | Fungi.   |
| Large do. . . . .                      | { <i>Pseudoterpnacy-</i><br><i>tisaria</i> . | —    | 5, 6   | 6     | { Broom, and needle<br>greenwood.                  |
| Small Grass do. . . . .                | { <i>Geometra papi-</i><br><i>lionaria</i> . | 7    | 10-5   | 6     | Birch, beech, nut, &c.                             |
| Little do. . . . .                     | <i>Nemoria viridata</i> .                    | 6    | 8      | 9-4   | Hawthorn, bramble.                                 |
| Blotched do. . . . .                   | <i>Iodis lactearia</i> .                     | 6    | 9      | 10-5  | Oak, birch.  |
| Dark do. . . . .                       | { <i>Phorodesma ba-</i><br><i>jularia</i> .  | 6, 7 | 7-5    | 5     | Oak.   |
| False Mocha . . . B                    | { <i>Hemithea thy-</i><br><i>miaria</i> .    | —    | 5      | 5, 6  | Oak, hawthorn.                                     |
| Maiden's Blush . . . . .               | <i>Ephyra porata</i> .                       | —    | 9      | 9-4   | Oak.   |
| Clay Treble-lines . . . . .            | „ <i>punctaria</i> .                         | 6    | 7-9    | 8-4   | Do.  |
| Mocha . . . . .                        | „ <i>trilinearia</i> .                       | —    | 8-10   | 9-4   | Beech.   |
| Dingy do. . . . .                      | „ <i>omicronaria</i> .                       | —    | 8-10   | —     | Maple, beech.                                      |
| Birch do. . . . .                      | „ <i>orbicularia</i> .                       | —    | 8      | —     | Sallow, alder.                                     |
| Purple - bordered<br>Gold . . . . .    | „ <i>pendularia</i> .                        | —    | 7      | 8-4   | Birch.   |
| Small Yellow Wave                      | <i>Hyria auroraria</i> .                     | 6, 7 | 8-5    | 5, 6  | Plantain.  |
| Small White do. . . . .                | <i>Asthenia luteata</i> .                    | —    | 8-10   | —     | Maple.   |
| Waved Carpet . . . . .                 | „ <i>candidata</i> .                         | —    | 4      | 5     | Hornbeam.  |
| Blomer's Wave . . . . .                | „ <i>sylvata</i> .                           | —    | 8      | —     | Alder.   |
| Dingy Shell . . . . .                  | „ <i>Blomeraria</i>                          | —    | 8, 9   | 10-6  | Wych elm.  |
| Welsh Wave . . . . .                   | { <i>Eupisteria hepa-</i><br><i>rata</i>     | —    | 8, 9   | 10-5  | Alder.   |
| Brown do. . . . .                      | { <i>Venusia Cambri-</i><br><i>caria</i> .   | —    | 8, 9   | —     | Mountain ash.                                      |
| Tawny Red Wave . . . . .               | <i>Acidalia ochrata</i> .                    | —    | —      | —     | —  |
| Single Dotted do. . . . .              | „ <i>perochrata</i> .                        | —    | —      | —     | —  |
| Treble Brown-<br>spotted do. . . . .   | „ <i>rubricata</i> .                         | 7    | 8-5    | 5     | { Knotgrass, trefoils, les-<br>ser meadow-rue, &c. |
| Small Bordered do.                     | „ <i>scutulata</i> .                         | 7    | 8-5    | 5     | { Chervil, dandelion,<br>knotgrass.                |
| Allied do. . . . .                     | „ <i>bisetata</i> .                          | 7    | 8-5    | 5     | Dandelion, knotgrass.                              |
| London do. . . . .                     | „ <i>trigeminata</i> .                       | 6    | 7-5    | 5     | Knotgrass.   |
| Bone do. . . . .                       | „ <i>contiguaria</i> .                       | 7    | 8-5    | 5     | Crowberry, knotgrass.                              |
| Dark Cream do. . . . .                 | „ <i>herbariata</i> .                        | 7    | 10-5   | 5     | Tansy?   |
| Silky do. . . . .                      | „ <i>ossata</i> .                            | 6    | 8-4    | 4, 5  | Dandelion.   |
| Small Dusky do. . . . .                | „ <i>interjectaria</i>                       | 7    | 8-5    | 5     | Do.  |
| Ringed do. . . . .                     | „ <i>holosericata</i>                        | 7    | 7-5    | 5     | Sun cistus, knotgrass.                             |
| Lace Border . . . . .                  | „ <i>incanata</i> .                          | 7    | 9-5    | 6     | { Groundsel, dandelion,<br>knotgrass.              |
| Mullein Wave . . . . .                 | „ <i>circellata</i> .                        | 7    | 8      | —     | Knotgrass.   |
| Dotted - bordered<br>Cream do. . . . . | „ <i>ornata</i> .                            | 7    | 7-4    | 4, 5  | Marjoram, thyme, mint                              |
| Satin do. . . . .                      | „ <i>promutata</i> .                         | —    | 7, 8-5 | 5, 6  | { Creeping cinquefoil,<br>yarrow, mugwort.         |
| Lesser Cream do. . . . .               | „ <i>straminata</i> .                        | 7    | 7-5    | 5, 6  | Knotgrass.   |
| Cream do. . . . .                      | „ <i>mancuniata</i>                          | —    | 7      | 7     | Do.  |
|  | „ <i>subsericeata</i>                        | 7    | 7      | —     | Do.  |
|  | „ <i>strigaria</i> .                         | —    | 6      | —     | Do.  |
|  | „ <i>immutata</i> .                          | 7    | 8-5    | 5     | Do.  |
|  | „ <i>remutata</i> .                          | 6    | 8-4    | 5     | Low plants.  |



## INSECTS (continued).

| Popular Name.                         | Scientific Name.                              | Ova. | Larva. | Pupa. | Food-plants.               |
|---------------------------------------|---|------|--------|-------|----------------------------|
| <b>MOTHS.</b>                         |   |      |        |       |                            |
| Smoky Wave . . .                      | <i>Acidalia fumata</i> .                      | 6, 7 | 8-5    | 5     | Heath.                     |
| Pink do. . . . .                      | " <i>emutaria</i> .                           | 7    | 7-5    | 5, 6  | Couchgrass.                |
| Riband do. . . . .                    | " <i>aversata</i> .                           | 7    | 9-5    | 5     | { Nut, primrose, goose     |
| Plain do. . . . . E                   | " <i>inornata</i> .                           | 7    | 8-5    | 6     | berry, wood avens,         |
| Portland Ribbon do.                   | " <i>degeneraria</i> .                        | 7    | 8-4    | 5     | Low plants.                |
| Small Scallop . . E                   | " <i>emarginata</i> .                         | 7    | 7      | —     | Knotgrass.                 |
| Blood Vein . . . .                    | <i>Timandra amataria</i> .                    | 7    | 9-5    | 5, 6  | { Convolvulus and bed      |
| Common White }<br>Wave } . . . . .    | <i>Cabera pusaria</i> .                       | —    | 7-9    | —     | straws.                    |
| Dingy White do. . .                   | " <i>exanthemaria</i> .                       | —    | 10     | 10-5  | Dock, knotgrass.           |
| Clouded Silver . .                    | <i>Corycia temerata</i> .                     | 6    | 7, 8   | 9-4   | { Oak, birch, nut, alder   |
| Spotted Pinion }<br>Wave } . . . . .  | " <i>taminata</i> .                           | —    | 7      | —     | and saw.                   |
| Sharp Angled Pea-<br>cock . . . . . B | <i>Macaria alternata</i> .                    | —    | 9      | —     | Sallow and alder.          |
| Peacock . . . . .                     | " <i>notata</i> .                             | —    | 9      | —     | { Sloe, wild cherry,       |
| Tawny Barred Angle                    | " <i>liturata</i> .                           | —    | 9      | 10-4  | buckthorn.                 |
| Latticed Heath . .                    | <i>Strenia clathrata</i> .                    | —    | 10-4   | 5     | { Sallow, wild cherry,     |
| Brown Silver Line .                   | <i>Panagra petrararia</i> .                   | 5    | 6      | —     | buckthorn.                 |
| Barred Umber . . .                    | <i>Numeria pulveraria</i> .                   | —    | 7, 8   | 9-4   | Sallow, sloe.              |
| Grey Scalloped Bar                    | <i>Scodiona belgaria</i> .                    | 6, 7 | 8-4    | 5     | Sallow.                    |
| Common Heath . .                      | <i>Fidonia atomaria</i> .                     | —    | 7-5    | 5     | Larch, Scotch fir.         |
| Bordered White . .                    | " <i>piniaria</i> .                           | 6    | 8, 9   | 10-3  | Lucerne, sainfoin.         |
| Rannoch Looper . .                    | " <i>pinetaria</i> .                          | 7-3  | 4, 5   | 5     | Bracken.                   |
| Frosted Yellow . .                    | " <i>conspiciata</i> .                        | 7    | 8, 9   | 9-5   | Sallow, nut, privet.       |
| Drab Looper . . . .                   | <i>Minoa euphorbiata</i> .                    | 7    | 8, 9   | 10-5  | Heath.                     |
| Black-veined . . .                    | <i>Scoria dealbata</i> .                      | 6    | 9-5    | 5, 6  | Knapweeds and trefoils.    |
| Belle . . . . .                       | <i>Sterrhia sacraria</i> .                    | 8    | 6 & 9  | —     | Larch and Scotch fir.      |
| Purple Bar . . . .                    | <i>Lythria purpuraria</i> .                   | —    | 8      | —     | Bilberry.                  |
| Rest Harrow . . .                     | <i>Aplasta ononaria</i> .                     | —    | 4 & 9  | —     | Broom.                     |
| Grass Wave . . . .                    | { <i>Aspilates strigil-</i><br><i>laria</i> . | 6    | 8-5    | 5     | Cypress spurge.            |
| Magpie, or Cur-<br>rant Moth . . . .  | { <i>Abraxas grossu-</i><br><i>lariata</i> .  | —    | 5      | 6     | Grasses.                   |
| Clouded do. . . . .                   | " <i>ulmata</i> .                             | —    | 9      | —     | Dock, chamomile.           |
| Scorched Carpet . .                   | <i>Ligdia adustata</i> .                      | 5, 6 | 6, 7   | 9-4   | Dock, knotgrass.           |
| Twin Spot do. . . .                   | <i>Larentia didymata</i> .                    | —    | 4, 5   | 5     | Rest-harrow.               |
| February do. . . .                    | " <i>cæsiata</i> .                            | 7    | 9-5    | 5     | Broom, heath.              |
| Striped Twin Spot }<br>do. . . . . B  | " <i>salicata</i> .                           | —    | —      | —     | { Currant, gooseberry,     |
| Beech Green Carpet                    | " <i>olivata</i> .                            | 8    | 10-4   | 5, 6  | sloe, &c.                  |
| Mottled Green do. .                   | " <i>pectinitaria</i> .                       | —    | 8, 9   | —     | Wych elm.                  |
| Rivulet . . . . .                     | { <i>Emmelesia affi-</i><br><i>nitata</i> .   | —    | 8      | —     | Spindle.                   |
| Small do. . . . .                     | " <i>alchemillata</i> .                       | —    | 8, 9   | —     | 5                          |
| Grass do. . . . .                     | " <i>albulata</i> .                           | 6    | 8      | 10-4  | Cowslip, rough chervil.    |
| Sandy do. . . . .                     | " <i>decolorata</i> .                         | 6    | 7      | 7-5   | { Bilberry, whortleberry,  |
| Barred do. . . . .                    | " <i>teniata</i> .                            | —    | 8      | —     | heath.                     |
| Single Barred do. .                   | " <i>unifasciata</i> .                        | 8    | 9, 10  | 10-6  | Bedstraw.                  |
| Heath do. . . . .                     | " <i>cricetata</i> .                          | —    | —      | —     | Hedge bedstraw.            |
| Pretty Pinion . . .                   | " <i>blandiata</i> .                          | —    | 9      | —     | { Alder and hedge bed-     |
| Netted Pug . . . .                    | <i>Eupithecia venosata</i> .                  | 5, 6 | 7      | 8-5   | straw.                     |
| Pinion-spotted do. .                  | " <i>consignata</i> .                         | 5, 6 | 6      | 9-4   | Seeds of campions.         |
| Beautiful do. . . .                   | " <i>linariata</i> .                          | 6    | 8      | 9-4   | Do.                        |
| Red do. . . . .                       | " <i>pulchellata</i> .                        | 6    | 7      | 9-4   | Seeds of yellow rattle.    |
| Lime Speck do. . .                    | " <i>centaureata</i> .                        | 5, 6 | 8, 9   | 9-5   | { Seed-capsules of white   |
| Valerian do. . . .                    | " <i>valerianata</i> .                        | 5, 6 | 7      | 7-5   | campion.                   |
| Rufous do. . . . .                    | " <i>subfulvata</i> .                         | 6, 7 | 9, 10  | 9-7   | Holly?                     |
|                                       |   |      |        |       | Wood chickweed.            |
|                                       |   |      |        |       | Eyebright.                 |
|                                       |   |      |        |       | { Seed-capsules of blad-   |
|                                       |   |      |        |       | der campion & white        |
|                                       |   |      |        |       | campion.                   |
|                                       |   |      |        |       | Oak, nut, and fruit trees. |
|                                       |   |      |        |       | { Flowers of yellow toad-  |
|                                       |   |      |        |       | flax.                      |
|                                       |   |      |        |       | Flowers of foxglove.       |
|                                       |   |      |        |       | { Flowers and seeds of     |
|                                       |   |      |        |       | yarrow, ragwort, gol-      |
|                                       |   |      |        |       | den-rod, angelica, &c.     |
|                                       |   |      |        |       | Flower of valerian.        |
|                                       |   |      |        |       | Yarrow and ox-eye.         |











## INSECTS (continued).

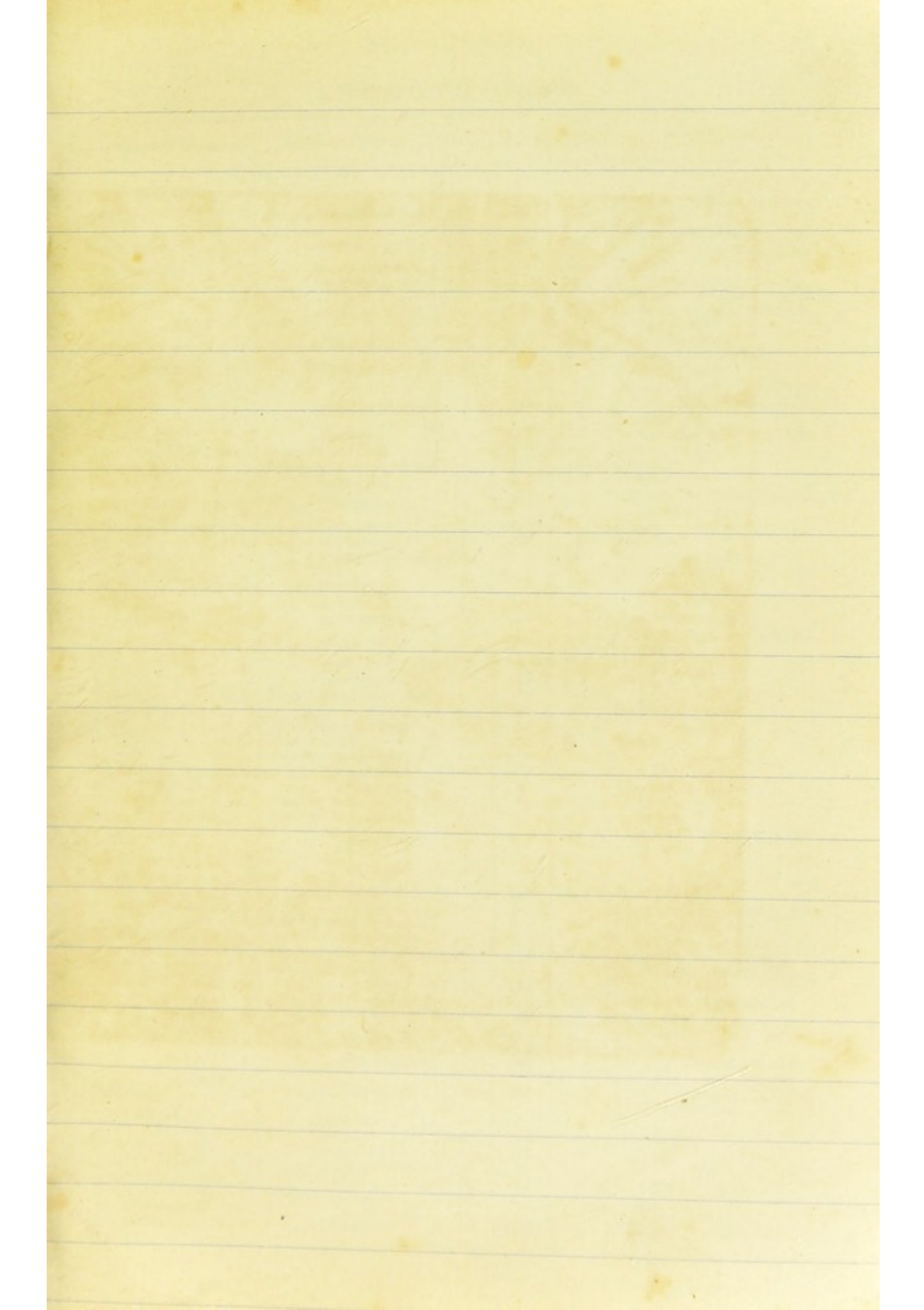
| Popular Name.                       | Scientific Name.                 | Ova.  | Larva.    | Pupa.   | Food-plants.   |
|-------------------------------------|----------------------------------|-------|-----------|---------|--|
| <b>MOTHS.</b>                       |                                  |       |           |         |  |
| Small Brindled Pug                  | { <i>Eupithecia subumbrata</i> } | 5, 6  | 8, 9      | 8-5     | Gentian and harebell.  |
| Lead do. . . . .                    | " <i>plumbeolata</i>             | 5     | 7, 8      | 7-5     | { Flowers of yellow cow-wheat.                                   |
| Haworth's do. . . . .               | " <i>isogrammata</i>             | 5, 6  | 7, 8      | 8-5     | { Flower-buds of clematis.                                       |
| Dwarf do. . . . .                   | " <i>pygmæata</i>                | 6     | 6, 7      | 7-5     | { Flowers of greater stitchwort.                                 |
| Beech do. . . . .                   | " <i>satyrata</i>                | 5, 6  | 9         | 9-6     | Scabious and bedstraws.  |
| Pauper do. . . . .                  | " <i>egenaria</i>                | —     | —         | —       | { Heath, nettle, golden-rod, &c.                                 |
| Grey do. . . . .                    | " <i>castigata</i>               | 5, 6  | 8-10      | 9-4     | { Flowers and seeds of wild angelica.                            |
| Triple Spotted do. . . . .          | " <i>trisignata</i>              | 6, 7  | 9         | 9-6     | Larch and spruce fir.  |
| Larch do. . . . .                   | " <i>lariciata</i>               | 6, 7  | 7         | 9-6     | Flowers of golden-rod.   |
| Golden Rod do. B                    | " <i>virgaureata</i>             | 6     | 8, 9      | 9-6     | { Flowers and seeds of wild angelica and cow-parsley.            |
| White Spotted do. . . . .           | " <i>albipunctata</i>            | 6, 7  | 9         | 9-6     | Oak and sloe.  |
| Marbled do. . . . .                 | " <i>irriguata</i>               | 6     | 6         | 7-6     | Ash.   |
| Ash do. . . . .                     | " <i>fraxinata</i>               | 8     | 8, 9      | 9-4     | —  |
| Ochreous do. . . . .                | " <i>extensaria</i>              | —     | —         | —       | Juniper and Scotch fir.  |
| Narrow Winged do. . . . .           | " <i>indigata</i>                | 5, 6  | 7         | 7-5     | Flowers of heath.  |
| Plain do. . . . .                   | " <i>nanata</i>                  | 7     | 8, 9      | 9-6     | { Flowers and seeds of goosefoot and orache.                     |
| Harebell do. . . . .                | " <i>subnotata</i>               | 6, 7  | 8, 9      | 9-6     | Harebell, &c.  |
| Wormwood do. . . . .                | " <i>campanulata</i>             | 7     | 8, 9      | 9-7     | { Flowers and seeds of ragwort, mugwort, golden-rod, yarrow, &c. |
| Small Wormwood } do. . . . .        | " <i>absynthiata</i>             | 7     | 9, 10     | 9-7     | { Scabious, and flowers of heath.                                |
| Slender do. . . . .                 | " <i>minutata</i>                | 6, 7  | 8, 9      | 9-7     | Sallow-catkins.  |
| Brindled Brown do. . . . .          | " <i>tenuiata</i>                | 6, 7  | 3, 4      | 5-7     | Oak.   |
| Mottled do. . . . .                 | " <i>dodoneata</i>               | 5     | 6, 7      | 7-5     | { Ash, alder, hawthorn, black currant, willow, &c.               |
| Large Cloaked do. . . . .           | " <i>exiguata</i>                | 6     | 9, 10     | 9-6     | { In buds and shoots of spruce fir.                              |
| Green do. . . . .                   | " <i>togata</i>                  | 6     | 8         | 9-6     | { Buds and flowers of apple and crab.                            |
| Manchester do. . . . .              | " <i>rectangulata</i>            | 7     | 4, 5      | 5, 6    | Whortleberry.  |
| Broom Scallop . . . . .             | " <i>debiliata</i>               | 7     | 4, 5      | 6, 7    | Great loosestrife.   |
| Small Seraphim . . . . .            | <i>Collix sparsata</i>           | —     | 8, 9      | —       | Willow and sawfly.   |
| Brindle Barred } Yellow } . . . . . | <i>Lobophora sexalata</i>        | —     | 9         | 10-5    | { Privet and herb Christopher                                    |
| Shaded Broad Bar } . . . . .        | " <i>viridata</i>                | —     | 7, 8      | 9-5     | Larch, Scotch fir.   |
| Marsh Highflyer . . . . .           | <i>Thera variata</i>             | 6 & 8 | 7 & 3-5   | 8 & 6   | Alder, sawfly, bilberry.   |
| July do. . . . . E                  | <i>Ypsipetes ruberata</i>        | —     | 9         | 4       | { Sallow, nut, alder, bilberry.                                  |
| Purple Barred } Carpet } . . . . .  | " <i>elutata</i>                 | 7     | 10-5      | 6       | Bedstraws.   |
| Beautiful do. . . . .               | <i>Melanthia ocellata</i>        | 6     | 7, 8      | 8-5     | Bramble and raspberry.   |
| Argent-and-Sable . . . . .          | " <i>albicillata</i>             | 5, 6  | 8, 9      | 8-5     | Birch and sweet gale.  |
| Small do. . . . .                   | <i>Melanippe hastata</i>         | 6, 7  | 8         | 9-6     | Hedge bedstraw.  |
| Bordered Chalk } Carpet } . . . . . | " <i>tristata</i>                | 6     | 8, 9      | 11-5    | Clematis.  |
| Sharp Angled do. . . . .            | " <i>procellata</i>              | 7     | 8, 9      | 10-5    | Chickweed.   |
| Silver Ground do. . . . .           | " <i>unangulata</i>              | 6, 7  | 7, 8      | —       | Primrose   |
| Bedstraw Chalk do. . . . .          | " <i>montanata</i>               | 6-8   | 10-3      | 4, 5    | Smooth heath bedstraw.   |
| Royal Mantle . . . . .              | " <i>galiata</i>                 | —     | 7 & 9     | 8 & 9-5 | Yellow bedstraw.   |
| Rosy Carpet . . . . .               | <i>Anticlea sinuata</i>          | 6     | 8, 9      | 10-5    | Bedstraws.   |
| Red Barred do. . . . .              | " <i>rubidata</i>                | 6, 7  | 8, 9      | 10-5    | Groundsel.   |
| Flame do. . . . .                   | <i>Coremia munitata</i>          | 6     | 10-3      | 4, 5    | Primrose.  |
| Red Twin Spot do. . . . .           | " <i>propugnata</i>              | 6     | 9         | —       | { Bedstraws, chickweed, and ground ivy.                          |
| Dark Barred Twin } Spot do. . . . . | " <i>ferrugata</i>               | 5 & 8 | 7 & 9     | —       | Bedstraws.   |
| Large do. . . . . E                 | " <i>unidentata</i>              | —     | 8         | 4       | { Hawthorn, white dead-nettle, knapweeds, &c.                    |
|                                     | " <i>quadrifasciata</i>          | —     | 4, 5, & 8 | —       |  |



## INSECTS (continued).

| Popular Name.                            | Scientific Name.                                   | Ova.  | Larva.    | Pupa.    | Food-plants.  |
|--|--|-------|-----------|----------|---|
| <b>MOTHS.</b>                            |  |       |           |          |   |
| Yellow Shell . . .                       | <i>Camptogramma bilineata</i> . . .                | —     | 4         | —        | { Dock, chickweed, and<br>grasses.                          |
| Fern . . . . .                           | <i>Phibalapteryx tersata</i> . . .                 | —     | 9         | —        | Clematis.   |
| Oblique Striped<br>Carpet . . . . .      | „ <i>lignata</i> . . .                             | 7 & 9 | 8 & 9-4   | 9 & 5, 6 | White water bedstraw.                                       |
| Small Waved Umber                        | „ <i>vitalbata</i> . . .                           | 7, 8  | 6 & 10    | —        | Clematis.   |
| Brown Scallop . . .                      | <i>Scotosia vetulata</i> . . .                     | 7-3   | 6         | 6, 7     | Buckthorn.  |
| Buckthorn Umber . .                      | „ <i>rhamnata</i> . . .                            | —     | 5, 6      | 6        | Buckthorn, birch.   |
| Tissue . . . . .                         | „ <i>certata</i> . . .                             | —     | 6, 7      | —        | Barberry.   |
| Scallop Shell . . .                      | „ <i>undulata</i> . . .                            | —     | 9, 10     | —        | Poplar, willow.   |
| Short Cloak Carpet                       | <i>Cidaria picata</i> . . .                        | 7     | 8         | 9-5      | Chickweed.  |
| Broken Bar . . . .                       | „ <i>corylata</i> . . .                            | 6     | 8, 9      | —        | Lime, sloe, and nut.  |
| Marbled Carpet . .                       | „ <i>russata</i> . . .                             | 5 & 8 | 7 & 10-4  | 7 & 5    | { Birch, hawthorn, sal-<br>low, and strawberry.             |
| Small Phoenix . . .                      | „ <i>silaceata</i> . . .                           | —     | 7 & 9     | 7 & 10-4 | { Willow herbs and en-<br>chanter's nightshade.             |
| Phoenix . . . . .                        | „ <i>prunata</i> . . .                             | 7-4   | 5, 6      | 6        | { Sloe, currant, and<br>gooseberry.                         |
| Clouded Yellow }<br>Moth . . . . .       | „ <i>fulvata</i> . . .                             | 7     | 5         | 6        | Dog-rose.   |
| Spinach . . . . .                        | „ <i>dotata</i> . . .                              | 8-4   | 4, 5      | 5        | Black and red currant.                                      |
| Small Mallow . . .                       | <i>Eubolia mensuraria</i> . . .                    | —     | 6         | —        | Grasses.  |
| Lead Belle . . . .                       | „ <i>palumbaria</i> . . .                          | —     | 5         | 6        | { Broom, heath, clover,<br>greenwood, &c.                   |
| Oblique Striped . .                      | „ <i>lineolata</i> . . .                           | 5 & 8 | 4-6 & 9   | 10-4     | Yellow bedstraw.  |
| Treble Barred . . .                      | <i>Anaitis plagiata</i> . . .                      | —     | 7 & 10-4  | —        | { Perforated St. John's<br>wort.                            |
| Olive Drab . . . .                       | <i>Lithostegia griseata</i> . . .                  | 6     | 7         | —        | Seed-pods of flaxweed.                                      |
| Chevron . . . . .                        | <i>Chesias obliquaria</i> . . .                    | —     | 7-9       | 8-4      | Broom.  |
| Chimney Sweep . .                        | { <i>Tanagra chæro-</i><br><i>phyllata</i> . . . } | 7-2   | 5         | 6        | Chervil and earth nut.                                      |
| Scalloped Hook Tip                       | { <i>Platypteryx la-</i><br><i>certula</i> . . . } | 6 & 9 | 6 & 9     | —        | Birch.  |
| Scarce do. . . . .                       | „ <i>sicula</i> . . .                              | —     | 5, 6      | —        | Oak, birch, and lime.                                       |
| Oak do. . . . .                          | „ <i>hamula</i> . . .                              | —     | 6 & 9     | —        | Oak, birch.   |
| Beech do. . . . .                        | „ <i>unguicula</i> . . .                           | 6 & 8 | 7 & 9, 10 | —        | Beech.  |
| Goose Egg . . . .                        | <i>Cilix spinula</i> . . .                         | —     | 5-7       | 6, 7     | { Hawthorn, sloe, moun-<br>tain ash.                        |
| Kitten . . . . .                         | <i>Dicranura furcula</i> . . .                     | 6     | 7-9       | 9-5      | Sallow, willow, poplar.                                     |
| Broad Barred do. .                       | „ <i>bifida</i> . . .                              | 6     | 7-9       | 9-4      | Poplar.   |
| Puss . . . . .                           | „ <i>vinula</i> . . .                              | 6     | 7, 8      | 8-5      | Willow, poplar, willow.                                     |
| Lobster . . . . .                        | <i>Stauropus fagi</i> . . .                        | 7     | 8, 9      | 10-5     | Beech, oak, birch, nut.                                     |
| Buff Tip . . . . .                       | <i>Pygæra bucephala</i> . . .                      | 5, 6  | 7-9       | 10-5     | { Lime, elm, willow, sal-<br>low, oak, beech, nut.          |
| Dusky Prominent . .                      | <i>Gluphisia crenata</i> . . .                     | —     | 8         | —        | Poplar.   |
| Pale do. . . . .                         | <i>Ptilodontis palpina</i> . . .                   | —     | 7 & 9     | 10-6     | { Willow, willow, birch,<br>poplar.                         |
| Swallow do. . . .                        | <i>Notodonta dictæa</i> . . .                      | —     | 6 & 9     | 7 & 10-5 | Poplar, willow, willow.                                     |
| Small Swallow do.                        | „ <i>dictæoides</i> . . .                          | 6     | 7-9       | 10-5     | Birch.  |
| Iron do. . . . .                         | „ <i>aromedarius</i> . . .                         | 6 & 8 | 7 & 8, 9  | 10-5     | Birch, alder, nut.  |
| Dark do. . . . .                         | „ <i>trilophus</i> . . .                           | —     | 7-9       | —        | Poplar and birch.   |
| Great do. . . . .                        | „ <i>trepida</i> . . .                             | —     | 8         | 9-4      | Oak.  |
| Marbled Brown . .                        | „ <i>dodonea</i> . . .                             | 6     | 7-9       | 10-5     | Oak and birch.  |
| Buff Arches . . . E                      | <i>Thyatira derasa</i> . . .                       | —     | 8, 9      | 10-5     | Bramble and hawthorn.                                       |
| Peach Blossom . . .                      | „ <i>batis</i> . . .                               | —     | 8, 9      | 10-5     | Bramble and raspberry.                                      |
| Lesser Satin Carpet                      | { <i>Cymatophora du-</i><br><i>plaris</i> . . . }  | 6, 7  | 8, 9      | 10-5     | Birch.  |
| Satin Carpet . . .                       | „ <i>fluctuosa</i> . . .                           | 6, 7  | 9, 10     | 10-5     | Do.   |
| Poplar Lutestring .                      | „ <i>or.</i> . . .                                 | —     | 6-8       | 9, 10    | Poplar.   |
| Figure of 80 . . .                       | „ <i>ocularis</i> . . .                            | —     | 7-9       | 9, 10    | Do.   |
| Scarce Marvel de }<br>Jour . . . . . E } | <i>Diphthera orion</i> . . .                       | 6     | 7-9       | 10-5     | Oak, birch.   |
| Dark Dagger . . .                        | <i>Acronycta tridens</i> . . .                     | 7     | 8-10      | 10-5     | { Willow, willow, haw-<br>thorn, mountain ash,<br>sloe, &c. |
| Grey do. . . . .                         | „ <i>psi</i> . . .                                 | 6, 7  | 8, 9      | 10-5     | { Poplar, elm, lime, haw<br>thorn, and pear.                |











## INSECTS (continued).

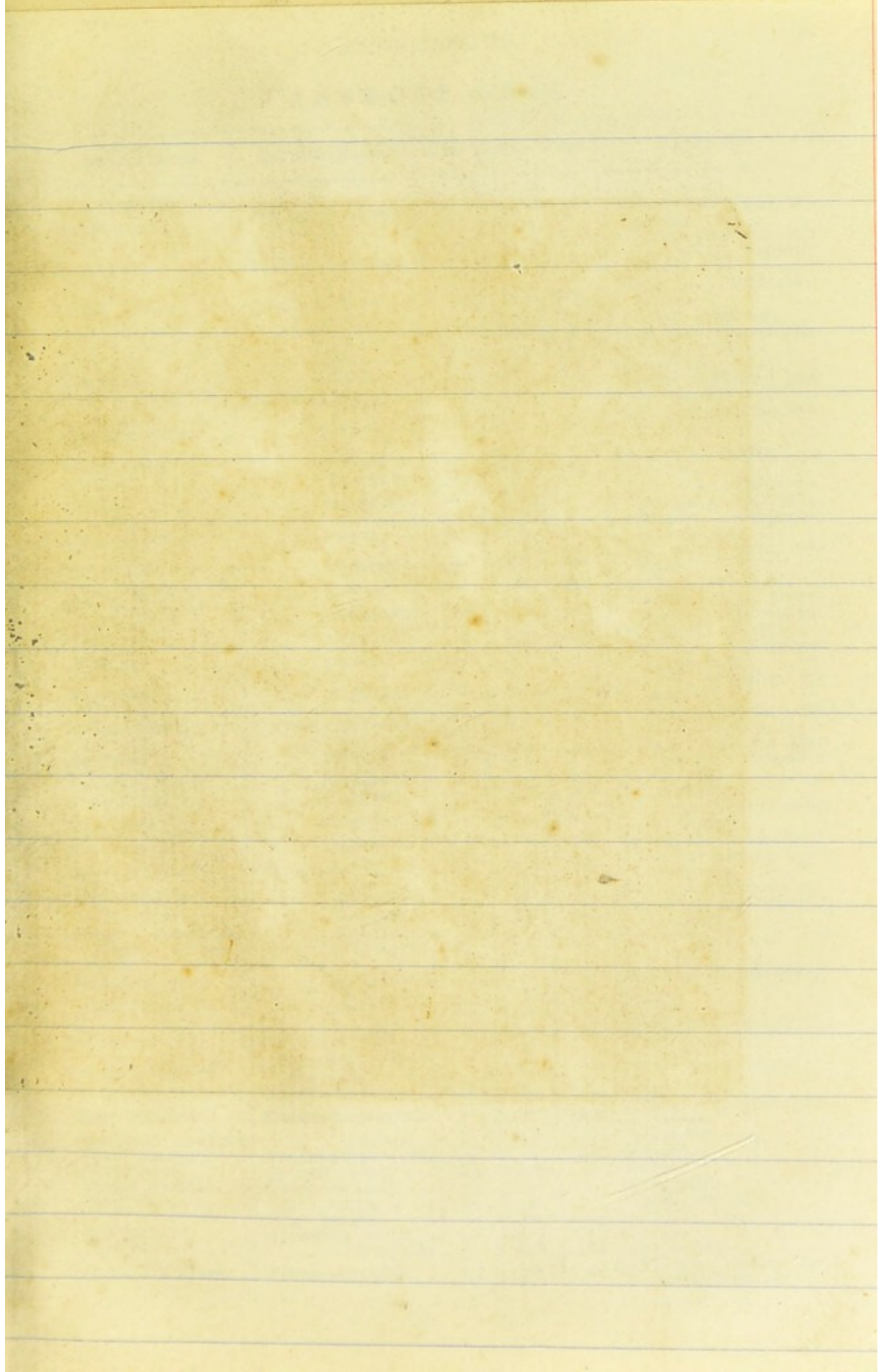
| Popular Name.                       | Scientific Name.           | Ova. | Larva.      | Pupa. | Food-plants.  |
|-------------------------------------|----------------------------|------|-------------|-------|---|
| <b>MOTHS.</b>                       |                            |      |             |       |   |
| Miller . . . .                      | <i>Acronycta leporina</i>  | 5, 6 | 7-9         | 10-5  | { Birch, poplar, willow, alder.                         |
| Sycamore . . . .                    | " <i>aceris</i> . . .      | 7    | 8, 9        | 10    | { Sycamore, maple, birch, horse-chestnut, oak.          |
| Poplar Grey . . .                   | " <i>megacephala</i> .     | 6    | 6-8         | 9-4   | Poplar.   |
| Streaked . . . .                    | " <i>strigosa</i> . . .    | 6    | 7-9         | 10-5  | Hawthorn.   |
| Alder . . . . .                     | " <i>alni</i> . . . . .    | —    | 7-9         | 8-4   | { Alder, willow, oak, lime, elm, nut, beech, birch, &c. |
| Coronet . . . . .                   | " <i>ligustri</i> . . .    | 6, 7 | 8, 9        | 10-5  | Ash and privet.   |
| Knot Grass . . .                    | " <i>rumicis</i> . . .     | 6    | 6-8         | 9-4   | { Bramble, plantain, knotgrass.                         |
| Light do. . . . .                   | " <i>menyanthidis</i>      | 6    | 6-8         | —     | { Buckbean, willow, bramble, heath, sweet gale, &c.     |
| Sweet-gale . . . .                  | " <i>myricæ</i> . . .      | 6, 7 | 8, 9        | —     | Sweet-gale, willow, birch.                              |
| Powdered Wainscot                   | <i>Simyra venosa</i> .     | 6    | 8, 9        | —     | Reed grass.   |
| Bright Eye . . .                    | <i>Leucania conigera</i> . | —    | 3-5         | 5     | Grasses.  |
| Double Line . . .                   | " <i>turca</i> . . . .     | —    | 2, 3        | 4, 5  | Do.   |
| Ochreous Brown .                    | " <i>lithargyria</i> .     | —    | 1-5         | 5, 6  | { Plantain, chickweed, grasses, &c.                     |
| Obscure Wainscot .                  | " <i>obsoleta</i> . . .    | 7    | 8, 9        | —     | Reed.   |
| Shore do. . . . .                   | " <i>littoralis</i> . .    | 7    | 8-5         | 5     | Sea-reed.   |
| Striped do. . . .                   | " <i>pudorina</i> . . .    | —    | 3, 4        | 4, 5  | Grasses and reed.                                       |
| Shoulder Striped do.                | " <i>comma</i> . . . .     | 6    | 8-4         | 5, 6  | { Sorrel and cock's-foot grass.                         |
| Pure do. . . . .                    | " <i>L-album</i> . . . .   | —    | —           | —     | —   |
| Streaked do. . . .                  | " <i>straminea</i> . .     | —    | 2-4         | 5, 6  | Grasses and reed.                                       |
| Smoky do. . . . .                   | " <i>impura</i> . . . .    | 7    | 10-4        | 5, 6  | { Sedge and cock's-foot grass.                          |
| Common do. . . .                    | " <i>pallens</i> . . . .   | 8, 9 | 10-4        | 5, 6  | Grasses.  |
| Fen do. . . . .                     | " <i>phragmitidis</i>      | 7    | 8-5         | 5, 6  | Reed.   |
| Pale do. . . . .                    | <i>Tapinostola Bondii</i>  | —    | —           | —     | —   |
| Coast do. . . . .                   | " <i>Elymi</i> . . . . .   | —    | 5           | 6     | Sea lyme grass.   |
| Flame do. . . . .                   | <i>Meliana flammea</i> .   | —    | —           | —     | —   |
| Silky do. . . . .                   | <i>Senta ulvæ</i> . . .    | —    | 9-4         | 5, 6  | Reed.   |
| Lineated do. . . .                  | <i>Nonagria despecta</i>   | —    | —           | —     | —   |
| Twin Spot do. . .                   | " <i>concolor</i> . . .    | —    | —           | —     | —   |
| Mere Wainscot . .                   | " <i>Hellmanni</i> . .     | —    | 6           | —     | Roots of reed.  |
| Clouded Dart . . .                  | <i>Axylia putris</i> . .   | 7    | 8           | 10-5  | Low plants.   |
| Bordered Brindle .                  | <i>Xylophasia rurea</i> .  | —    | 4           | 4, 5  | Grasses.  |
| Light Arches . . .                  | " <i>lithoxylea</i> . .    | —    | 5, 6        | 6     | { Roots of grass and low plants.                        |
| Reddish Light Arches                | " <i>sublustris</i> . .    | —    | —           | —     | —   |
| Dark Arches . . .                   | " <i>polyodon</i> . . .    | —    | 4, 5        | 6, 7  | Low plants.   |
| Clouded Brindle .                   | " <i>hepatica</i> . . .    | —    | 8-4         | 5     | Chickweed, grasses, &c.                                 |
| Bird's Wing . . .                   | <i>Dipterygia pinastri</i> | —    | 8, 9        | 10-5  | Dock, sorrel, &c.                                       |
| Bordered Gothic .                   | <i>Neuria saponariae</i> . | —    | 7, 8        | —     | Campions.   |
| Feathered Ear . .                   | <i>Pachetra leucophaea</i> | —    | 10-4        | 5, 6  | Grasses.  |
| Dusky Nutmeg . .                    | <i>Mamestra abjecta</i> .  | —    | 5           | 6     | At roots of couch grass.                                |
| Nutmeg . . . . .                    | " <i>anceps</i> . . . .    | —    | 12-2        | —     | —   |
| Large do. . . . .                   | " <i>albicolon</i> . . .   | —    | 7, 8        | 9-4   | Orache and goosefoot.                                   |
| Dusky Brocade . .                   | " <i>furva</i> . . . .     | —    | 6           | —     | Grasses.  |
| Cabbage . . . . .                   | " <i>brassicæ</i> . . .    | —    | 5, 6 & 8, 9 | 9-4   | { Cabbage, dock, goose-foot, &c.                        |
| Dot . . . . .                       | " <i>persicariæ</i> . .    | 7    | 8, 9        | —     | Spotted persicaria, &c.                                 |
| Rustic Shoulder }<br>Knot . . . . . | <i>Apamea basilinea</i> .  | —    | 8-3         | 4, 5  | { Wheat in summer, various plants after hibernation.    |
| Union Rustic . . .                  | " <i>connexa</i> . . . .   | —    | —           | —     | —   |
| Brown Pinion . . .                  | " <i>gemina</i> . . . .    | 7    | 8-4         | 5     | Grasses.  |
| Uniform Rustic . .                  | " <i>unanimis</i> . . .    | —    | 9-4         | 4-6   | Do.   |
| Double Lobed . . .                  | " <i>ophiogramma</i> .     | —    | —           | —     | —   |
| Common Rustic . .                   | " <i>oculea</i> . . . .    | —    | 4, 5        | 5-7   | Grasses.  |
| Marbled Minor . .                   | <i>Miana strigilis</i> . . | —    | 3, 4        | —     | Do.   |
| Middle Barred do. .                 | " <i>fasciuncula</i> . .   | —    | —           | —     | —   |
| Rosy do. . . . .                    | " <i>litérosa</i> . . .    | —    | 5, 6        | —     | Slender foxtail grass.                                  |



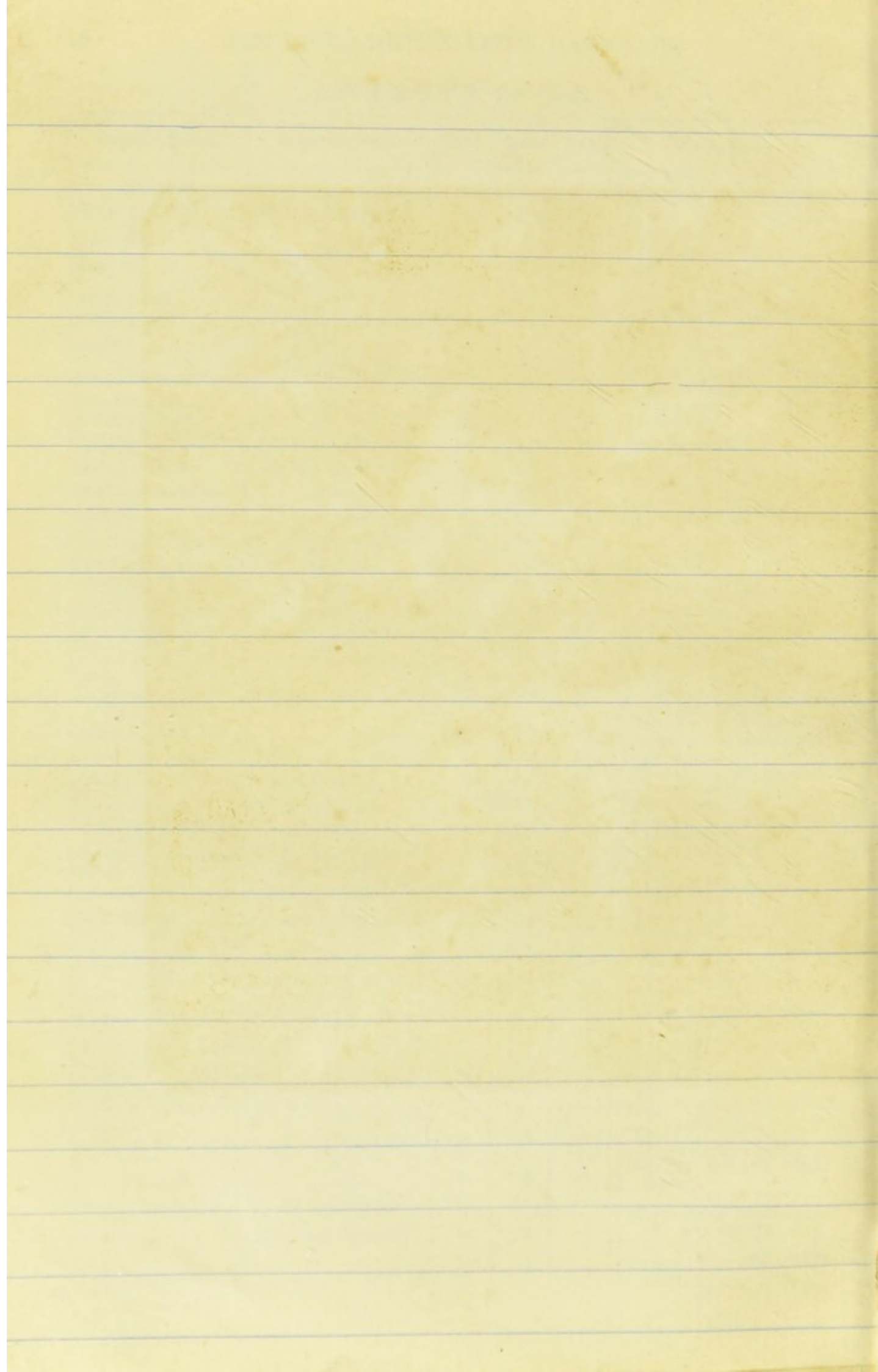
## INSECTS (continued).

| Popular Name.                                       | Scientific Name.                                    | Ova. | Larva. | Pupa. | Food-plants.  |
|---|---|------|--------|-------|---|
| MOTHS.  |   |      |        |       |   |
| Cloaked Minor                                       | <i>Miana furuncula</i>                              | —    | 4-6    | 5, 6  | { In stems of fescue grass<br>and slender foxtail<br>grass. |
| Wood do. . . . E                                    | <i>arcuosa</i>                                      | —    | 5      | 6     | Turfy hair grass.   |
| Least do. . . . .                                   | { <i>Photedes capti-</i><br><i>uncula</i> . . . }   | —    | —      | —     | —   |
| Triple Lines . . .                                  | <i>Grammesia tri-</i><br><i>linea</i> . . . }       | —    | 4, 5   | 5, 6  | Great plantain.   |
| Gold Line . . . .                                   | <i>Hydrilla palustris</i> .                         | —    | 7, 8   | —     | { Plantains, and other<br>low plants.                       |
| Dingy . . . . .                                     | { <i>Acosmetia cali-</i><br><i>ginosa</i> . . . }   | —    | —      | —     | —   |
| Bordered Rustic .                                   | { <i>Caradrina Mor-</i><br><i>pheus</i> . . . }     | 7, 8 | 9, 10  | 5, 6  | { Orpine, sallow, bramble,<br>dock, teasle, &c.             |
| Powdered do. . . .                                  | " <i>blanda</i> . . .                               | —    | 4      | 5, 6  | Chickweed.  |
| Mottled Beauty .                                    | " <i>cubicularis</i> .                              | 8    | 9-4    | 5-7   | Grasses, &c.  |
| Brown Feathered }<br>Rustic . . . . .               | <i>Rusina tenebrosa</i> .                           | —    | 9-3    | 4-6   | Violets, knotgrass, &c.                                     |
| Archer's Dart . . E                                 | <i>Agrotis velligera</i> .                          | —    | 10-5   | 5, 6  | Roots of grasses.   |
| Shuttle Shaped do..                                 | " <i>puta</i> . . . .                               | 8    | 9-12   | —     | { Dandelion, knotgrass,<br>lettuce, &c.                     |
| Turnip . . . . .                                    | " <i>segetum</i> . . .                              | 6    | 7-4    | —     | Roots of turnip.  |
| Heart and Dart . .                                  | " <i>exclamationis</i> .                            | 6    | 9-5    | 5, 6  | { Roots of cabbage, tur-<br>nip, &c.                        |
| Heart and Club E                                    | " <i>corticea</i> . . .                             | 6    | 8-4    | 5, 6  | Goosefoot.  |
| Light Feathered }<br>Rustic . . . . .               | " <i>cinerea</i> . . .                              | —    | 9-4    | 5, 6  | Roots of low plants.  |
| Cloud Dart . . . .                                  | " <i>ripæ</i> . . . . .                             | —    | 8-10   | 6     | Houndstongue on coast.                                      |
| True Lover's Knot .                                 | " <i>porphyrea</i> . .                              | 7    | 8-5    | 5, 6  | Heather.  |
| Stout Dart . . . .                                  | " <i>ravida</i> . . . .                             | —    | 4, 5   | 6     | Thistles, dandelion, &c.                                    |
| Dotted Rustic . . .                                 | " <i>pyrophila</i> . .                              | —    | 8      | —     | Heath, grasses, &c.   |
| Broad Bordered }<br>Yellow Under-<br>wing . . . . . | <i>Triphaena fimbria</i> .                          | 9    | 10-4   | 5-7   | { Birch, oak, sallow,<br>broom, primrose,<br>grasses, &c.   |
| Lesser Yellow do. .                                 | " <i>orbona</i> . . . .                             | 7    | 8-5    | 5-7   | { Sallow buds, broom,<br>nettle, and low plants.            |
| Large Yellow do. .                                  | " <i>pronuba</i> . . .                              | 7    | 8-5    | 5-7   | Dock, &c.   |
| Double Dart . . . .                                 | <i>Noctua augur</i> . . .                           | 7    | 8-5    | 5, 6  | { Sallow, hawthorn, and<br>low plants                       |
| Flame Shoulder . .                                  | " <i>pecta</i> . . . . .                            | 6    | 7-4    | 5-7   | Low plants.   |
| Setaceous Hebrew }<br>Character . . . . .           | " <i>C-nigrum</i> . . .                             | —    | 4 & 10 | —     | { Pea-stents, and low<br>plants.                            |
| Double Square Spot                                  | " <i>triangulum</i> . .                             | —    | 4, 5   | 6     | Sallow, bramble.  |
| Purple Clay . . . .                                 | " <i>brunnea</i> . . . .                            | —    | 4, 5   | 5, 6  | Sallow.   |
| Ingrailed do. . . .                                 | " <i>festiva</i> . . . .                            | 7    | 7-5    | 5, 6  | { Sallow, foxglove,<br>violet, &c.                          |
| Confluent do. . . .                                 | " <i>conflua</i> . . . .                            | 7    | 8-5    | 5, 6  | Moss campion.   |
| Barred Chestnut . .                                 | " <i>Dahlia</i> . . . . .                           | —    | 9-5    | 5, 6  | Low plants.   |
| Small Square Spot .                                 | " <i>rubi</i> . . . . .                             | —    | 6, 7   | —     | Do.   |
| Dotted Clay . . . .                                 | " <i>baja</i> . . . . .                             | —    | 4, 5   | 5, 6  | Do.   |
| Dingy Shears . . . E                                | <i>Orthosia upsilon</i> .                           | —    | 5, 6   | 6     | Willow, poplar.   |
| Heart Moth . . . .                                  | <i>Dicylea Oo</i> . . . .                           | —    | 5, 6   | —     | Oak.  |
| Marbled Shears . .                                  | { <i>Dianthæcia irre-</i><br><i>gularis</i> . . . } | —    | 8      | —     | { Viper's bugloss, Span-<br>ish catchfly.                   |
| Tawny do. . . . .                                   | " <i>carpophaga</i> .                               | 6    | 7, 8   | 10-4  | Seeds of campions.  |
| Mottled do. . . . .                                 | " <i>capsophila</i> . .                             | 6    | 6-9    | 8-4   | Campions.   |
| Lychnis . . . . .                                   | " <i>capsicola</i> . .                              | 6    | 7-9    | 8-5   | Seeds of do.  |
| Campion . . . . .                                   | " <i>cucubali</i> . . .                             | 6    | 7, 8   | —     | Do.   |
| White Spotted }<br>Coronet . . . . .                | " <i>albimacula</i> .                               | 6    | 7      | —     | Do.   |
| Marbled do. . . . .                                 | " <i>conspersa</i> . .                              | —    | 7-9    | —     | Do.   |
| Scarce do. . . . .                                  | " <i>compta</i> . . . .                             | —    | 7      | —     | Seeds of garden pinks.                                      |
| Northern Grey . .                                   | " <i>cæsia</i> . . . . .                            | 6    | 7, 8   | 8-5   | { Bladder and sea cam-<br>pions.                            |
| Dwarf Shears . . . .                                | " <i>Barrettii</i> . . .                            | —    | —      | —     | —   |
| Ranunculus . . . .                                  | <i>Hecatera dysodea</i> .                           | —    | 7, 8   | —     | { Flowers and seed-heads<br>of sow-thistle and<br>lettuce.  |
| Broad Barred White                                  | " <i>serena</i> . . . .                             | —    | 7, 8   | 9-5   | { Sow-thistle and wild<br>lettuce.                          |











## INSECTS (continued).

| Popular Name.                        | Scientific Name.                    | Ova. | Larva.       | Pupa.   | Food-plants.  |
|--------------------------------------|-------------------------------------|------|--------------|---------|---|
| <b>MOTHS.</b>                        |                                     |      |              |         |   |
| Angle Shades . . .                   | <i>Phlogophora meticulosa</i> . . . | —    | 11-4         | —       | { Broom, and many low plants.                       |
| Small do. . . . .                    | <i>Euplexia lucipara</i> . . .      | 6    | 8, 9         | —       | { Bracken, male fern, sallow, nettle, plantain, &c. |
| Green Arches . . .                   | <i>Aplecta herbida</i> . . .        | —    | 8-4          | 5, 6    | { Dock, and other low plants.                       |
| Great Brocade . . .                  | „ <i>occulta</i> . . .              | —    | 4, 5         | 6       | Plantain, primrose.                                 |
| Grey Arches . . .                    | „ <i>nebulosa</i> . . .             | —    | 10-5         | 6       | Birch, sallow, hawthorn.                            |
| Silvery do. . . . .                  | „ <i>tincta</i> . . .               | —    | 10-5         | 6       | Birch and grasses.                                  |
| Brown do. . . . .                    | „ <i>advena</i> . . .               | —    | 8-4          | 5, 6    | Various low plants.                                 |
| Dark Brocade . . .                   | <i>Hadena adusta</i> . . .          | 7    | 7-9          | 4       | { Sallow, hawthorn, and low plants.                 |
| Glaucous Shears . .                  | „ <i>glauca</i> . . .               | —    | 7, 8         | 9-5     | { Birch, sallow, bilberry, heath.                   |
| Common do. . . . .                   | „ <i>dentina</i> . . .              | —    | 5, 6         | —       | Roots of dandelion.                                 |
| Nutmeg . . . . .                     | „ <i>chenopodii</i> . . .           | 6    | 7-9          | 10-5    | Goosefoot.  |
| Orache . . . . .                     | „ <i>atriplicis</i> . . .           | —    | 8, 9         | —       | { Spotted persicaria, goosefoot, dock, &c.          |
| Dingy Brocade . . .                  | „ <i>suasa</i> . . .                | —    | 7-9          | —       | { Plantain, knotgrass, lettuce, &c.                 |
| Bright Line . . . .                  | „ <i>oleracea</i> . . .             | —    | 8, 9         | 10-4    | { Elm, nettle, dock, cabbage.                       |
| Broom Moth . . . .                   | „ <i>pisi</i> . . .                 | —    | 8-10         | 10-5    | Bracken, broom, &c.                                 |
| Pale Shouldered Brocade . . .        | „ <i>thalassina</i> . . .           | —    | 7, 8         | 8-5     | { Sallow, broom, honeysuckle, knotgrass, &c.        |
| Beautiful do. . . .                  | „ <i>contigua</i> . . .             | —    | 8, 9         | —       | Oak, birch, nut, &c.                                |
| Light do. . . . .                    | „ <i>genistæ</i> . . .              | —    | 7-9          | —       | { Broom, chickweed, campion, &c.                    |
| Northern do. . . .                   | „ <i>rectilinea</i> . . .           | 6    | 8-3          | —       | { Sallow, bramble, bilberry.                        |
| Striped Lychnis . .                  | <i>Cucullia lychnitis</i> . . .     | —    | 7-9          | 9-5     | Seeds of white and dark mulleins.                   |
| Starwort . . . . .                   | „ <i>asteris</i> . . .              | —    | 8, 9         | 9-5     | Golden-rod, sea starwort, and China aster.          |
| Cudweed Shark . .                    | „ <i>gnaphalii</i> . . .            | 6    | 7, 8         | 9-5     | Golden-rod.   |
| Wormwood do. . . .                   | „ <i>absynthii</i> . . .            | —    | 8, 9         | 9-5     | Wormwood.   |
| Chamomile do. . . .                  | „ <i>chamomillæ</i> . . .           | —    | 5, 6 s. 8, 7 | 8 & 9-3 | { Chamomile and flowers of feverfew.                |
| Common do. . . . .                   | „ <i>umbratica</i> . . .            | 6, 7 | 7-9          | 9-5     | Sow-thistle and lettuce.                            |
| Bordered Sallow . .                  | <i>Heliothis marginata</i> . . .    | —    | 7, 8         | 9-6     | { Rest-harrow, henbane, knotgrass.                  |
| Bordered Straw . .                   | „ <i>peltigera</i> . . .            | —    | 7, 8         | —       | Rest-harrow, henbane.                               |
| Marbled Clover . .                   | „ <i>dipsacea</i> . . .             | —    | 8, 9         | 10-5    | { Toadflax and Spanish catchfly.                    |
| Broad Bordered White Underwing . . . | <i>Anarta melanopa</i> . . .        | —    | —            | —       | —   |
| Scotch do. do. . . .                 | „ <i>cordigera</i> . . .            | —    | 8            | —       | Bilberry, whortleberry.                             |
| Beautiful do. do. .                  | „ <i>myrtilli</i> . . .             | —    | 7-10         | —       | Heath.  |
| Dwarf do. do. . . . B                | <i>Heliodes arbuti</i> . . .        | 6    | s. 3, 4      | —       | { Forget-me-not and field chickweed.                |
| Spotted Sulphur . .                  | <i>Agrophila sulphuralis</i> . . .  | —    | 6, 7         | —       | Small convolvulus.                                  |
| Four Spot . . . . .                  | <i>Acontia luctuosa</i> . . .       | 6    | 6-8          | —       | Do.   |
| Rosy Marbled . . .                   | <i>Erastria venustula</i> . . .     | —    | 8            | 9-5     | { Flowers of trailing tormentil.                    |
| Marbled White Spot .                 | „ <i>fuscata</i> . . .              | —    | 8, 9         | —       | Lavender grass.                                     |
| Silver Barred . . .                  | <i>Banksia argentula</i> . . .      | —    | 8            | 9-6     | Grasses.  |
| Silver Hook . . . .                  | <i>Hydrelia unca</i> . . .          | 6, 7 | 7, 8         | —       | Sedges.   |
| Purple Marbled . .                   | <i>Micra ostrina</i> . . .          | —    | —            | —       | Low plants.   |
| Small do. . . . .                    | „ <i>parva</i> . . .                | —    | —            | —       | Thistle stems.                                      |
| Spectacle . . . . .                  | „ <i>paula</i> . . .                | —    | —            | —       | —   |
| Dark do. . . . .                     | <i>Abrostola urticae</i> . . .      | —    | 8, 9         | 10-5    | Nettle.   |
| Burnished Brass . .                  | „ <i>triphasia</i> . . .            | —    | 8, 9         | 10-5    | Nettle, hop.  |
|                                      | <i>Plusia chrysitis</i> . . .       | 6, 7 | 7-4          | 5       | { Thistle, nettle, dead nettle, burdock.            |



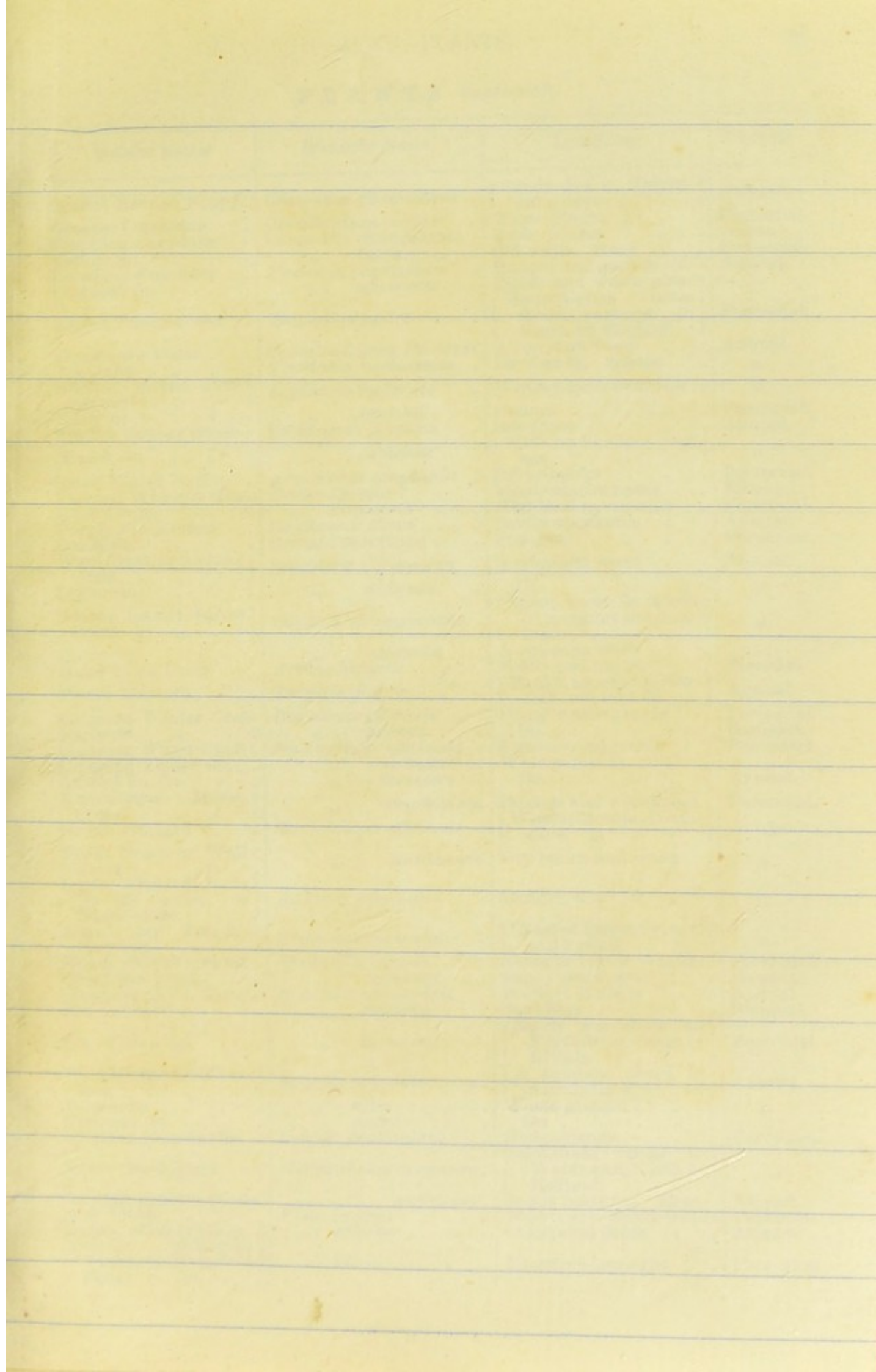
## INSECTS (continued).

| Popular Name.       | Scientific Name.                          | Ova. | Larva. | Pupa. | Food-plants.                                   |
|---------------------|---|------|--------|-------|--|
| MOTHS.              |   |      |        |       |  |
| Golden Y . . .      | <i>Plusia iota</i> . . .                  | —    | 4-6    | 6     | { Honeysuckle, nettle,<br>dead nettle, ground- |
| Beautiful do. . .   | „ <i>V-aureum</i> . . .                   | —    | 5      | 6     | sel.<br>Nettle.                                |
| Silver Y . . .      | „ <i>gamma</i> . . .                      | —    | 4-9    | —     | { Nettle, hop, and low<br>plants.              |
| Scarce do. . .      | „ <i>ni</i> . . .                         | —    | —      | —     | —  |
| Northern do. . .    | „ <i>interrogationis</i> . . .            | —    | 5, 6   | —     | Nettle.  |
| Dark Gothic . . .   | <i>Mania typica</i> . . .                 | 7, 8 | 9-4    | 5     | Dock and low plants.                           |
| Black Neck . . .    | { <i>Toxocampa pas-</i><br><i>tinum</i> } | —    | 5      | —     | Tufted vetch. *                                |
| Lunar Double Stripe | <i>Ophiodes lunaris</i> . . .             | —    | 7      | —     | Oak.   |
| Mother Shipton . .  | <i>Euclidia mi</i> . . .                  | —    | 5      | —     | Melilot.                                       |
| Burnet Companion .  | „ <i>glyphica</i> . . .                   | —    | 5      | —     | Clover.  |
| Small Purple Barred | <i>Phylometra cenea</i> . .               | —    | 8, 9   | 10-5  | Milkwort.                                      |

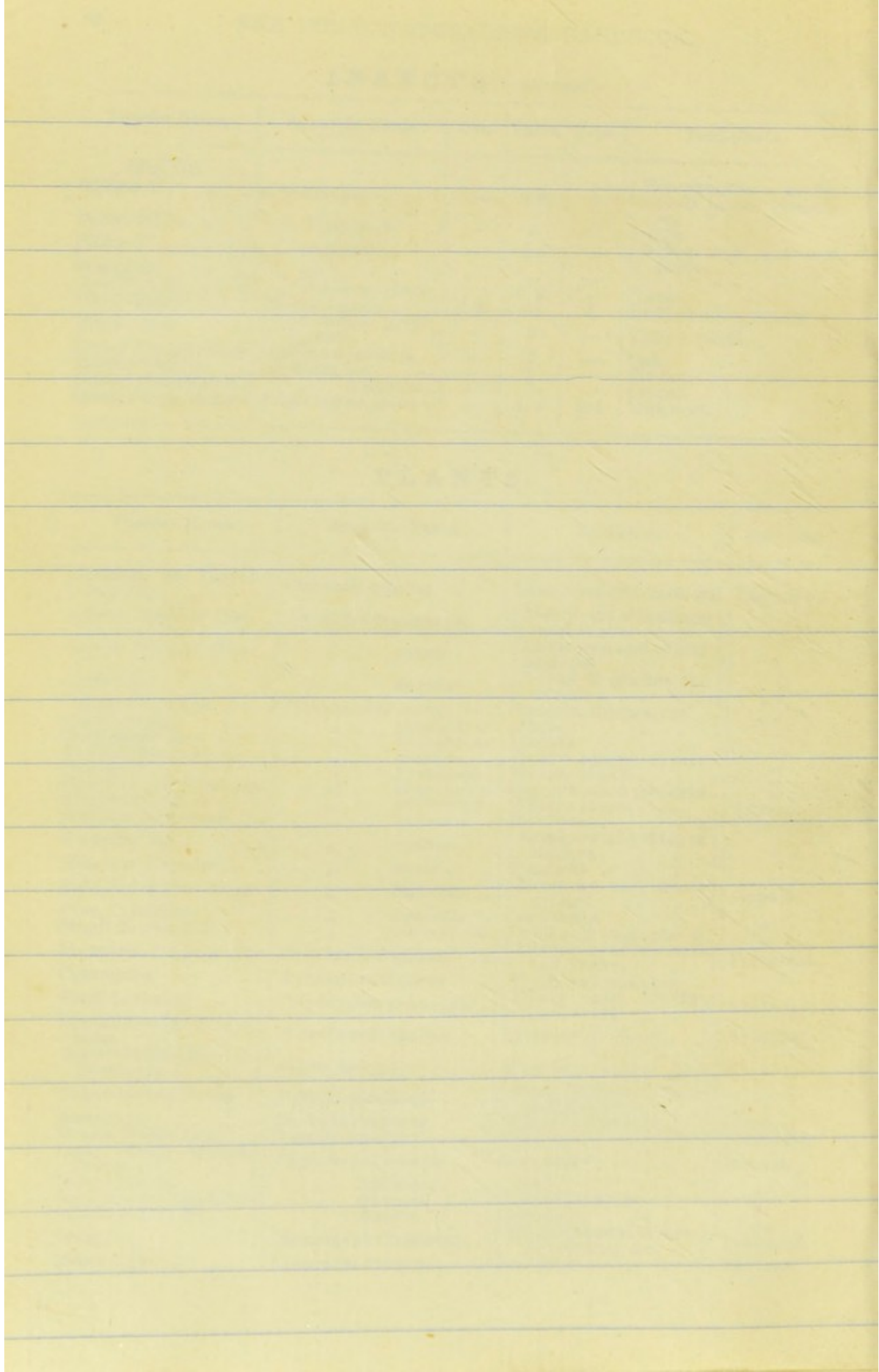
## PLANTS.

| Popular Name.                           | Scientific Name.                | Localities.                                   | Duration.  |
|---|---------------------------------|---|------------|
| Clematis, or Travel-<br>ler's Joy . . . | <i>Clematis vitalba</i> . . .   | Limestone and chalk soil                      | Perennial. |
| Alpine Meadow Rue .                     | <i>Thalictrum alpinum</i> . .   | { Mountains of Scotland<br>and Wales }        | „          |
| Lesser Meadow Rue .                     | „ <i>minus</i> . . .            | { Limestone and chalky<br>pastures }          | „          |
| Yellow do. . .                          | „ <i>flavum</i> . . .           | { Banks of ditches and<br>rivers }            | „          |
| Water Crowfoot . .                      | <i>Ranunculus aquatilis</i> . . | Streams, ditches, &c. .                       | „          |
| Small do. do. . .                       | „ <i>pantothrix</i> . . .       | Ditches . . . . .                             | „          |
| Ivy-leaved do. . .                      | „ <i>hederaceus</i> . . .       | Ditches . . . . .                             | „          |
| Great Spearwort . .                     | „ <i>lingua</i> . . .           | Watery places. Scarce .                       | „          |
| Lesser do. . .                          | „ <i>flammula</i> . . .         | Watery places . . . .                         | „          |
| Grass-leaved Crowfoot                   | „ <i>gramineus</i> . . .        | Dry mountain pastures .                       | „          |
| Celery-leaved do. . .                   | „ <i>sceleratus</i> . . .       | Watery places . . . .                         | Annual.    |
| Bulbous Buttercup . .                   | „ <i>bulbosus</i> . . .         | Meadows . . . . .                             | Perennial. |
| Creeping do. . .                        | „ <i>repens</i> . . .           | { Meadows and sides of<br>ditches }           | „          |
| Meadow Crowfoot . .                     | „ <i>acris</i> . . .            | Meadows . . . . .                             | „          |
| Pale Hairy Buttercup .                  | „ <i>hirsutus</i> . . .         | { Meadows and waste<br>ground }               | Annual.    |
| Corn Crowfoot . . .                     | „ <i>arvensis</i> . . .         | Corn-fields . . . . .                         | „          |
| Small-flowered do. . .                  | „ <i>parviflorus</i> . . .      | Fields and waste places .                     | „          |
| Mountain Globe-flower                   | <i>Trollius Europæus</i> . . .  | { Mountains of Scotland<br>and Wales }        | Perennial. |
| Columbine . . .                         | <i>Aquilegia vulgaris</i> . . . | Woods and pastures . .                        | „          |
| Field Larkspur . . .                    | <i>Delphinium consolida</i> . . | { Sandy and chalky<br>corn-fields }           | Annual.    |
| Monk's-hood or Wolf's-<br>bane . . .    | <i>Aconitum Napellus</i> . . .  | River-sides. Rare . . .                       | Perennial. |
| Herb Christopher, or<br>Baneberry . . . | <i>Actæa spicata</i> . . .      | Mountain woods. Rare .                        | „          |
| Entire-leaved Peony .                   | <i>Pæonia corallina</i> . . .   | { Steep Holmes Island<br>in the Severn }      | „          |
| Barberry . . .                          | <i>Berberis vulgaris</i> . . .  | Woods and hedges . . .                        | Shrub.     |
| White Water Lily . .                    | <i>Nymphæa alba</i> . . .       | Clear water . . . . .                         | Perennial. |
| Long Rough-headed<br>Poppy . . .        | <i>Papaver argemone</i> . . .   | Corn-fields . . . . .                         | Annual.    |
| Round do. do. . .                       | „ <i>hybridum</i> . . .         | Do. . . . .                                   | „          |
| Long Smooth-headed do.                  | „ <i>dubium</i> . . .           | Cultivated fields . . .                       | „          |
| Common Red do. . .                      | „ <i>Rhæas</i> . . .            | Corn-fields . . . . .                         | „          |
| Welsh do. . .                           | <i>Meconopsis Cambrica</i> . .  | { Rocky places in Wales,<br>Devonshire, &c. } | Perennial. |
| Horned do. . .                          | <i>Glaucium luteum</i> . . .    | Sea-shore . . . . .                           | Biennial.  |











## PLANTS (continued).

| Popular Name.  | Scientific Name.                  | Localities.  | Duration.  |
|--|-----------------------------------|--|------------|
| Scarlet Horned Poppy .   | <i>Glaucium phœniceum</i> .       | { Sandy shores, Doubt-<br>ful native . . . }                       | Annual.    |
| Greater Celandine .  | <i>Chelidonium majus</i> .        | Waste places . . .   | Perennial. |
| Climbing Corydalis .   | <i>Corydalis claviculata</i> .    | Bushy places . . .   | Annual.    |
| Yellow do. . . . .   | " <i>lutea</i> . . .              | Old walls. Rare . . .  | Perennial. |
| Ramping Fumitory .   | <i>Fumaria capreolata</i> .       | Hedges and corn-fields .   | Annual.    |
| Common do. . . . .   | " <i>officinalis</i> . . .        | Fields and waste places .  | "          |
| Alpine Penny Cress .   | <i>Thlaspi alpestre</i> . . .     | { Mountainous lime-<br>stone pastures in<br>North of England }     | Perennial. |
| Shepherd's Purse . .   | <i>Capsella Bursa-Pastoris</i> .  | A common weed . . .  | Annual.    |
| Teesdalia . . . . .  | <i>Teesdalia nudicaulis</i> .     | Dry banks. Scarce . . .  | "          |
| Narrow-leaved Pep-<br>perwort . . . . .                            | <i>Lepidium rudemale</i> . .      | Waste places near sea . .  | "          |
| Hairy do. . . . .  | " <i>Smithii</i> . . . . .        | Hedges . . . . .   | Perennial. |
| English Scurvy Grass .   | <i>Cochlearia Anglica</i> . .     | Sea-shore . . . . .  | Annual.    |
| Danish do. . . . .   | " <i>Danica</i> . . . . .         | { Cliffs and hedges near<br>sea . . . . . }                        | "          |
| Great Water Radish .   | <i>Armoracia amphibia</i> . .     | River-banks . . . . .  | Perennial. |
| Twisted Whitlow Grass  | <i>Draba incana</i> . . . . .     | Mountainous rocks . . .  | Biennial.  |
| Rock Draba . . . . .   | " <i>rupestris</i> . . . . .      | Highland mountains . . .   | Perennial. |
| Purple Sea Rocket . .  | <i>Cakile maritima</i> . . .      | Sandy sea-shores . . . .   | Annual.    |
| Sea Kale . . . . .   | <i>Crambe maritima</i> . . .      | Sea-coast . . . . .  | Perennial. |
| Wart Cress, or Swine's<br>Cress . . . . .                          | <i>Senebiera Coronopus</i> . .    | A common weed . . . . .  | Annual.    |
| Lesser do. . . . .   | " <i>didyma</i> . . . . .         | Do. . . . .  | "          |
| Narrow-leaved Bitter<br>Cress . . . . .                            | <i>Cardamine impatiens</i> . .    | { Damp rocks in North<br>of England and Scot-<br>land . . . . . }  | "          |
| Hairy do. . . . .  | " <i>hirsuta</i> . . . . .        | A common weed . . . . .  | "          |
| Hairy Rock Cress . .   | <i>Arabis hirsuta</i> . . . .     | Walls and banks . . . .  | Biennial.  |
| Tower Mustard . . . .  | <i>Turritis glabra</i> . . . .    | { Banks, chiefly in Nor-<br>folk and Suffolk }                     | Annual.    |
| Common Winter Cress  | <i>Barbarea vulgaris</i> . . .    | Damp waste ground . . .  | Perennial. |
| Early do. . . . .  | " <i>præcox</i> . . . . .         | Do. . . . .  | Biennial.  |
| Common Water Cress .   | <i>Nasturtium officinale</i> . .  | Streams and ponds . . .  | Perennial. |
| Creeping Yellow do. .  | " <i>sylvestre</i> . . . . .      | Watery places . . . . .  | "          |
| Annual do. do. . . .   | " <i>terrestre</i> . . . . .      | Do. . . . .  | Annual.    |
| Amphibious Marsh<br>Cress . . . . .                                | " <i>amphibium</i> . . . . .      | Ditches and wet places .   | Perennial. |
| Hedge Mustard . . . .  | <i>Sisymbrium officinale</i> . .  | { Waste places and road-<br>sides . . . . . }                      | Annual.    |
| Thale Cress or Wall<br>Cress . . . . .                             | " <i>thalianum</i> . . . . .      | Dry banks and walls . . .  | "          |
| Garlic Mustard, Jack-<br>by-the-hedge, or<br>Sauce-alone . . . . . | <i>Alliaria officinalis</i> . . . | Hedges, &c. . . . .  | "          |
| Hare's ear Treacle-<br>mustard . . . . .                           | <i>Erysimum orientale</i> . . .   | { Coast of Essex, Sussex,<br>and Suffolk . . . }                   | "          |
| Hoary Shrubby Stock .  | <i>Matthiola incana</i> . . . .   | Shore of Isle of Wight . .   | Perennial. |
| Great Sea Stock . . .  | " <i>sinuata</i> . . . . .        | Sandy sea-shores . . . .   | Biennial.  |
| Common Wild Navew .  | <i>Brassica campestris</i> . . .  | Borders of fields . . . .  | Annual.    |
| Sea Cabbage . . . . .  | " <i>oleracea</i> . . . . .       | Sea-shore . . . . .  | Biennial.  |
| Isle of Man do. . . .  | " <i>monensis</i> . . . . .       | { Sandy sea-shore on<br>North-west Coast of<br>Britain . . . . . } | Perennial. |
| Wild Mustard, or Cher-<br>lock . . . . .                           | <i>Sinapis arvensis</i> . . . .   | A common weed in<br>cornfields, &c. . . . .                        | Annual.    |
| White do. . . . .  | " <i>alba</i> . . . . .           | Waste ground . . . . .   | "          |
| Common do. . . . .   | " <i>nigra</i> . . . . .          | Do. . . . .  | "          |
| Shrubby Mignonette .   | <i>Reseda fruticulosa</i> . . .   | Hedge-banks . . . . .  | Perennial. |
| Hoary Rock Rose . . .  | <i>Helianthemum canum</i> . .     | { Mountain rocks in<br>Wales and North of<br>England . . . . . }   | "          |
| Spotted Annual do. do.   | " <i>guttatum</i> . . . . .       | Sandy pastures. Rare . . .   | Annual.    |
| Dog Violet . . . . .   | <i>Viola canina</i> . . . . .     | Woods and hedge-banks .  | Perennial. |
| Pansy, or Heartsease .   | " <i>tricolor</i> . . . . .       | Cultivated fields . . . .  | Annual.    |
| Yellow Mountain<br>Violet, or Mountain<br>Pansy . . . . .          | " <i>lutea</i> . . . . .          | Mountain pastures . . . .  | Perennial. |



## PLANTS (continued).

| Popular Name.   | Scientific Name.           | Localities.                               | Duration.  |
|---|----------------------------|---|------------|
| Common Milkwort   | <i>Polygala vulgaris</i>   | Heaths and dry pastures                   | Perennial. |
| Moss Campion  | <i>Silene acaulis</i>      | Summits of mountains                      | "          |
| Bladder do.   | " <i>inflata</i>           | Corn-fields and pastures                  | "          |
| Sea do.   | " <i>maritima</i>          | { Sea-shore, and moun-<br>tain streams }  | "          |
| English Catchfly  | " <i>Anglica</i>           | Dry fields                                | Annual.    |
| Variegated do.  | " <i>quinquevulnera</i>    | Sandy fields. Rare                        | "          |
| Nottingham do.  | " <i>nutans</i>            | { Limestone and chalk<br>rocks }          | Perennial. |
| Ragged Robin  | <i>Lychnis Flos-Cuculi</i> | Damp places                               | "          |
| German Catchfly   | " <i>viscaria</i>          | { Dry mountain rocks.<br>Local }          | "          |
| Red Robin, or Cam-<br>pion                              | " <i>diurna</i>            | Hedges and banks                          | "          |
| Mountain Campion  | " <i>alpina</i>            | Clova mountains, Angus                    | "          |
| Evening Campion   | " <i>vespertina</i>        | Do.                                       | "          |
| Corn-Cockle   | <i>Agrostemma Githago</i>  | Corn-fields.                              | "          |
| Procumbent Pearlwort                                    | <i>Sagina procumbens</i>   | A common weed                             | "          |
| Annual do.  | " <i>apetala</i>           | Dry places                                | Annual.    |
| Sea do.   | " <i>maritima</i>          | { Sea-shore, and summit<br>of Ben Nevis } | "          |
| Spurrey   | <i>Spergula arvensis</i>   | Corn-fields.                              | "          |
| Smooth do.  | " <i>saginoides</i>        | Highland mountains                        | Perennial. |
| Wood Starwort   | <i>Stellaria nemorum</i>   | Damp woods                                | "          |
| Chickweed   | " <i>media</i>             | A common weed                             | Annual.    |
| Greater Stitchwort,<br>Satin-flower, or<br>Adder's Meat | " <i>Holostea</i>          | Hedge-banks                               | Perennial. |
| Lesser do.  | " <i>graminea</i>          | Dry heathy places                         | "          |
| Marsh do.   | " <i>glauca</i>            | Marshy places. Local                      | "          |
| Bog do.   | " <i>uliginosa</i>         | Do.                                       | Annual.    |
| Alpine do.  | " <i>cerastoides</i>       | Highland mountains                        | Perennial. |
| Many-stalked do.  | " <i>scapigera</i>         | { Damp places on moun-<br>tains }         | "          |
| Three-nerved Sandwort                                   | <i>Arenaria trinervis</i>  | Damp woods                                | Annual.    |
| Thyme-leaved do.  | " <i>serpyllifolia</i>     | Dry banks and walls                       | "          |
| Spring or Vernal do.                                    | " <i>verna</i>             | Mountain pastures                         | Perennial. |
| Alpine do.  | " <i>rubella</i>           | Mountains. Very rare                      | "          |
| Fine-leaved do.   | " <i>tenuifolia</i>        | Walls and sandy places                    | Annual.    |
| Level-topped do.  | " <i>fastigiata</i>        | Scotch mountains                          | "          |
| Sea do.   | " <i>marina</i>            | Sandy sea-shores                          | "          |
| Broad-leaved Mouse-ear                                  | <i>Cerastium vulgatum</i>  | Fields and road-sides                     | "          |
| Narrow-leaved do.                                       | " <i>viscosum</i>          | Do.                                       | Perennial. |
| Field Chickweed   | " <i>arvense</i>           | { Gravelly and chalky<br>fields }         | "          |
| Broad-leaved Moun-<br>tain Chickweed                    | " <i>latifolium</i>        | Mountains                                 | "          |
| Mossy Cypsel  | <i>Cherleria sedoides</i>  | Highland mountains                        | "          |
| Perennial Flax  | <i>Linum perenne</i>       | Chalky fields                             | "          |
| Narrow-leaved do.                                       | " <i>angustifolium</i>     | { Sandy and chalky pas-<br>tures }        | "          |
| Little, or Cathartic do.                                | " <i>catharticum</i>       | Dry pastures                              | Annual.    |
| Common Mallow   | <i>Malva sylvestris</i>    | { Road-sides and waste<br>places }        | Perennial. |
| Dwarf do.   | " <i>rotundifolia</i>      | Do.                                       | Annual.    |
| Hairy Marsh do.   | <i>Althaea hirsuta</i>     | Cobham, Kent                              | "          |
| Small-leaved Lime Tree                                  | <i>Tilia parvifolia</i>    | Woods                                     | Tree.      |
| Hairy St. John's Wort                                   | <i>Hypericum hirsutum</i>  | { Woods on limestone or<br>chalk soil }   | Perennial. |
| Trailing do.  | " <i>humifusum</i>         | Sandy and peaty places                    | "          |
| Common Maple  | <i>Acer campestre</i>      | Woods and hedges                          | Tree.      |
| Crimson Crane's-bill                                    | <i>Geranium sanguineum</i> | { Limestone and magne-<br>sian rocks }    | Perennial. |
| Dusky do.   | " <i>phæum</i>             | { Woods and thickets.<br>Rare }           | "          |
| Knotty do.  | " <i>nodosum</i>           | { Hertfordshire and<br>Cumberland }       | "          |
| Wood do.  | " <i>sylvaticum</i>        | Woods and meadows                         | "          |
| Meadow do.  | " <i>pratense</i>          | Damp pastures                             | "          |



## P L A N T S (continued).

| Popular Name.                                      | Scientific Name.               | Localities.                                      | Duration.  |
|--|--------------------------------|--|------------|
| Pyrenean Crane's-bill                              | <i>Geranium pyrenaicum</i>     | { Road-sides and mea-<br>dows. Local }           | Perennial. |
| Herb Robert  | " <i>Robertianum</i>           | Road-sides and hedges                            | Annual.    |
| Shining Crane's-bill                               | " <i>lucidum</i>               | Walls and stony places                           | "          |
| Dove's-foot do.                                    | " <i>molle</i>                 | Fields and waste places                          | "          |
| Round-leaved do.                                   | " <i>rotundifolium</i>         | Do. . . . .                                      | "          |
| Small-flowered do.                                 | " <i>pusillum</i>              | Do. . . . .                                      | "          |
| Jagged do.   | " <i>dissectum</i>             | Do. . . . .                                      | "          |
| Long-stalked do.                                   | " <i>columbinum</i>            | Do. Scarce                                       | "          |
| Stork's-bill                                       | <i>Erodium cicutarium</i>      | Fields and waste places                          | "          |
| Musk do.   | " <i>moschatum</i>             | Hilly pastures                                   | "          |
| Sea do.  | " <i>maritimum</i>             | { Sandy sea-shores, and<br>at Dartmoor. Scarce } | Perennial. |
| Wood Sorrel  | <i>Oxalis Acetosella</i>       | Woods and shady places                           | "          |
| Yellow do. do.                                     | " <i>corniculata</i>           | { Damp places in West<br>of England. Rare }      | Annual.    |
| Bladder Nut  | <i>Staphylea pinnata</i>       | Doubtful native                                  | Shrub.     |
| Furze, Gorse, or Whin                              | <i>Ulex Europæus</i>           | Commons and thickets                             | "          |
| Green-weed, or Petty<br>Whin                       | <i>Genista Anglica</i>         | Heaths and moors                                 | "          |
| Broom  | <i>Cytisus scoparius</i>       | Woods and heaths                                 | "          |
| Rest Harrow  | <i>Ononis spinosa</i>          | Heaths and dry commons                           | Perennial. |
| Black Medick, or Non-<br>such                      | <i>Medicago lupulina</i>       | Pastures   | Annual.    |
| Lucerne, or Purple<br>Medick                       | " <i>sativa</i>                | Fields. Not native                               | Perennial  |
| Spotted do.  | " <i>maculata</i>              | Fields   | Annual.    |
| Sickle Medick                                      | <i>Medicago falcata</i>        | Do.  | Perennial. |
| Yellow Melilot                                     | <i>Melilotus officinalis</i>   | Waste places                                     | Annual.    |
| White or Dutch<br>Clover, or Trefoil               | <i>Trifolium repens</i>        | Meadows  | Perennial. |
| Purple do.   | " <i>pratense</i>              | Do.  | "          |
| Teazle-headed Trefoil                              | " <i>maritimum</i>             | Salt marshes                                     | Annual.    |
| Rough do.  | " <i>scabrum</i>               | Dry fields                                       | "          |
| Knotted do.  | " <i>striatum</i>              | Sandy fields                                     | "          |
| Round-headed do.                                   | " <i>glomeratum</i>            | Dry pastures                                     | "          |
| Subterraneous do.                                  | " <i>subterraneum</i>          | Dry banks and fields                             | "          |
| Hop do.  | " <i>procumbens</i>            | Dry pastures                                     | "          |
| Great Bird's-foot do.                              | <i>Lotus major</i>             | Bushy places                                     | Perennial. |
| Little do. do.                                     | " <i>angustissimus</i>         | South Coast. Rare                                | Annual.    |
| Lady's Fingers, Kid-<br>ney Vetch, or<br>Woundwort | <i>Anthyllis vulneraria</i>    | Dry pastures                                     | Perennial. |
| Hairy Mountain Oxy-<br>tropis                      | <i>Oxytropis uralensis</i>     | { Dry mountain pastures<br>in Scotland }         | "          |
| Sweet Milk Vetch                                   | <i>Astragalus glycyphyllos</i> | Woods and dry fields                             | "          |
| Wood-bitter Vetch                                  | <i>Vicia Orobus</i>            | Rocky woods in the North                         | "          |
| Common do.   | " <i>sativa</i>                | Fields. Doubtful native                          | Annual.    |
| Yellow do.   | " <i>lutea</i>                 | Sea-coast  | Perennial. |
| Bush do.   | " <i>sepium</i>                | Woods and shady hedges                           | "          |
| Hairy do., or Tare                                 | " <i>hirsuta</i>               | Fields and hedges                                | Annual.    |
| Smooth do. do.                                     | " <i>tetrasperma</i>           | Do.  | "          |
| Yellow Vetchling                                   | <i>Lathyrus Aphaca</i>         | { Sandy and gravelly<br>fields. Rare }           | "          |
| Crimson do.  | " <i>Nissolia</i>              | Grassy places                                    | "          |
| Blue Marsh do.                                     | " <i>palustris</i>             | Boggy meadows                                    | Perennial  |
| Bitter Vetch                                       | <i>Orobus tuberosus</i>        | Woods  | "          |
| Black do.  | " <i>niger</i>                 | Rocks in the Highlands                           | "          |
| Bird's-foot  | <i>Ornithopus perpusillus</i>  | Sandy heaths                                     | "          |
| Horse-shoe Vetch                                   | <i>Hippocrepis comosa</i>      | Chalky banks                                     | "          |
| Sainfoin   | <i>Onobrychis sativa</i>       | Chalk and limestone hills                        | "          |
| Meadow-sweet                                       | <i>Spiræa ulmaria</i>          | Damp meadows                                     | "          |
| Mountain Avens                                     | <i>Dryas octopetala</i>        | Mountain pastures                                | "          |
| Common do., or Herb<br>Bennet                      | <i>Geum urbanum</i>            | Hedges and thickets                              | "          |
| Water Avens  | " <i>rivale</i>                | { Damp meadows and<br>marshes }                  | "          |
| Silver Weed, or Goose-<br>grass                    | <i>Potentilla Anserina</i>     | Waste ground                                     | "          |



## PLANTS (continued).

| Popular Name.                                 | Scientific Name.                     | Localities.                    | Duration.  |
|---|--------------------------------------|--------------------------------|------------|
| Creeping Cinquefoil . . .                     | <i>Potentilla reptans</i> . . .      | Meadows and way-sides          | Perennial. |
| Hoary do. . . . .                             | " <i>argentea</i> . . .              | { Pastures and commons }       | "          |
| Shrubby do. . . . .                           | " <i>fruticosa</i> . . .             | Local . . . . .                | "          |
| Strawberry-flowered do.                       | " <i>rupestris</i> . . .             | Mountain thickets . . .        | "          |
| Alpine do. . . . .                            | " <i>alpestris</i> . . .             | { Rocks in Wales. Very }       | "          |
| Saw-leaved do. . . . .                        | " <i>opaca</i> . . .                 | rare . . . . .                 | "          |
| White rock do. . . . .                        | " <i>alba</i> . . .                  | Mountains . . . . .            | "          |
| Trifid do. . . . .                            | " <i>tridentata</i> . . .            | Do. Very rare . . . . .        | "          |
| Common Tormantil . . .                        | <i>Tormentilla officinalis</i> . . . | Woods and banks . . . . .      | "          |
| Trailing do. . . . .                          | " <i>reptans</i> . . .               | Do. . . . .                    | "          |
| Wood Strawberry . . .                         | <i>Fragaria vesca</i> . . .          | Woods and thickets . . . . .   | "          |
| Raspberry . . . . .                           | <i>Rubus Idæus</i> . . .             | Rocky woods . . . . .          | Shrub.     |
| Dewberry . . . . .                            | " <i>cæsius</i> . . .                | { Thickets and borders }       | "          |
| Stone Bramble . . . . .                       | " <i>saxatilis</i> . . .             | of fields . . . . .            | "          |
| Cloudberry . . . . .                          | " <i>Chamæmorus</i> . . .            | { Stony, mountainous }         | Perennial. |
| Common Lady's Mantle . .                      | <i>Alchemilla vulgaris</i> . . .     | places . . . . .               | "          |
| Field do. . . . .                             | " <i>arvensis</i> . . .              | Mountain moors . . . . .       | "          |
| Burnet . . . . .                              | <i>Sanguisorba officinalis</i> . . . | Hilly pastures . . . . .       | Annual.    |
| Burnet Rose . . . . .                         | <i>Rosa spinosissima</i> . . .       | A common weed . . . . .        | Perennial. |
| Soft-leaved do. . . . .                       | " <i>mollis</i> . . .                | Damp meadows . . . . .         | Shrub.     |
| Sweet-briar . . . . .                         | " <i>rubiginosa</i> . . .            | Waste places . . . . .         | "          |
| Dog Rose . . . . .                            | " <i>canina</i> . . .                | Mountain thickets . . . . .    | "          |
| Trailing do. do. . . . .                      | " <i>arvensis</i> . . .              | Bushy places . . . . .         | "          |
| White Beam Tree . . .                         | <i>Pyrus Aria</i> . . .              | Hedges and bushy places . . .  | "          |
| Mare's-tail . . . . .                         | <i>Hippuris vulgaris</i> . . .       | Woods and hedges . . . . .     | "          |
| White Bryony . . . . .                        | <i>Bryonia dioica</i> . . .          | Woods . . . . .                | Perennial. |
| Water Blinks . . . . .                        | <i>Montia fontana</i> . . .          | Stagnant water . . . . .       | "          |
| Four-leaved All-seed . . .                    | { <i>Polycarpon tetra-</i> }         | Hedges . . . . .               | Annual.    |
| Mossy Tillœa . . . . .                        | <i>phyllum</i> . . .                 | Wet places . . . . .           | "          |
| Wall Pennywort . . . . .                      | <i>Tillœa muscosa</i> . . .          | South coast . . . . .          | "          |
| Hairy Stonecrop . . . . .                     | <i>Cotyledon Umbilicus</i> . . .     | Sandy wastes . . . . .         | Perennial. |
| Common do., or Wall                           | <i>Sedum villosum</i> . . .          | Damp rocks and walls . . .     | "          |
| Pepper . . . . .                              | " <i>acre</i> . . .                  | Damp rocks . . . . .           | "          |
| Rose Root . . . . .                           | <i>Rhodiola rosea</i> . . .          | Walls and rocks . . . . .      | "          |
| Kidney-leaved Saxi- }<br>frage . . . . .      | <i>Saxifraga geum</i> . . .          | Mountains and sea-cliffs . . . | "          |
| Hairy do. . . . .                             | " <i>hirsuta</i> . . .               | South of Ireland . . . . .     | "          |
| London Pride, or }<br>None-so-pretty . . .    | " <i>umbrosa</i> . . .               | Do. . . . .                    | "          |
| Starry Saxifrage . . . . .                    | " <i>stellaris</i> . . .             | Mountains . . . . .            | "          |
| Yellow Mountain do. . .                       | " <i>aizoides</i> . . .              | Do. . . . .                    | "          |
| Meadow do. . . . .                            | " <i>granulata</i> . . .             | { Boggy places on }            | "          |
| Drooping do. . . . .                          | " <i>cernua</i> . . .                | mountains . . . . .            | "          |
| Rue-leaved do. . . . .                        | " <i>tridactylites</i> . . .         | Meadows . . . . .              | "          |
| Moss do. . . . .                              | " <i>muscoïdes</i> . . .             | Mountain rocks . . . . .       | Annual.    |
| Palmate do. . . . .                           | " <i>cæspitosa</i> . . .             | Walls and dry places . . .     | Perennial. |
| Hairy do. . . . .                             | " <i>hirta</i> . . .                 | Highland mountains . . . . .   | "          |
| Broad-flowered do. . . .                      | " <i>platypetala</i> . . .           | Mountains . . . . .            | "          |
| Ladies' Cushion . . . . .                     | " <i>hypnoides</i> . . .             | Do. . . . .                    | "          |
| Opposite-leaved Gol- }<br>den Saxifrage . . . | { <i>Chrysosplenium</i> }            | Do. . . . .                    | "          |
| Marsh Pennywort, or }<br>Whiterot . . . . .   | <i>alternifolium</i> . . .           | Do. . . . .                    | "          |
| Wood Sanicula . . . . .                       | <i>Hydrocotyle vulgaris</i> . . .    | Damp places . . . . .          | "          |
| Wild Celery, or }<br>Smallage . . . . .       | <i>Sanicula Europæa</i> . . .        | Damp places . . . . .          | "          |
| Parsley . . . . .                             | <i>Apium graveolens</i> . . .        | Woods . . . . .                | Biennial.  |
| Honewort . . . . .                            | <i>Petroselinum sativum</i> . . .    | Marshes . . . . .              | "          |
| Pepper Saxifrage . . . . .                    | <i>Trinia glaberrima</i> . . .       | Old walls . . . . .            | Perennial. |
| Spignel, Meu, or Bald }<br>Money . . . . .    | <i>Silaus pratensis</i> . . .        | Limestone rocks . . . . .      | "          |
| Masterwort . . . . .                          | <i>Meum Athamanticum</i> . . .       | Damp meadows . . . . .         | "          |
|   | { <i>Peucedanum Ostru-</i> }         | Mountain pastures . . . . .    | "          |
|   | <i>thium</i> . . . . .               | { Damp pastures. }             | "          |
|   |                                      | { Doubtful native }            | "          |



## P L A N T S (continued).

| Popular Name.                             | Scientific Name.                                       | Localities.                                   | Duration.  |
|---|--|---|------------|
| Small Hartwort . . .                      | <i>Tordylium officinale</i> . . .                      | { Corn-fields. Doubtful }<br>native . . . . . | Annual.    |
| Great do. . . . .                         | " <i>maximum</i> . . . . .                             | Do. do. . . . .                               | "          |
| Small Bur Parsley . . .                   | <i>Caucalis Daucoides</i> . . .                        | Corn-fields. Local . . .                      | "          |
| Great do. . . . .                         | " <i>latifolia</i> . . . . .                           | Corn-fields . . . . .                         | "          |
| Knotted Hedge Parsley . .                 | <i>Torilis nodosa</i> . . . . .                        | Fields and banks . . .                        | "          |
| Venus's Comb, or<br>Shepherd's Needle }   | <i>Scandix Pecten-Veneris</i> . .                      | A common weed . . .                           | "          |
| Garden Chervil . . . . .                  | <i>Anthriscus Cerefolium</i> . .                       | Waste ground . . . . .                        | "          |
| Yellow-seeded do. . . . .                 | <i>Chærophyllyum aureum</i> . .                        | Fields. Scarce. . . . .                       | Perennial. |
| Broad-leaved do. . . . .                  | " <i>aromaticum</i> . . . . .                          | Near Guthrie, Forfar . .                      | "          |
| Sweet Cicely . . . . .                    | <i>Myrrhis odorata</i> . . . . .                       | North of England . . .                        | "          |
| Hemlock . . . . .                         | <i>Conium maculatum</i> . . . .                        | Hedge-banks . . . . .                         | Biennial.  |
| Alexanders . . . . .                      | <i>Smyrniolum Olusatrum</i> . .                        | { Sea-side and waste }<br>ground . . . . .    | "          |
| Coriander . . . . .                       | <i>Coriandrum sativum</i> . . . .                      | Fields and waste places .                     | Annual.    |
| Cornel Tree, or Dogwood .                 | <i>Cornus sanguinea</i> . . . . .                      | Hedges . . . . .                              | Shrub.     |
| Dwarf do. . . . .                         | " <i>suecica</i> . . . . .                             | Mountain pastures . . .                       | Perennial. |
| Elder . . . . .                           | <i>Sambucus nigra</i> . . . . .                        | Woods and hedges . . .                        | Tree.      |
| Meal Tree . . . . .                       | <i>Viburnum Lantana</i> . . . . .                      | Hedges and thickets . .                       | Shrub.     |
| Guelder Rose . . . . .                    | <i>Opulus</i> . . . . .                                | Woods . . . . .                               | "          |
| Perfoliate Honeysuckle . .                | <i>Lonicera Caprifolium</i> . . .                      | Woods. Rare . . . . .                         | "          |
| Common do., or Wood-<br>bine }            | " <i>Periclymenum</i> . . . . .                        | Do. . . . .                                   | "          |
| Upright do. . . . .                       | " <i>Xylosteum</i> . . . . .                           | Thickets in Sussex . . .                      | "          |
| Linnæa . . . . .                          | <i>Linnæa Borealis</i> . . . . .                       | Northern pine woods . .                       | Perennial  |
| Crosswort . . . . .                       | <i>Galium cruciatum</i> . . . . .                      | Hedges and thickets . .                       | "          |
| Smooth Heath Bed-<br>straw }              | " <i>saxatile</i> . . . . .                            | Heaths . . . . .                              | "          |
| Upright do. . . . .                       | " <i>erectum</i> . . . . .                             | Hedges . . . . .                              | "          |
| Rough-fruited do. . . . .                 | " <i>saccharatum</i> . . . . .                         | Corn-fields. Rare . . .                       | Annual.    |
| Smooth-fruited Corn do. .                 | " <i>spurium</i> . . . . .                             | Forfar. . . . .                               | "          |
| Wall do. . . . .                          | " <i>anglicum</i> . . . . .                            | Walls . . . . .                               | "          |
| Goosegrass, or Cleavers . .               | " <i>Aparine</i> . . . . .                             | Hedge-banks . . . . .                         | "          |
| Field Madder . . . . .                    | <i>Sherardia arvensis</i> . . . .                      | Fields . . . . .                              | "          |
| Field Woodruff . . . . .                  | <i>Asperula arvensis</i> . . . . .                     | Near Davenport . . . .                        | "          |
| Red Valerian . . . . .                    | <i>Centranthus rubra</i> . . . . .                     | { Chalky banks and old }<br>walls . . . . .   | Perennial. |
| Marsh do. . . . .                         | <i>Valeriana dioica</i> . . . . .                      | Damp meadows . . . . .                        | "          |
| Great Wild do. . . . .                    | " <i>officinalis</i> . . . . .                         | Damp places . . . . .                         | "          |
| Corn Salad . . . . .                      | <i>Fedia olitoria</i> . . . . .                        | A common weed . . . .                         | Annual.    |
| Lamb's Lettuce . . . . .                  | " <i>dentata</i> . . . . .                             | Corn-fields . . . . .                         | "          |
| Small Scabious . . . . .                  | <i>Scabiosa columbaria</i> . . . .                     | Pastures . . . . .                            | Perennial. |
| Yellow Goat's Beard . . .                 | <i>Tragopogon pratensis</i> . . .                      | Do. . . . .                                   | Biennial.  |
| Purple do., or Salsify . . .              | " <i>porrifolius</i> . . . . .                         | { Damp meadows. Not }<br>native . . . . .     | "          |
| Ox Tongue . . . . .                       | <i>Helminthia echioides</i> . . .                      | Hedge-banks . . . . .                         | Annual.    |
| Sow Thistle . . . . .                     | <i>Sonchus oleraceus</i> . . . . .                     | A common weed . . . .                         | "          |
| Hawk Weed Wall<br>Lettuce. . . . . }      | <i>Prenanthes hieracifolia</i> . .                     | Near Forfar . . . . .                         | "          |
| Dandelion . . . . .                       | <i>Leontodon Taraxacum</i> . . .                       | A common weed . . . .                         | Perennial. |
| Rough Hawk-bit . . . . .                  | <i>Apargia hispida</i> . . . . .                       | Dry pastures and heaths .                     | "          |
| Mouse-ear Hawk Weed . . .                 | <i>Hieracium Pilosella</i> . . . .                     | Dry places . . . . .                          | "          |
| Orange do. do. . . . .                    | " <i>aurantiacum</i> . . . . .                         | Northern woods . . . .                        | "          |
| Smooth Hawk's Beard . . .                 | <i>Crepis tectorum</i> . . . . .                       | Walls and dry places . .                      | Annual.    |
| Rough do. . . . .                         | " <i>Biennis</i> . . . . .                             | Dry pastures . . . . .                        | Biennial.  |
| Stinking do. . . . .                      | <i>Borckhausia foetida</i> . . . .                     | Chalky fields . . . . .                       | "          |
| Long-rooted Cat's Ear . . .               | <i>Hypochaeris radicata</i> . . . .                    | Meadows . . . . .                             | Perennial. |
| Dwarf Nipplewort . . . . .                | <i>Lapsana pusilla</i> . . . . .                       | Sandy fields . . . . .                        | Annual.    |
| Slender-flowered Thistle . .              | <i>Carduus tenuiflorus</i> . . . . .                   | Waste places . . . . .                        | "          |
| Carline do. . . . .                       | <i>Carlina vulgaris</i> . . . . .                      | Dry pastures . . . . .                        | Biennial.  |
| Nodding Bur Marigold . . .                | <i>Bidens cernua</i> . . . . .                         | Ditches . . . . .                             | Annual.    |
| Cat's-Foot . . . . .                      | <i>Antennaria dioica</i> . . . . .                     | Dry heaths . . . . .                          | Perennial. |
| Common Cudweed . . . . .                  | { <i>Gnaphalium Germa-</i><br><i>nicum</i> . . . . . } | Dry ground . . . . .                          | Annual.    |
| Groundsel . . . . .                       | <i>Senecio vulgaris</i> . . . . .                      | A common weed . . . .                         | "          |
| Inlegant Ragwort . . . . .                | " <i>squalidus</i> . . . . .                           | Walls and waste places .                      | "          |
| Great do., or Bird's<br>Tongue. . . . . } | " <i>paludosus</i> . . . . .                           | Fens and ditches Rare .                       | Perennial  |



## PLANTS (continued).

| Popular Name.            | Scientific Name.               | Localities.               | Duration.  |
|--------------------------|--------------------------------|---------------------------|------------|
| Marsh Fleawort . . .     | <i>Cineraria palustris</i>     | Fens. Local . . .         | Perennial. |
| Field do. . . . .        | <i>campestris</i>              | Fields . . . . .          | "          |
| Greater Leopard's Bane   | { <i>Doronicum planta-</i>     | Damp woods. Doubtful      | "          |
| Common do. . . . .       | <i>gineum</i>                  | native . . . . .          | "          |
| Daisy . . . . .          | <i>Pardalianches</i>           | Do. do. . . . .           | "          |
| Ox-eye do. . . . .       | { <i>Bellis perennis</i>       | Pastures, &c. . . . .     | "          |
|                          | { <i>Chrysanthemum Leu-</i>    | Dry pastures . . . . .    | "          |
|                          | <i>canthemum</i>               |                           |            |
| Corn Marigold . . .      | <i>segetum</i>                 | Corn-fields . . . . .     | Annual.    |
| Yarrow, or Milfoil . .   | <i>Achillea millefolium</i>    | Pastures and way-sides .  | Perennial. |
| Golden Milfoil . . .     | <i>tomentosa</i>               | Dry hill pastures. Scarce | "          |
| Black Knapweed . . .     | <i>Centaurea nigra</i>         | Pastures and way-sides .  | "          |
| Yellow Star Thistle . .  | <i>solstitialis</i>            | Waste places . . . . .    | Annual.    |
| Ivy-leaved Bell-flower . | <i>Campanula hederacea</i>     | Bogs . . . . .            | Perennial. |
| Sheep's Scabious . . .   | <i>Jasione montana</i>         | Dry pastures . . . . .    | Annual.    |
| Cranberry . . . . .      | <i>Oxycoccus palustris</i>     | Bogs . . . . .            | Shrub.     |
| Ling, or Heather . . .   | <i>Calluna vulgaris</i>        | Heaths and moors . . .    | "          |
| Scotch Menziesia . . .   | <i>Menziesia cærulea</i>       | Highland moors . . . .    | "          |
| Marsh Cistus . . . . .   | <i>Andromeda polifolia</i>     | Bogs . . . . .            | "          |
| Yellow Bird's Nest . .   | <i>Monotropa Hypopitis</i>     | { Roots of beech and      | Perennial. |
|                          |                                | { fir-trees . . . . .     |            |
| Privet . . . . .         | <i>Ligustrum vulgare</i>       | Hedges and thickets . .   | Shrub.     |
| Lesser Periwinkle . .    | <i>Vinca minor</i>             | Thickets. Scarce . . .    | Perennial. |
| Greater do. . . . .      | <i>major</i>                   | Hedges . . . . .          | "          |
| Centaury . . . . .       | <i>Erythraea Centaurium</i>    | Dry pastures . . . . .    | Annual.    |
| Bog-bean, or Marsh       | <i>Menyanthes trifoliata</i>   | Bogs . . . . .            | Perennial. |
| Trefoil . . . . .        |                                |                           |            |
| Jacob's Ladder . . . .   | <i>Polemonium cæruleum</i>     | Bushy places . . . . .    | "          |
| Small Bind-weed . . .    | <i>Convolvulus arvensis</i>    | Hedge-banks, &c. . . .    | "          |
| Viper Grass . . . . .    | <i>Echium vulgare</i>          | Dry fields . . . . .      | Biennial.  |
| Gromwell . . . . .       | <i>Lithospermum officinale</i> | Fields and waste places . | Perennial. |
| Corn do. . . . .         | <i>arvense</i>                 | Do. . . . .               | Annual.    |
| Creeping do. . . . .     | <i>purpureo-cæruleum</i>       | Do. Scarce . . . . .      | Perennial. |
| Sea do. . . . .          | <i>maritimum</i>               | Sandy coasts . . . . .    | "          |
| Forget-me-not . . . .    | <i>Myosotis palustris</i>      | Ditches . . . . .         | "          |
| Creeping do. . . . .     | <i>repens</i>                  | Damp peaty places . . .   | "          |
| Field do. . . . .        | <i>arvensis</i>                | Dry places . . . . .      | Annual.    |
| Early do. . . . .        | <i>collina</i>                 | Dry fields and walls . .  | "          |
| Changeable do. . . . .   | <i>versicolor</i>              | Dry places . . . . .      | "          |
| Alkanet . . . . .        | <i>Anchusa officinalis</i>     | Waste ground. Rare . .    | Perennial. |
| Evergreen do. . . . .    | <i>sempervirens</i>            | Do. Local . . . . .       | "          |
| Bugloss . . . . .        | <i>Lycopsis arvensis</i>       | Fields . . . . .          | Annual.    |
| Comfrey . . . . .        | <i>Symphytum officinale</i>    | Watery places . . . . .   | Perennial. |
| Borage . . . . .         | <i>Borago officinalis</i>      | Waste ground . . . . .    | Biennial.  |
| Madwort . . . . .        | <i>Asperugo procumbens</i>     | Do. Rare . . . . .        | Annual.    |
| Green-leaved Hound's     | <i>Cynoglossum sylvaticum</i>  | Shady places . . . . .    | Biennial.  |
| Tongue . . . . .         |                                |                           |            |
| Deadly Nightshade, or    | <i>Atropa belladonna</i>       | Waste ground . . . . .    | Perennial. |
| Dwale . . . . .          |                                |                           |            |
| Woody do., or Bitter-    | <i>Solanum Dulcamara</i>       | Hedges . . . . .          | "          |
| sweet . . . . .          | <i>nigrum</i>                  | A common weed . . . .     | Annual.    |
| Garden do. . . . .       | <i>Orobanche major</i>         | Roots of broom and furze  | Perennial. |
| Broom-rape . . . . .     | <i>Hederæ</i>                  | On ivy roots . . . . .    | "          |
| Ivy do. . . . .          |                                |                           |            |
| Thyme-leaved Speed-      | <i>Veronica serpyllifolia</i>  | Meadows . . . . .         | "          |
| well . . . . .           |                                |                           |            |
| Alpine do. . . . .       | <i>alpina</i>                  | Mountains . . . . .       | "          |
| Brooklime . . . . .      | <i>Beccabunga</i>              | Ditches . . . . .         | "          |
| Common Speedwell . .     | <i>officinalis</i>             | Dry places . . . . .      | "          |
| Mountain do. . . . .     | <i>montana</i>                 | { Shady woods. Not        | "          |
|                          |                                | { common . . . . .        |            |
| Germander do. . . . .    | <i>Chamaedrys</i>              | Banks . . . . .           | "          |
| Hairy do. . . . .        | <i>hirsuta</i>                 | Heaths in Ayrshire . . .  | "          |
| Ivy-leaved do. . . . .   | <i>hederifolia</i>             | A common weed . . . .     | Annual.    |
| Germander Chickweed .    | <i>agrestis</i>                | Do. . . . .               | "          |
| Grey Speedwell . . . .   | <i>polita</i>                  | Do. . . . .               | "          |
|                          | <i>Buxbaumii</i>               | Fields . . . . .          | "          |
|                          | <i>arvensis</i>                | A common weed . . . .     | "          |
| Wall do. . . . .         |                                | Mountain pastures. Rare   | Perennial. |
| Alpine Painted Cup . .   | <i>Barbisia alpina</i>         |                           |            |



## P L A N T S (continued).

| Popular Name.                                       | Scientific Name.  | Localities.                                   | Duration.  |
|---|---|---|------------|
| Yellow Rattle . . . . .                             | <i>Rhinanthus Crista-galli</i>                            | Meadows . . . . .                             | Annual.    |
| Yellow Cow Wheat . . . . .                          | <i>Melampyrum pratense</i>                                | Woods . . . . .                               | "          |
| Marsh Red Rattle, or<br>Lousewort . . . . .         | <i>Pedicularis palustris</i>                              | Marshes . . . . .                             | Perennial. |
| Dwarf do. . . . .                                   | <i>sylvatica</i>  | Damp meadows and bogs                         | "          |
| Foxglove . . . . .                                  | <i>Digitalis purpurea</i>                                 | Woods and hedge-banks                         | Biennial.  |
| Snapdragon . . . . .                                | <i>Antirrhinum majus</i>                                  | Old walls. Not native .                       | Perennial. |
| Ivy-leaved do., or<br>Toad Flax . . . . .           | <i>Linaria Cymbalaria</i>                                 | Do. Do. . . . .                               | "          |
| Sharp-leaved Fluell-<br>len, or Toad Flax . . . . . | " <i>Elatine</i>  | Dry fields . . . . .                          | Annual.    |
| Common Toad Flax, or<br>Butter and Eggs . . . . .   | " <i>vulgaris</i>   | Hedges . . . . .                              | Perennial. |
| Small do. . . . .                                   | <i>minor</i>  | Chalky fields. Local                          | Annual.    |
| Cornish Moneywort . . . . .                         | <i>Sibthorpia Europæa</i>                                 | Damp places. Local                            | Perennial. |
| White Mullein . . . . .                             | <i>Verbascum Lychnitis</i>                                | Chalky places. Local                          | Biennial.  |
| Dark do. . . . .                                    | " <i>nigrum</i>   | Hedge-banks . . . . .                         | Perennial. |
| Gipsywort . . . . .                                 | <i>Lycopus Europæus</i>                                   | Ditches and pool-sides                        | "          |
| Meadow Clary . . . . .                              | <i>Salvia pratensis</i>                                   | Hedge-banks. Rare                             | "          |
| Wild do. . . . .                                    | " <i>verbenaca</i>  | Do., and dry fields                           | "          |
| Wild Thyme . . . . .                                | <i>Thymus Serpyllum</i>                                   | Heaths and hedge-banks                        | "          |
| Wall Germander . . . . .                            | <i>Teucrium Chamædrys</i>                                 | Old walls. Naturalised .                      | "          |
| Bugle . . . . .                                     | <i>Ajuga reptans</i>                                      | Woods . . . . .                               | "          |
| Pyramidal do. . . . .                               | " <i>pyramidalis</i>                                      | Highland pastures . . .                       | "          |
| Mountain do. . . . .                                | " <i>alpina</i>   | Mountains. Rare . . . .                       | "          |
| Bee Nettle . . . . .                                | <i>Galeopsis versicolor</i>                               | Corn-fields . . . . .                         | Annual.    |
| Weasel Snout . . . . .                              | <i>Galeobdolon luteum</i>                                 | Hedges and thickets . . .                     | Perennial. |
| White Dead Nettle . . . . .                         | <i>Lamium album</i>                                       | Hedges and way-sides . .                      | "          |
| Spotted do. . . . .                                 | " <i>maculatum</i>  | Hedge-banks. Rare . . .                       | "          |
| Red do. . . . .                                     | " <i>purpureum</i>  | A common weed . . . . .                       | Annual.    |
| Cut-leaved do. . . . .                              | " <i>incisum</i>  | Fields . . . . .                              | "          |
| Henbit do. . . . .                                  | " <i>amplexicaule</i>                                     | Waste places . . . . .                        | "          |
| Ground Ivy . . . . .                                | <i>Glechoma hederacea</i>                                 | Hedge-banks . . . . .                         | Perennial. |
| Bastard Balm . . . . .                              | { <i>Melittis Melissophyl-</i><br><i>lum</i> . . . . . }  | { Woods in southern<br>counties . . . . . }   | "          |
| Self Heal . . . . .                                 | <i>Prunella vulgaris</i>                                  | Fields . . . . .                              | "          |
| Skull Cap . . . . .                                 | <i>Scutellaria galericulata</i>                           | Wet places . . . . .                          | "          |
| Butterwort . . . . .                                | <i>Pinguicula vulgaris</i>                                | Bogs . . . . .                                | "          |
| Alpine do. . . . .                                  | " <i>alpina</i>   | Mountain do. . . . .                          | "          |
| Pale do. . . . .                                    | " <i>lusitanica</i>                                       | Bogs. Local . . . . .                         | "          |
| Intermediate Bladder-<br>wort . . . . .             | <i>Utricularia intermedia</i>                             | Water. Rare . . . . .                         | "          |
| Small do. . . . .                                   | <i>minor</i>  | Pools on moors . . . . .                      | "          |
| Water Violet . . . . .                              | <i>Hottonia palustris</i>                                 | Clear water . . . . .                         | "          |
| Bird's-eye Primrose . . . . .                       | <i>Primula farinosa</i>                                   | { Damp places on moun-<br>tains . . . . . }   | "          |
| Sea Milkwort . . . . .                              | <i>Glaux maritima</i>                                     | { Sea-shores and salt-<br>marshes . . . . . } | "          |
| Chickweed Winter-<br>green . . . . .                | <i>Trientalis Europæa</i>                                 | Heaths. Rare . . . . .                        | "          |
| Wood Pimpernel . . . . .                            | <i>Lysimachia nemorum</i>                                 | Woods . . . . .                               | "          |
| Money-wort . . . . .                                | " <i>nummularia</i>                                       | { Ditch-banks and shady<br>places . . . . . } | "          |
| Scarlet Pimpernel . . . . .                         | <i>Anagallis arvensis</i>                                 | A common weed . . . . .                       | Annual.    |
| Chaff Weed . . . . .                                | <i>Centunculus minimus</i>                                | Damp places . . . . .                         | "          |
| Brook Weed . . . . .                                | <i>Samolus Valerandi</i>                                  | Do. . . . .                                   | Perennial. |
| Sea Thrift . . . . .                                | <i>Armeria maritima</i>                                   | Sea cliffs . . . . .                          | "          |
| Greater Plantain . . . . .                          | <i>Plantago major</i>                                     | A common weed . . . . .                       | "          |
| Hoary do. . . . .                                   | " <i>media</i>  | Chalk hills . . . . .                         | "          |
| Ribwort do. . . . .                                 | " <i>lanceolata</i>                                       | { A common weed in<br>pastures . . . . . }    | "          |
| Sea do. . . . .                                     | " <i>maritima</i>   | Muddy sea-coasts . . . .                      | "          |
| Buck's-horn do. . . . .                             | " <i>coronopus</i>  | Dry places . . . . .                          | Annual.    |
| Shore Weed . . . . .                                | <i>Littorella lacustris</i>                               | Margins of pools . . . .                      | Perennial. |
| Beet . . . . .                                      | <i>Beta maritima</i>                                      | Muddy sea-shores . . . .                      | "          |
| Wild Spinach . . . . .                              | { <i>Chenopodium Bonus</i><br><i>Henricus</i> . . . . . } | Waste places . . . . .                        | "          |
| White Goosefoot . . . . .                           | " <i>album</i>  | A common weed . . . . .                       | Annual.    |
| Ristort, or Snake Weed                              | <i>Polygonum Bistorta</i>                                 | Damp meadows . . . . .                        | Perennial. |



## PLANTS (continued).

| Popular Name.                          | Scientific Name.                 | Localities.                   | Duration.  |
|--|----------------------------------|-------------------------------|------------|
| Knotgrass                              | <i>Polygonum aviculare</i>       | A common weed                 | Annual.    |
| Black Bindweed, or Climbing Buck-wheat | " <i>convolvulus</i>             | Do.                           | "          |
| Curled Dock                            | <i>Rumex crispus</i>             | Do.                           | Perennial. |
| Meadow do.                             | " <i>pratensis</i>               | Meadows. Rare                 | "          |
| Sorrel                                 | " <i>acetosa</i>                 | Meadows                       | "          |
| Sheep's do.                            | " <i>acetosella</i>              | Heaths                        | "          |
| Mountain do.                           | <i>Oxyria reniformis</i>         | Mountains.                    | "          |
| Flax-leaved Toad Flax.                 | <i>Thesium linophyllum</i>       | Chalky pastures               | "          |
| Crowberry, or Crake-berry              | <i>Empetrum nigrum</i>           | Bogs                          | Shrub.     |
| Broad-leaved Spurge                    | <i>Euphorbia platyphylla</i>     | Fields.                       | Annual.    |
| Irish do.                              | " <i>hiberna</i>                 | Thickets                      | Perennial. |
| Hairy do.                              | " <i>pilosa</i>                  | Woods near Bath               | "          |
| Cypress do.                            | " <i>Cyparissias</i>             | Thickets. Local               | "          |
| Petty do.                              | " <i>Peplus</i>                  | A common weed                 | Annual.    |
| Wood do.                               | " <i>amygdaloides</i>            | Woods                         | Perennial. |
| Spring Water Starwort                  | <i>Callitriche verna</i>         | Pools                         | Annual.    |
| Stalked do. do.                        | " <i>pedunculata</i>             | Do.                           | "          |
| Autumnal do. do.                       | " <i>autumnalis</i>              | Do.                           | "          |
| Roman Nettle                           | <i>Urtica pilulifera</i>         | Waste ground                  | "          |
| Small do.                              | " <i>urens</i>                   | Do.                           | "          |
| Common do.                             | " <i>dioica</i>                  | Way-sides and fields          | Perennial. |
| Pellitory                              | <i>Parietaria officinalis</i>    | Old walls                     | "          |
| Smooth Willow                          | <i>Salix triandra</i>            | { Wet woods and osier-beds    | Tree.      |
| Sweet do.                              | " <i>pentandra</i>               | River-banks                   | "          |
| Net-leaved do.                         | " <i>reticulata</i>              | Scotch mountains              | "          |
| Green Mountain Sallow                  | " <i>Andersoniana</i>            | Do.                           | "          |
| Bilberry-leaved Willow                 | " <i>vaccinifolia</i>            | Highlands.                    | "          |
| Whortle-leaved do.                     | " <i>myrsinites</i>              | Do.                           | "          |
| Dwarf do.                              | " <i>herbacea</i>                | Mountains.                    | Shrub.     |
| Scotch Fir, or Pine                    | <i>Pinus sylvestris</i>          | Northern forests              | Tree.      |
| Dwarf Juniper                          | <i>Juniperus nana</i>            | Mountains.                    | Shrub.     |
| Black Bryony                           | <i>Tamus communis</i>            | Thickets                      | Perennial  |
| Herb Paris                             | <i>Paris quadrifolia</i>         | Woods                         | "          |
| Water Thyme                            | <i>Eudorea Canadensis</i>        | Canals                        | "          |
| Green-winged Orchis                    | <i>Orchis Morio</i>              | Meadows                       | "          |
| Early do.                              | " <i>mascula</i>                 | Do.                           | "          |
| Dwarf Dark-winged do.                  | " <i>ustulata</i>                | Chalky pastures               | "          |
| Marsh do.                              | " <i>latifolia</i>               | Marshes                       | "          |
| Spotted do.                            | " <i>maculata</i>                | Heaths                        | "          |
| Fragrant do.                           | <i>Gymnadenia conopsea</i>       | Chalk hills.                  | "          |
| Frog do.                               | <i>Habenaria viridis</i>         | Hill pastures                 | "          |
| Small White do.                        | " <i>albida</i>                  | Mountains.                    | "          |
| Butterfly do.                          | " <i>chlorantha</i>              | Damp meadows                  | "          |
| Green Man do.                          | <i>Aceras anthropophora</i>      | Chalk hills.                  | "          |
| Bee do.                                | <i>Ophrys apifera</i>            | Do.                           | "          |
| Late Spider do.                        | " <i>arachnites</i>              | Do. Rare                      | "          |
| Fly do.                                | " <i>muscifera</i>               | Chalk hills.                  | "          |
| Tway Blade                             | <i>Listera ovata</i>             | Woods                         | "          |
| Bird's Nest                            | " <i>Nidus-avis</i>              | { Parasitic on roots of beech | "          |
| White Helleborine                      | <i>Epipactis grandiflora</i>     | Woods on chalk                | "          |
| Narrow-leaved do.                      | " <i>ensifolia</i>               | Woods. Rare                   | "          |
| Red do.                                | " <i>rubra</i>                   | Mountain woods. Rare          | "          |
| Stinking Iris                          | <i>Iris foetidissima</i>         | Pastures and thickets         | "          |
| Narrow-leaved Solomon's Seal           | <i>Convallaria verticillata</i>  | Scottish woods.               | "          |
| Solomon's Seal                         | " <i>multiflora</i>              | Woods                         | "          |
| Angular do.                            | " <i>Polygonatum</i>             | Do. Rare                      | "          |
| Wild Hyacinth, Blue-bell, or Harebell  | { <i>Hyacinthus non-scriptus</i> | Woods and thickets            | "          |
| Rose-coloured Garlic                   | <i>Allium ambiguum</i>           | Not native.                   | "          |
| Chives                                 | " <i>Schœnoprassum</i>           | Meadows. Rare                 | "          |
| Mountain Spiderwort                    | <i>Anthericum serotinum</i>      | Welsh mountains               | "          |



## PLANTS (continued).

| Popular Name.                               | Scientific Name.   | Localities.                                    | Duration.  |
|---|--|--|------------|
| Turk's-cap Lily . . .                       | <i>Lilium Martagon</i> . . .                             | Woods. Not native . . .                        | Perennial. |
| Sharp-flowered Rush . . .                   | <i>Juncus acutiflorus</i> . . .                          | Damp ground . . .                              | "          |
| Small-jointed do. . . .                     | " <i>uliginosus</i> . . .                                | Damp heaths . . .                              | "          |
| Moss do. . . . .                            | " <i>squarrosus</i> . . .                                | Hill bogs . . .                                | "          |
| Great Hairy Rush . . .                      | <i>Luzula sylvatica</i> . . .                            | Woods and hills . . .                          | "          |
| Narrow-leaved do. . . .                     | " <i>Fosteri</i> . . .                                   | Woods . . .                                    | "          |
| Flowering do. . . . .                       | <i>Butomus umbellatus</i> . . .                          | Ponds and slow streams . . .                   | "          |
| Star Fruit . . . . .                        | { <i>Actinocarpus Dama-</i><br><i>sonium</i> . . . . . } | Pools . . . . .                                | "          |
| Sea-side Arrow Grass . . .                  | <i>Triglochin maritimum</i> . . .                        | { Salt marshes and }<br>{ muddy shores } . . . | "          |
| Ivy-leaved Duckweed . . .                   | <i>Lemna trisulca</i> . . .                              | Ditches and ponds . . .                        | Annual.    |
| Small do. . . . .                           | " <i>minor</i> . . . . .                                 | Do. . . . .                                    | "          |
| Thick-leaved do. . . . .                    | " <i>gibba</i> . . . . .                                 | Do. . . . .                                    | "          |
| Great do. . . . .                           | " <i>polyrhiza</i> . . . . .                             | Ponds . . . . .                                | "          |
| Curled Pondweed . . . .                     | <i>Potamogeton crispus</i> . . .                         | Pools and ditches . . .                        | Perennial  |
| Flat-stalked do. . . . .                    | " <i>compressus</i> . . . . .                            | Ditches . . . . .                              | "          |
| Close-leaved do. . . . .                    | " <i>densus</i> . . . . .                                | Ditches and pools . . .                        | "          |
| Sea Ruppia . . . . .                        | <i>Ruppia maritima</i> . . .                             | Salt ditches . . . . .                         | "          |
| Creeping Spike Rush . . .                   | <i>Eleocharis palustris</i> . . .                        | Ditches and bogs . . .                         | "          |
| Many-stalked do. . . . .                    | " <i>multicaulis</i> . . . . .                           | Marshes . . . . .                              | "          |
| Floating Water Rush . . .                   | <i>Eleogiton fluitans</i> . . .                          | Pools . . . . .                                | "          |
| Hare's-tail Cotton Grass                    | <i>Eriophorum vaginatum</i> . . .                        | Moors . . . . .                                | "          |
| Prickly Sedge . . . . .                     | <i>Carex Davalliana</i> . . .                            | Bogs. Rare . . . . .                           | "          |
| Flea do. . . . .                            | " <i>pulicaris</i> . . . . .                             | Bogs . . . . .                                 | "          |
| Curved do. . . . .                          | " <i>incurva</i> . . . . .                               | Sea-shores . . . . .                           | "          |
| Sea do. . . . .                             | " <i>arenaria</i> . . . . .                              | Sandy shores . . . . .                         | "          |
| Soft Brown do. . . . .                      | " <i>intermedia</i> . . . . .                            | Marshes . . . . .                              | "          |
| Great Rough do. . . . .                     | " <i>vulpina</i> . . . . .                               | Meadows . . . . .                              | "          |
| Smaller Panicked do. . . .                  | " <i>teretiuscula</i> . . . . .                          | Bogs . . . . .                                 | "          |
| Greater do. do. . . . .                     | " <i>paniculata</i> . . . . .                            | Do. . . . .                                    | "          |
| Star Headed do. . . . .                     | " <i>stellulata</i> . . . . .                            | Marshes . . . . .                              | "          |
| White do. . . . .                           | " <i>curta</i> . . . . .                                 | Bogs . . . . .                                 | "          |
| Elongated do. . . . .                       | " <i>elongata</i> . . . . .                              | Marshes . . . . .                              | "          |
| Oval do. . . . .                            | " <i>ovalis</i> . . . . .                                | Do. . . . .                                    | "          |
| Remote-flowered do. . . .                   | " <i>remota</i> . . . . .                                | Damp woods . . . . .                           | "          |
| Axillary-clustered do. . . .                | " <i>axillaris</i> . . . . .                             | Marshes . . . . .                              | "          |
| Russet do. . . . .                          | " <i>pulla</i> . . . . .                                 | Mountain bogs . . . . .                        | "          |
| Bog do. . . . .                             | " <i>cæspitosa</i> . . . . .                             | Marshes . . . . .                              | "          |
| Rigid do. . . . .                           | " <i>rigida</i> . . . . .                                | Mountains . . . . .                            | "          |
| Few-flowered do. . . . .                    | " <i>pauciflora</i> . . . . .                            | Peaty moors . . . . .                          | "          |
| Pendulous do. . . . .                       | " <i>pendula</i> . . . . .                               | Damp woods . . . . .                           | "          |
| Loose Pendulous do. . . . .                 | " <i>strigosa</i> . . . . .                              | Woods . . . . .                                | "          |
| Pendulous Wood do. . . . .                  | " <i>sylvatica</i> . . . . .                             | Damp do. . . . .                               | "          |
| Starved do. . . . .                         | " <i>depauperata</i> . . . . .                           | Dry do. . . . .                                | "          |
| Loose-spiked Rock do. . . .                 | " <i>Mielichhoferi</i> . . . . .                         | Mountains . . . . .                            | "          |
| Dwarf do. . . . .                           | " <i>capillaris</i> . . . . .                            | Do. . . . .                                    | "          |
| Mud do. . . . .                             | " <i>limosa</i> . . . . .                                | Muddy bogs . . . . .                           | "          |
| Loose-flowered do. . . . .                  | " <i>rariflora</i> . . . . .                             | Scotch mountains . . . . .                     | "          |
| Cyperus do. . . . .                         | " <i>Pseudo-Cyperus</i> . . . . .                        | Damp places . . . . .                          | "          |
| Black do. . . . .                           | " <i>atrata</i> . . . . .                                | Mountains . . . . .                            | "          |
| Pale do. . . . .                            | " <i>pallens</i> . . . . .                               | Marshes . . . . .                              | "          |
| Yellow do. . . . .                          | " <i>flava</i> . . . . .                                 | Turfy bogs . . . . .                           | "          |
| Tawny do. . . . .                           | " <i>fulva</i> . . . . .                                 | Boggy meadows . . . . .                        | "          |
| Long-bracteated do. . . . .                 | " <i>extensa</i> . . . . .                               | Marshes . . . . .                              | "          |
| Distant-spiked do. . . . .                  | " <i>distans</i> . . . . .                               | Do. . . . .                                    | "          |
| Green-ribbed do. . . . .                    | " <i>binervis</i> . . . . .                              | Dry heaths . . . . .                           | "          |
| Round-headed do. . . . .                    | " <i>pilulifera</i> . . . . .                            | Heaths and moors . . . . .                     | "          |
| Downy-fruited do. . . . .                   | " <i>tomentosa</i> . . . . .                             | Meadows. Rare . . . . .                        | "          |
| Pink-leaved do. . . . .                     | " <i>panicea</i> . . . . .                               | Bogs and meadows . . . . .                     | "          |
| Glaucous Heath do. . . . .                  | " <i>recurva</i> . . . . .                               | Woods and pastures . . . . .                   | "          |
| Smooth-beaked do. . . . .                   | " <i>laevigata</i> . . . . .                             | Boggy woods . . . . .                          | "          |
| Short-spiked Bladder }<br>do. . . . . }     | " <i>vesicaria</i> . . . . .                             | Marshes . . . . .                              | "          |
| Slender-beaked Blad- }<br>der do. . . . . } | " <i>ampullacea</i> . . . . .                            | Do. . . . .                                    | "          |
| Hairy do. . . . .                           | " <i>hirta</i> . . . . .                                 | Damp places . . . . .                          | "          |
| Sweet Vernal Grass . . . .                  | { <i>Anthoxanthum odo-</i><br><i>ratum</i> . . . . . }   | Pastures . . . . .                             | "          |



## PLANTS (continued).

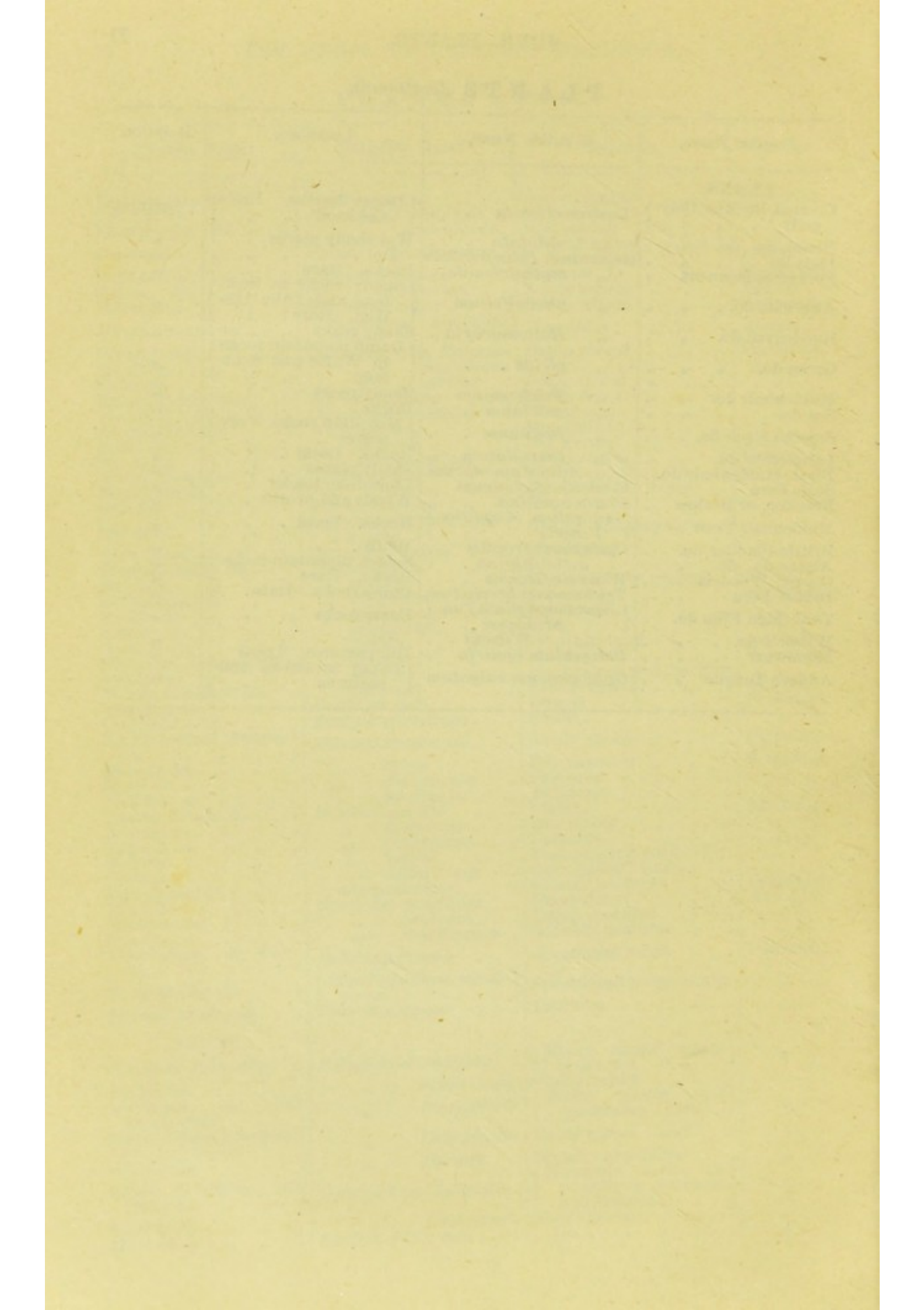
| Popular Name.  | Scientific Name.   | Localities.   | Duration.  |
|--|--|---|------------|
| Mat Grass . . . . .                                  | <i>Nardus stricta</i> . . . . .                          | Damp heaths . . . . .                                       | Perennial. |
| Fox-tail do. . . . .                                 | <i>Alopecurus pratensis</i> . . . . .                    | Pastures . . . . .  | "          |
| Floating do. do. . . . .                             | " <i>geniculatus</i> . . . . .                           | Wet places . . . . .  | "          |
| Canary do. . . . .                                   | <i>Phalaris Canariensis</i> . . . . .                    | { Uncultivated places. }<br>Naturalised . . . . .           | Annual.    |
| Cat's-tail do. . . . .                               | <i>Phleum pratense</i> . . . . .                         | Pastures . . . . .  | Perennial. |
| Sea do. do. . . . .                                  | " <i>arenarium</i> . . . . .                             | Sandy shores . . . . .                                      | Annual.    |
| Millet do. . . . .                                   | <i>Milium effusum</i> . . . . .                          | Damp woods . . . . .  | Perennial. |
| Annual Beard do. . . . .                             | { <i>Polypogon monspe-</i><br><i>liensis</i> . . . . . } | Way-sides . . . . .   | Annual.    |
| Wood Reed . . . . .                                  | <i>Calamagrostis Epigejos</i> . . . . .                  | Damp places . . . . .                                       | Perennial. |
| Small do. . . . .                                    | " <i>lanceolata</i> . . . . .                            | Do. . . . .   | "          |
| Close do. . . . .                                    | " <i>stricta</i> . . . . .                               | Bogs. Rare . . . . .  | "          |
| Brown Bent Grass. . . . .                            | <i>Agrostis canina</i> . . . . .                         | Damp fields . . . . .                                       | "          |
| Water Whorl do. . . . .                              | <i>Catabrosa aquatica</i> . . . . .                      | Wet places . . . . .  | "          |
| Alpine Hair do. . . . .                              | <i>Aira alpina</i> . . . . .                             | Mountains . . . . .   | "          |
| Early do. . . . .                                    | " <i>præcox</i> . . . . .                                | Dry ground . . . . .  | Annual.    |
| Silver do. . . . .                                   | " <i>caryophyllea</i> . . . . .                          | Hill pastures . . . . .                                     | Perennial. |
| Wood Melic do. . . . .                               | <i>Melica uniflora</i> . . . . .                         | Shady woods . . . . .                                       | "          |
| Mountain do. . . . .                                 | " <i>nutans</i> . . . . .                                | Mountain do. Rare . . . . .                                 | "          |
| Soft do. . . . .                                     | <i>Holcus lanatus</i> . . . . .                          | Meadows . . . . .   | "          |
| Oat do. . . . .                                      | { <i>Arrhenatherum ave-</i><br><i>naceum</i> . . . . . } | Hedges and way-sides . . . . .                              | "          |
| Blue Moor do. . . . .                                | <i>Sesleria cærulea</i> . . . . .                        | Mountains . . . . .   | "          |
| Reed Meadow do. . . . .                              | <i>Poa aquatica</i> . . . . .                            | Ditches . . . . .   | "          |
| Hard do. . . . .                                     | " <i>rigida</i> . . . . .                                | Walls and dry ground . . . . .                              | Annual.    |
| Flat-stalked do. . . . .                             | " <i>compressa</i> . . . . .                             | Dry places . . . . .  | Perennial. |
| Rough do. . . . .                                    | " <i>trivialis</i> . . . . .                             | Meadows . . . . .   | "          |
| Smooth do. . . . .                                   | " <i>pratensis</i> . . . . .                             | Do. . . . .   | "          |
| Annual do. . . . .                                   | " <i>annua</i> . . . . .                                 | Waste ground . . . . .                                      | Annual.    |
| Glaucous Meadow do. . . . .                          | " <i>glauca</i> . . . . .                                | Mountains . . . . .   | Perennial. |
| Sweet do. . . . .                                    | " <i>fluitans</i> . . . . .                              | Ditches and pool margins . . . . .                          | "          |
| Wheat Meadow do. . . . .                             | " <i>loliacea</i> . . . . .                              | Sandy shores . . . . .                                      | Annual.    |
| Quaking do. . . . .                                  | <i>Briza media</i> . . . . .                             | Downs . . . . .   | Perennial. |
| Cock's-foot do. . . . .                              | <i>Dactylis glomerata</i> . . . . .                      | Fields . . . . .  | "          |
| Single-husked Fescue }<br>do. . . . . }              | <i>Festuca uniglumis</i> . . . . .                       | Sandy shores . . . . .                                      | Biennial.  |
| Sheep's do. . . . .                                  | " <i>ovina</i> . . . . .                                 | Dry pastures . . . . .                                      | Perennial. |
| Hard do. . . . .                                     | " <i>duriuscula</i> . . . . .                            | Pastures . . . . .  | "          |
| Meadow do. . . . .                                   | " <i>pratensis</i> . . . . .                             | Meadows . . . . .   | "          |
| Barren Brome do. . . . .                             | <i>Bromus sterilis</i> . . . . .                         | Fields . . . . .  | Annual.    |
| Annual do. . . . .                                   | " <i>diandrus</i> . . . . .                              | Dry places . . . . .  | "          |
| Smooth do. . . . .                                   | " <i>racemosus</i> . . . . .                             | Pastures . . . . .  | "          |
| Soft do. . . . .                                     | " <i>mollis</i> . . . . .                                | Pastures and road-sides . . . . .                           | "          |
| Corn do. . . . .                                     | " <i>squarrosus</i> . . . . .                            | Corn-fields. Rare . . . . .                                 | "          |
| Downy Oat do. . . . .                                | <i>Avena pubescens</i> . . . . .                         | Chalky pastures . . . . .                                   | Perennial. |
| Wall Barley . . . . .                                | <i>Hordeum murinum</i> . . . . .                         | Road-sides . . . . .  | Annual.    |
| Meadow do. . . . .                                   | " <i>pratense</i> . . . . .                              | Damp pastures . . . . .                                     | "          |
| Sea do. . . . .                                      | " <i>maritimum</i> . . . . .                             | Sea-side pastures . . . . .                                 | "          |
| Couchgrass, or Dog }<br>do. . . . . }                | <i>Triticum repens</i> . . . . .                         | A common weed . . . . .                                     | Perennial. |
| False Brome do. . . . .                              | { <i>Brachypodium sylva-</i><br><i>ticum</i> . . . . . } | Copses and hedge-banks. . . . .                             | "          |
| Darnel, or Rye do. . . . .                           | <i>Lolium perenne</i> . . . . .                          | Pastures . . . . .  | "          |
| FERNS.   |  |   |            |
| Common Polypody . . . . .                            | <i>Polypodium vulgare</i> . . . . .                      | { Mossy banks, damp }<br>rocks, &c. . . . . }               | "          |
| Welsh do. . . . .                                    | " <i>cambricum</i> . . . . .                             | Shady banks . . . . .                                       | "          |
| Mountain do., or }<br>Beech Fern . . . . . }         | " <i>Phegopteris</i> . . . . .                           | { Damp woods and }<br>mountains. Local . . . . . }          | "          |
| Smooth three-branched }<br>do., or Oak do. . . . . } | " <i>Dryopteris</i> . . . . .                            | Damp places. Local . . . . .                                | "          |
| Alpine do. . . . .                                   | " <i>alpestre</i> . . . . .                              | Scotch mountains . . . . .                                  | "          |
| Alpine Shield do., or }<br>Holly do. . . . . }       | <i>Polystichum Lonchitis</i> . . . . .                   | { Mountain rocks, es- }<br>pecially in Scotland . . . . . } | "          |
| Prickly do. . . . .                                  | " <i>aculeatum</i> . . . . .                             | Shady places . . . . .                                      | "          |
| Male do. . . . .                                     | <i>Lastrea Filix-mas</i> . . . . .                       | Do. . . . .   | "          |



## PLANTS (continued).

| Popular Name.                           | Scientific Name.  | Localities.   | Duration.  |
|---|---|---|------------|
| FERNS.                                  |   |   |            |
| Crested Buckler Poly-<br>pody . . . . . | <i>Lastrea cristata</i> . . .                               | { Boggy heaths. Rare }<br>and local . . . . .                           | Perennial. |
| Broad do. do. . . . .                   | „ <i>dilatata</i> . . .                                     | Wet shady places . . .  | „          |
| Lady do. . . . .                        | <i>Asplenium Filix-fœmina</i>                               | Do. . . . .   | „          |
| Forked Spleenwort . . .                 | „ <i>septentrionale</i> . .                                 | Rocks. Rare . . . . .   | „          |
| Alternate do. . . . .                   | „ <i>alternifolium</i> . .                                  | { Shady rocks in Scot-<br>land and Lake Dis-<br>trict. Rare . . . . . } | „          |
| Rue-leaved do. . . . .                  | „ <i>Ruta-muraria</i> . .                                   | Shady rocks . . . . .   | „          |
| Green do. . . . .                       | „ <i>viride</i> . . . . .                                   | { Damp mountain rocks<br>in Wales and Scot-<br>land . . . . . }         | „          |
| Maidenhair do. . . . .                  | „ <i>Trichomanes</i> . .                                    | Shady rocks . . . . .   | „          |
| Sea do. . . . .                         | „ <i>marinum</i> . . . . .                                  | Rocks . . . . .   | „          |
| Smooth Rock do. . . . .                 | „ <i>fontanum</i> . . . . .                                 | { Mountain rocks. Very<br>scarce . . . . . }                            | „          |
| Lanceolate do. . . . .                  | „ <i>lanceolatum</i> . .                                    | Rocks. Local . . . . .  | „          |
| Black Maidenhair do. . .                | „ <i>Adiantum-nigrum</i>                                    | Shady places . . . . .  | „          |
| Scale Fern . . . . .                    | <i>Ceterach officinarum</i> . .                             | Limestone Rocks . . . .   | „          |
| Bracken, or Brakes . . .                | <i>Pteris aquilina</i> . . .                                | Woods and heaths . . . .  | „          |
| Maidenhair Fern . . . . .               | { <i>Adiantum Capillus-</i><br><i>Veneris</i> . . . . . }   | Rocks. Local . . . . .  | „          |
| Brittle Bladder do. . . .               | <i>Cystopteris fragilis</i> . .                             | Walls . . . . .   | „          |
| Alpine do. do. . . . .                  | „ <i>alpina</i> . . . . .                                   | Scotch mountain rocks . .   | „          |
| Oblong Woodsia . . . . .                | <i>Woodsia ilvensis</i> . . .                               | Rocks. Rare . . . . .   | „          |
| Bristle Fern . . . . .                  | <i>Trichomanes brevisetum</i>                               | Damp rocks. Rare . . . .  | „          |
| Tunbridge Film do. . . . .              | { <i>Hymenophyllum Tun-</i><br><i>bridgense</i> . . . . . } | Damp rocks . . . . .  | „          |
| Wilson's do. . . . .                    | „ <i>Wilsoni</i> . . . . .                                  | Do. . . . .   | „          |
| Moonwort . . . . .                      | <i>Botrychium lunaria</i> . .                               | Hill pastures. Local . . .  | „          |
| Adder's Tongue . . . . .                | <i>Ophioglossum vulgatum</i>                                | { Damp meadows and<br>pastures . . . . . }                              | „          |







# JULY.

## GENERAL HINTS.

It often happens that when there is most to be done there is least to be said, and that is the case with the present month. The days are long, and the collector will have enough work on his hands to occupy every hour of the long summer days.

Palings, tree-trunks, and light, as before. Treacling will be very productive in this month, and the collector will have his boards as full as they will hold. Should he be very much pressed for space, he will be obliged to have recourse to artificial heat, and dry the specimens by the fire. This must be very cautiously done, as, if the drying be too rapid, the wings will be warped.

Do not trouble yourself about pupæ.

Butterflies and day-flying moths are now abundant. Should there be access to a large oak wood you may chance to obtain one of the great prizes—the Purple Emperor. For him and his wife we must lay a bait. Like many butterflies, the Purple Emperor delights in the most repulsive of substances, and nothing seems to please him so much as flesh in the last stages of decay.

Generally the male, to whom alone the splendid purple plumage belongs, flies at the top of oak trees, much too high to be reached with a net. But he cannot resist the odour of decaying flesh, and a drowned cat or puppy may be advantageously utilised as an Emperor trap. If possible, find an open but damp spot, so that the heat and moisture may aid decomposition.

When I was collecting in Bagley Wood, many years ago, a splendid pair of this butterfly was brought to me. The captor saw them drinking at a peculiarly noisome puddle, put his hat over them, and caught them both.

Beating or shaking will be useful in this month. Very good moths may often be startled out of small trees by giving the trunk a violent blow with the sole of the boot. A blow with a heavy stick will produce the same effect, as the sudden jar will communicate itself to the branches as well as the trunk. Dr. Knaggs recommends a French instrument which is made on purpose. It is a long-handled mallet, with a leaden head cased in thick leather or gutta-percha. The object of the leather casing is to save the tree from injury, and to prevent the sound of the blows from being heard at a distance. Sometimes the head weighs as much as two pounds, but Dr. Knaggs prefers a rather light one.

The same mode of beating will also answer for caterpillars, and Dr. Knaggs gives an account of the following very useful box.

It is very difficult to put more than one or two caterpillars into a single box, as many of them are very active, and will crawl out as soon as the lid is raised.

The box in question is made of a large chip pill-box. A second lid is placed on the bottom of the box, and a hole cut or punched through both of them. The hole should be on one side. It will be seen that, when the two holes correspond, a caterpillar can be introduced into the box, but that when the pierced lid is turned, the aperture is closed. There is no space, therefore, for one of the inmates to push its



way out while another is being introduced; and then a movement of the fingers closes the aperture.

The eggs which have been collected will have hatched by this time. As rearing them is a delicate and difficult task, I shall say little about it except to mention that, in their active stages, they require the most constant care and attention, especially in changing their food. When they are very young, they must be lifted off the old food and placed on the new by means of a pointed strip of paper. And, as there are often several hundreds of a single species hatched nearly at the same time from the same brood, and each must be moved singly, the reader may picture for himself the amount of labour which these little creatures entail on their possessor. At the present moment there are in my house about 360 larvæ of the Gipsy Moth (*Liparis dispar*) in one box. They are a fortnight old, and appear to become greedier every day. They are fed upon the mountain ash, and thrive admirably.

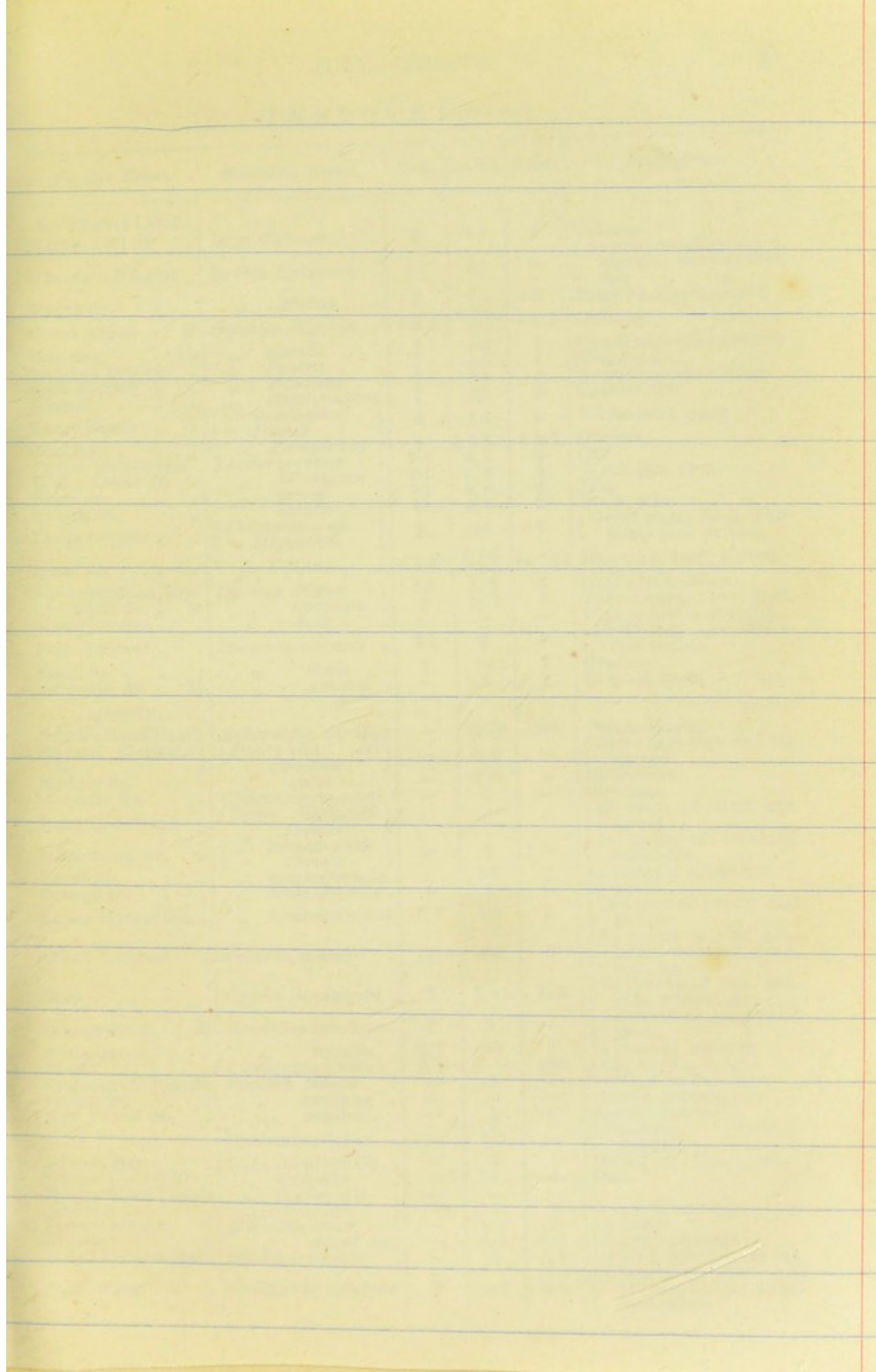
This species, by the way, is remarkable from the fact that collectors have ceased to find it at large, as it now seems only to be procurable, like the silkworm, from eggs laid in captivity.

As in June, the plants are in full bloom, and indeed it is difficult to say whether June or July is to be considered the superior in this respect.

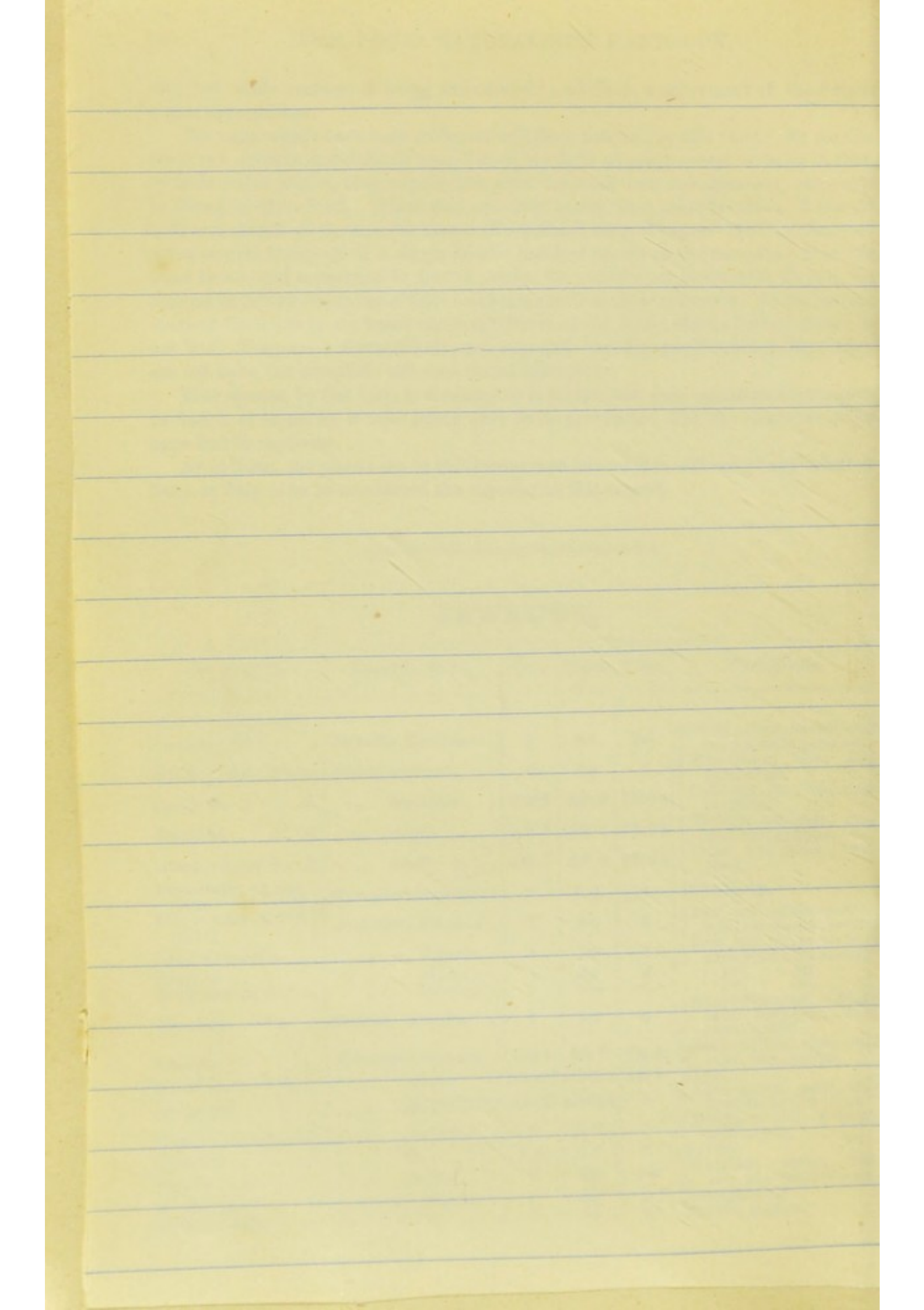
## I N S E C T S.

| Popular Name.         | Scientific Name.           | Ova.     | Larva.     | Pupa.   | Food-Plants.  |
|-----------------------|----------------------------|----------|------------|---------|---|
| <b>BUTTERFLIES.</b>   |                            |          |            |         |   |
| Swallow Tail . .      | <i>Papilio Machaon</i> .   | 6        | 6-8        | 8-5     | { Wild carrot, fennel, and marsh milk-parsley.      |
| Black-veined White    | <i>Pieris crataegi</i> .   | 6        | 8-5        | 6       | { Hawthorn, sloe, and fruit trees.                  |
| Large do. . . E       | „ <i>brassicæ</i> .        | 5 & 8    | 6 & 9      | 7 & 9-4 | { Cabbage, &c., and nasturtium.                     |
| Small do. . . E       | „ <i>rapæ</i> .            | 5 & 8    | 6 & 9      | 7 & 9-4 | { Turnip, cabbage, &c., and nasturtium.             |
| Green-veined do. E    | „ <i>napi</i> .            | 5 & 8    | 6 & 9      | 7 & 9-4 | { Rape, and other cruciferae.                       |
| Brimstone, or Sulphur | <i>Gonepteryx rhamni</i>   | 4        | 6, 7       | 7       | Buckthorn.  |
| Silver-washed Frill   | <i>Argynnis Paphia</i> .   | 7        | 8-6        | 6       | { Dog and other violets, wild raspberry, nettle.    |
| Dark Green do. .      | „ <i>Aglaia</i> .          | 8        | 8-6        | 6       | { Dog and other violets, and wild heartsease.       |
| Niobe do. . .         | „ <i>Niobe</i> .           | 8        | 8-5        | 6       | Do. do.   |
| High Brown do. .      | „ <i>Adippe</i> .          | 8        | 8-6        | 6       | Do. do.   |
| Wood do. . .          | <i>Melitæa Athalia</i> .   | 7        | 8-5        | 6       | { Narrow-leaved plantain, foxglove, wild germander. |
| Comma . . .           | <i>Vanessa C-album</i> .   | 5 & 7    | 5 & 8      | 6 & 9   | { Elm, willow, sloe, currant, hop, nettle.          |
| Small Tortoiseshell   | „ <i>urticæ</i> .          | 4, 5 & 7 | 5, 6 & 8   | 6 & 8   | Nettle.   |
| Large do. . .         | „ <i>polychloros</i>       | 5 s. 10  | s. 10-5, 6 | 7       | { Elm, aspen, osier, willow, and fruit trees.       |
| Camberwell Beauty     | „ <i>Antiopa</i> .         | 5        | 6, 7       | 7       | { Birch, poplar, willow, and nettle.                |
| Peacock . . . E       | „ <i>Io</i> .              | 4, 5     | 6, 7       | 7       | Nettle.   |
| Painted Lady . E      | „ <i>cardui</i>            | 6        | 6-9        | 7-9     | { Thistles, nettle, mal-low, and scarlet bean       |
| White Admiral B       | <i>Limenitis Sibylla</i> . | 7        | 8-5        | 6       | Honeysuckle.  |
| Purple Emperor .      | <i>Apatura Iris</i> .      | 7        | 8-5        | 6       | Sallow, poplar.                                     |











## INSECTS (continued).

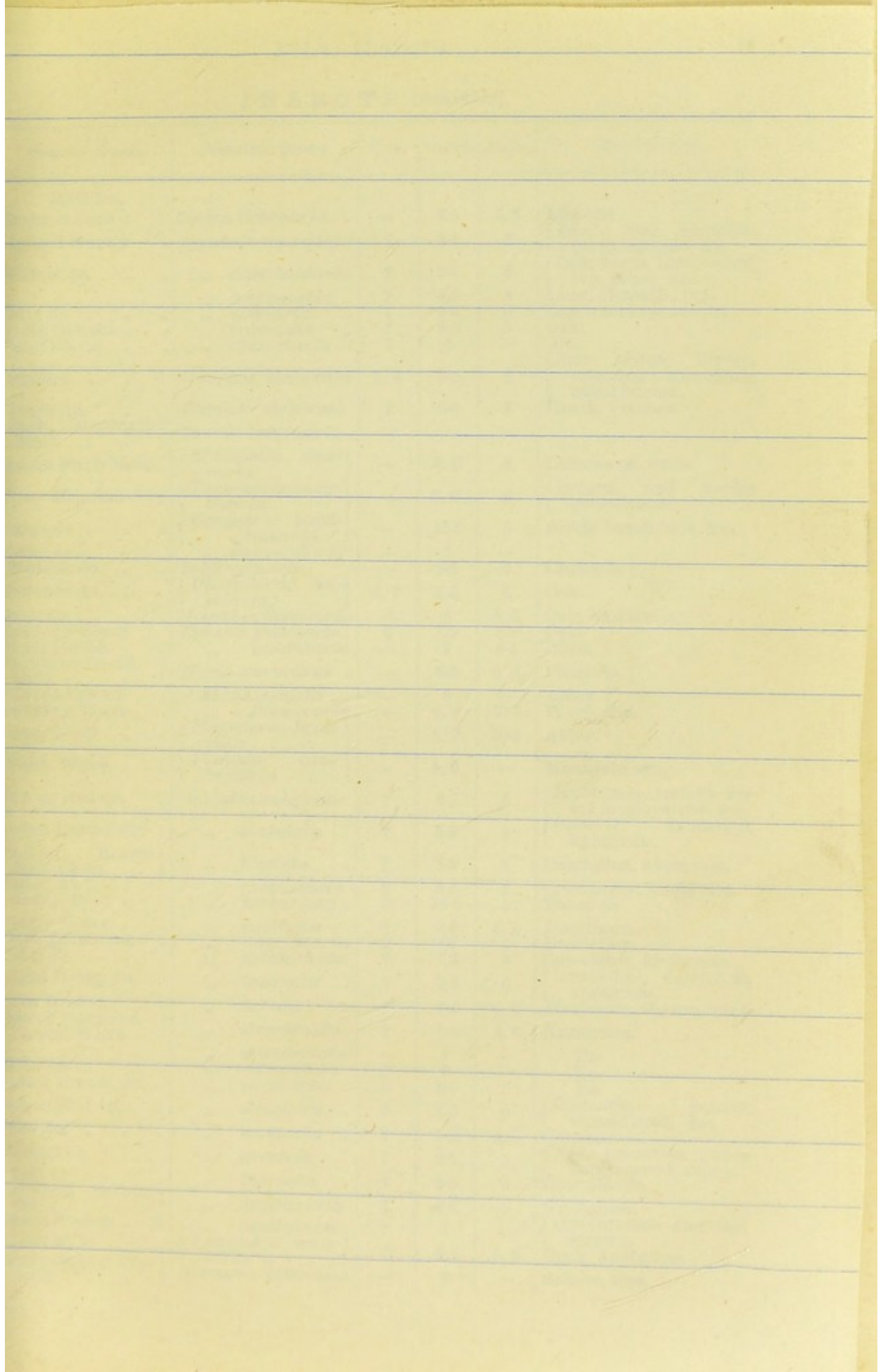
| Popular Name.       | Scientific Name.                           | Ova.   | Larva.        | Pupa.    | Food-plants.   |
|---------------------|--|--------|---------------|----------|--|
| <b>BUTTERFLIES.</b> |  |        |               |          |  |
| Marbled White .     | <i>Arge Galatea</i> .                      | 7      | 8-5           | 6        | Grasses.   |
| Mountain Ringlet .  | <i>Erebia Epiphron</i> .                   | —      | 8-5           | —        | { Annual meadow-grass,<br>sheep's fescue-grass,<br>&c.       |
| Scotch do. . . .    | " <i>Medea</i> .                           | 8      | 9-5           | 6        | Poa and other grasses.                                       |
| Wood Argus . E      | <i>Satyrus Aegeria</i> .                   | 5 & 8  | 6, 7 &<br>9-3 | 4 & 7    | Grasses.   |
| Grayling . . . .    | " <i>Semelz</i> .                          | 7      | 8-6           | 6        | Couch and other grasses.                                     |
| Meadow Brown . .    | " <i>Janira</i> .                          | 7      | 8-5           | 6        | Grasses, &c.   |
| Gate Keeper . . .   | " <i>Tithonus</i> .                        | 7      | 8-6           | 6        | Annual meadow-grass.   |
| Ringlet . . . .     | " <i>Hyperanthus</i> .                     | 7      | 8-6           | 6        | Grasses, &c.   |
| Large Heath . . .   | { <i>Cænonympha</i><br><i>Davus</i> }      | 6      | 8-5           | 6        | White beak rush.   |
| Small do. . . . .   | " <i>Pamphilus</i> .                       | 5      | 5, 6 & 8      | 4 & 7    | Grasses.   |
| Purple Hairstreak . | <i>Thecla quercus</i> .                    | 7-4    | 5, 6          | 6        | Oak.   |
| White Letter do. .  | " <i>W-Album</i> .                         | 7-4    | 5, 6          | 6        | Wych elm, elm.   |
| Black do. . . . .   | " <i>pruni</i> .                           | 7-4    | 5, 6          | 6        | Sloe.  |
| Brown do. . . . .   | " <i>betulae</i> .                         | 10     | 5, 6          | 7        | Birch, sloe.   |
| Large Copper . . .  | { <i>Polyommatus</i><br><i>Hippothoe</i> } | 8      | 8-6           | 7        | { Great water dock. Pro-<br>bably now extinct.               |
| Small do. . . . .   | " <i>Phlaeas</i> .                         | 6 & 10 | 5-8 &<br>10-4 | 4 & 10-4 | Ragwort, dock, sorrel.                                       |
| Silver-studded Blue | <i>Lycæna Aegon</i> .                      | 7-2    | 5, 6          | 6        | Bird's-foot, broom.  |
| Chalk-hill do. . E  | " <i>Corydon</i> .                         | 9      | 10-6          | 7        | Tufted horse-shoe vetch.                                     |
| Mazarine do. . . .  | " <i>Acis</i> .                            | —      | —             | —        | Flower-heads of thrift.                                      |
| Pearl Skipper . . . | <i>Hesperia comma</i> .                    | 8-3    | 6             | 7        | { Bird's-foot, and bird's-<br>foot trefoil.                  |
| Small do. . . . .   | " <i>linea</i> .                           | 7      | 8-6           | 7        | Grasses.   |
| Lulworth do. . M    | " <i>Actæon</i> .                          | —      | 6             | 7        | In wood reed.  |
| <b>MOTHS.</b>       |  |        |               |          |  |
| Death's Head Hawk   | <i>Acherontia Atropos</i>                  | —      | 9, 10         | 9-6      | Potato leaves.   |
| Spotted Elephant }  | { <i>Deilephila eu-</i>                    | —      | 8, 9          | —        | { Cypress spurge and sea                                     |
| do. . . . . }       | { <i>phorbicae</i> }                       | —      | —             | —        | { spurge.  |
| Madder do. . . . .  | " <i>galii</i> .                           | —      | 8-10          | —        | Bedstraws.   |
| Oleander do. . . .  | <i>Chærocampa nerii</i> .                  | —      | 9             | —        | Oleander.  |
| Ruby Clearwing . .  | { <i>Sesia chrysi-</i>                     | —      | 6             | —        | { In roots of dock and                                       |
|                     | { <i>formis</i> . }                        | —      | —             | —        | { sorrel.  |
| Ichneumon do. . .   | " <i>ichneumoni-</i>                       | —      | 7             | —        | { In stems of stinking                                       |
|                     | { <i>formis</i> . }                        | —      | —             | —        | { hellebore.   |
| Thrift do. . . . .  | " <i>muscaformis</i> .                     | —      | 7-9           | 5        | In stems of sea-thrift.                                      |
| Orange do. . . . .  | " <i>scoliaformis</i> .                    | —      | 4             | —        | In birch.  |
| Lunar Hornet do. .  | " <i>bembeciformis</i>                     | 7, 8   | 9-5           | 5        | { In stems of poplar and                                     |
|                     |  |        |               |          | { saw.   |
| Wood Leopard . .    | <i>Zeuzera æsculi</i> .                    | 7      | 8-5           | 6        | { In stems of elm, ash,<br>horse-chestnut, pear,<br>oak, &c. |
| Goat . . . . .      | <i>Cossus ligniperda</i> .                 | 7      | 9, 10         | 11-5     | { In trunks of oak, ash,<br>elm, willow, &c.                 |
| Orange Swift . E    | <i>Hepialus sylvinus</i> .                 | 7      | 7             | —        | { At roots of sorrel and                                     |
|                     |  |        |               |          | { dock.  |
| Northern do. . . .  | " <i>velleda</i> .                         | 6, 7   | 8-5           | 5        | In roots of bracken.   |
| Tinsel . . . . .    | <i>Limacodes asellus</i> .                 | 6, 7   | 8, 9          | 10-6     | Oak, poplar, beech.  |
| Transparent Burnet  | <i>Zygæna Minos</i> .                      | —      | 5             | 6        | Trefoils and vetches.  |
| Scotch do. . . . .  | " <i>exulans</i> .                         | —      | —             | —        | <i>Azalea procumbens</i> .                                   |
| New Forest do. . .  | " <i>meliloti</i> .                        | —      | 5             | 6        | Trefoil and vetch.   |
|                     | <i>Syntomis phegea</i> .                   | —      | 9-5           | —        | { Scabious, plantain,<br>dandelion.                          |
| Ribbon Bar . . . .  | <i>Nola cucullatella</i> .                 | —      | 5             | 5        | Hawthorn, sloe, apple.                                       |
| Scarce Dotted do. . | " <i>strigula</i> .                        | —      | 5             | 6        | Oak.   |
| Scarce Black Arches | " <i>centonalis</i> .                      | —      | —             | —        |  |
| Kentish do. . . . . | " <i>albulalis</i> .                       | —      | 5             | 6        | Ash and bramble.   |
| Scarce Muslin . . . | <i>Nudaria senex</i> .                     | —      | 5, 6          | 7        | Lichens.   |
| Muslin . . . . .    | " <i>mundana</i> .                         | —      | 5, 6          | 6, 7     | Lichens on walls.  |
| Small Dew Lackey .  | <i>Setina irrorella</i> .                  | —      | 5             | 5, 6     | Ground lichens near sea.                                     |
| Rose Wing . . . .   | <i>Calligenia miniata</i>                  | 7      | 8-5           | 5, 6     | { Lichens on oaks, also<br>withered oak, alder,<br>and saw.  |



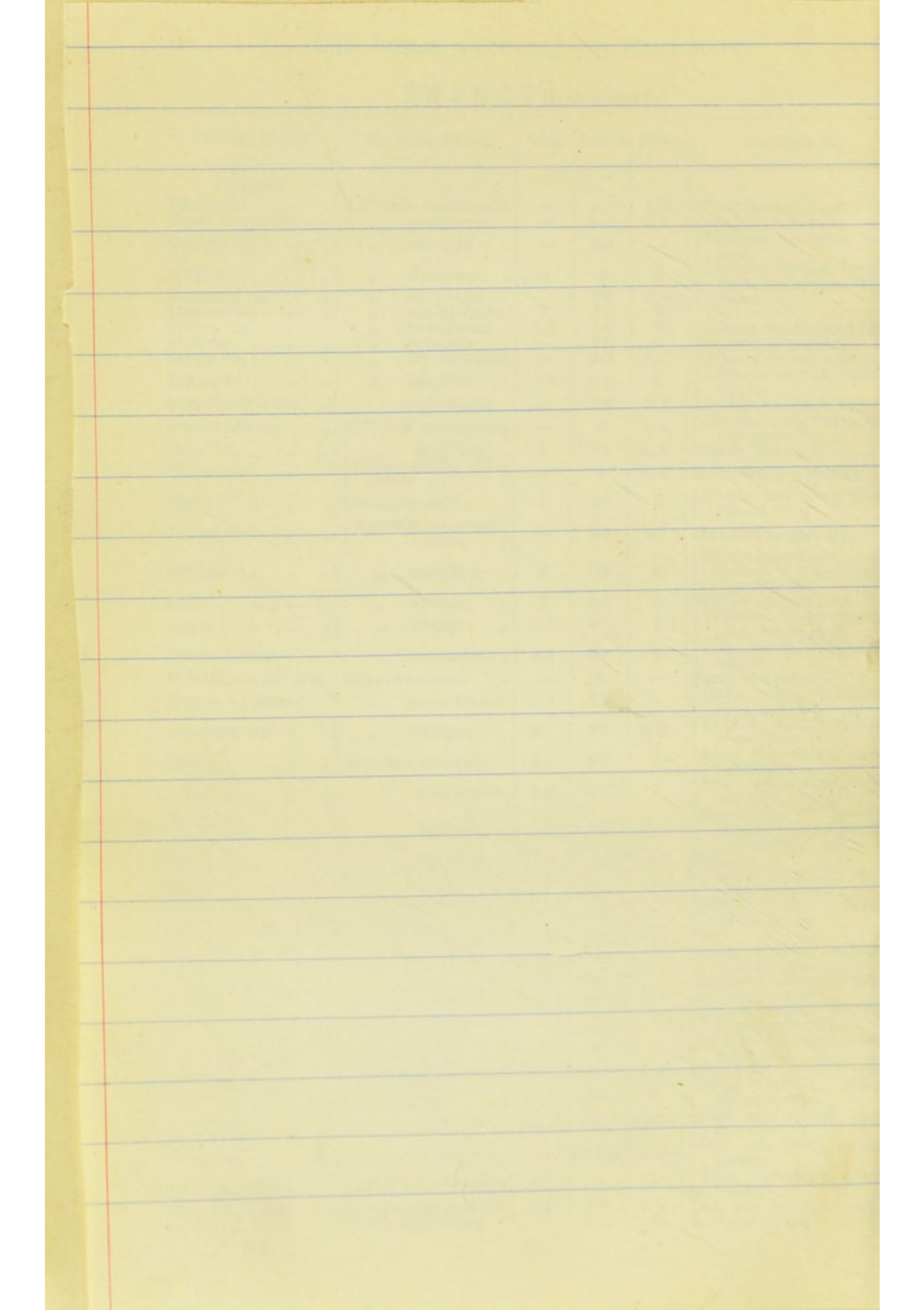
## INSECTS (continued).

| Popular Name.       | Scientific Name.                   | Ova.  | Larva.   | Pupa.    | Food-plants.  |
|---------------------|------------------------------------|-------|----------|----------|---|
| <b>MOTHS.</b>       |                                    |       |          |          |   |
| Four-spot . . .     | <i>Lithosia mesomella</i>          | —     | 8-5      | 5, 6     | Heath and lichens.                                      |
| Pearl Footman . .   | „ <i>muscerda</i> .                | —     | 5, 6     | 6, 7     | Lichens on willow.                                      |
| Orange do. . . .    | „ <i>aureola</i> .                 | —     | 9-5      | —        | { Lichens on larch and oak.                             |
| Buff do. . . . .    | „ <i>deplana</i> .                 | —     | 6        | 6        | { Lichens on oak, beech, yew and spruce fir.            |
| Common do. . . .    | „ <i>lurideola</i> .               | —     | 8-5      | 5, 6     | Lichens.  |
| Leaden do. . . .    | „ <i>molybdeola</i> .              | 7     | 7-5      | 6        | Do.   |
| Scarce do. . . .    | „ <i>complanata</i> .              | 7, 8  | 8-6      | 6        | Lichens on sloe and fir.                                |
| Dun do. . . . .     | „ <i>griseola</i> .                | —     | 8-6      | 6        | Lichens on poplar.                                      |
| Straw do. . . . .   | „ <i>stramineola</i>               | —     | 8-6      | 6, 7     | Lichens on oak, sloe, &c.                               |
| Large do. . . . .   | „ <i>quadra</i> .                  | —     | 5, 6     | 6        | { Lichens on oak, beech, apple.                         |
| Red Necked do. .    | „ <i>rubricollis</i> .             | —     | 8-10     | 3, 4     | Lichens on larch, &c.                                   |
| Feathered do. . .   | <i>Eulepia grammica</i>            | —     | 5        | 5, 6     | { Heath, mugwort, fescue-grass.                         |
| Grey do. . . . .    | „ <i>cribrum</i> .                 | 7     | 8-5      | 5, 6     | Heath, bilberry.  |
| Cinnabar . . . .    | { <i>Callimorpha Jacobeæ</i> . }   | —     | 5        | 5, 6     | Ragwort, groundsel.                                     |
| Tiger . . . . .     | <i>Chelonia cæja</i> .             | 7     | 8-6      | 6        | { Nettle, and many other plants.                        |
| Brown Tail . . .    | { <i>Liparis chrysorhæa</i> }      | —     | 9-5      | 5-7      | Hawthorn, sloe, &c.                                     |
| Gold do. . . . .    | „ <i>auriflua</i> .                | 8     | 9-5      | 6        | { Sloe, hawthorn, oak, willow, gooseberry, currant, &c. |
| Satin . . . . . M   | „ <i>salicis</i> .                 | 8     | 8-5      | 6        | Willow, poplar, oak.                                    |
| Gipsy . . . . .     | „ <i>dispar</i> .                  | 8-3   | 4-6      | 7        | { Willow, hawthorn, sloe, sweet gale.                   |
| Black Arches . .    | „ <i>monacha</i> .                 | 8-3   | 5-7      | 7        | { Oak, birch, beech, fir, apple.                        |
| Whittlesea Ermine   | <i>Orgyia cænosa</i> .             | —     | 8        | —        | Reed and sedge.   |
| Scarce Vapourer     | „ <i>gonostigma</i>                | 6, 7  | 9-5      | —        | { Oak, beech, bramble, sloe, nut, &c.                   |
| Common do. . . .    | „ <i>antiqua</i> .                 | 9-7   | 7-9      | 8, 9     | { Willow, oak, rose, fruit trees, &c.                   |
| Lackey . . . . .    | <i>Bombyx neustria</i> .           | 7-3   | 5-7      | 7        | { Sloe, hawthorn, and fruit trees.                      |
| Coast do. . . . .   | „ <i>castrensis</i>                | 7-3   | 6, 7     | 7        | { Sea wormwood, and sea-side carrot.                    |
| Oak Eggar . . . .   | „ <i>roboris</i> .                 | 7, 8  | 9-6      | 6, 7     | { Hawthorn, broom, bramble, heath, buckthorn, sloe.     |
| Northern do. . .    | „ <i>quercus</i> .                 | 8     | 9-5      | 6, 7     | Bilberry.   |
| Drinker . . . . .   | <i>Odonestis potatoria</i>         | 7, 8  | 9-5      | 6        | { Couch, sword, and other grasses.                      |
| Swallow Tail . . B  | { <i>Uropteryx sambucata</i> . }   | —     | 9-5      | 6        | { Elder, ivy, holly, bramble.                           |
| Bordered Beauty .   | <i>Epione vespertaria</i>          | 7-4   | 5, 6     | 6        | Nut.  |
| Dark do. do. . . .  | „ <i>apiciaria</i> .               | 8-4   | 5, 6     | 6        | { Nut, poplar, willow, willow, alder.                   |
| Little Thorn . . .  | „ <i>advenaria</i> .               | 5, 6  | 8        | —        | Dogwood and wild rose.                                  |
| Brimstone . . . .   | <i>Rumia cratægata</i> .           | 4 & 9 | 6 & 9-3  | —        | Hawthorn, sloe.   |
| Orange . . . . .    | <i>Angerona prunaria</i>           | 7     | 10-4     | 5        | { Beech, sloe, willow, broom, plum, &c.                 |
| Pale Emerald . .    | { <i>Metrocampta margaritata</i> } | 7, 8  | 9-5      | 6        | { Oak, birch, beech, hornbeam, &c.                      |
| Barred Red . . .    | <i>Ellopiæ fasciaria</i> .         | 7, 8  | 9-4      | 5, 6     | Scotch fir.   |
| Lilac Beauty . . .  | { <i>Pericallia syringaria</i> . } | 6, 7  | 9-6      | 6        | { Lilac, privet, elder, honeysuckle.                    |
| Early Thorn . . .   | <i>Selenia illunaria</i> .         | 4 & 7 | 6 & 9    | 6 & 9-3  | { Oak, ash, willow, hawthorn.                           |
| Purple do. . . . E  | „ <i>illustraria</i> .             | —     | 6 & 9-10 | 7 & 11-4 | { Oak, ash, birch, beech, maple.                        |
| Scalloped Oak . . E | <i>Crocallis clingularia</i>       | 8-2   | 5        | 6        | { Oak, hawthorn, sloe, heath.                           |
| Common Thorn . . E  | <i>Ennomos angularia</i>           | 9-4   | 6-8      | 7, 8     | { Oak, ash, birch, beech.                               |
| Dotted Beauty . .   | <i>Cleora glabraria</i> .          | —     | 5, 6     | 6        | Lichens on fir.   |











## INSECTS (continued).

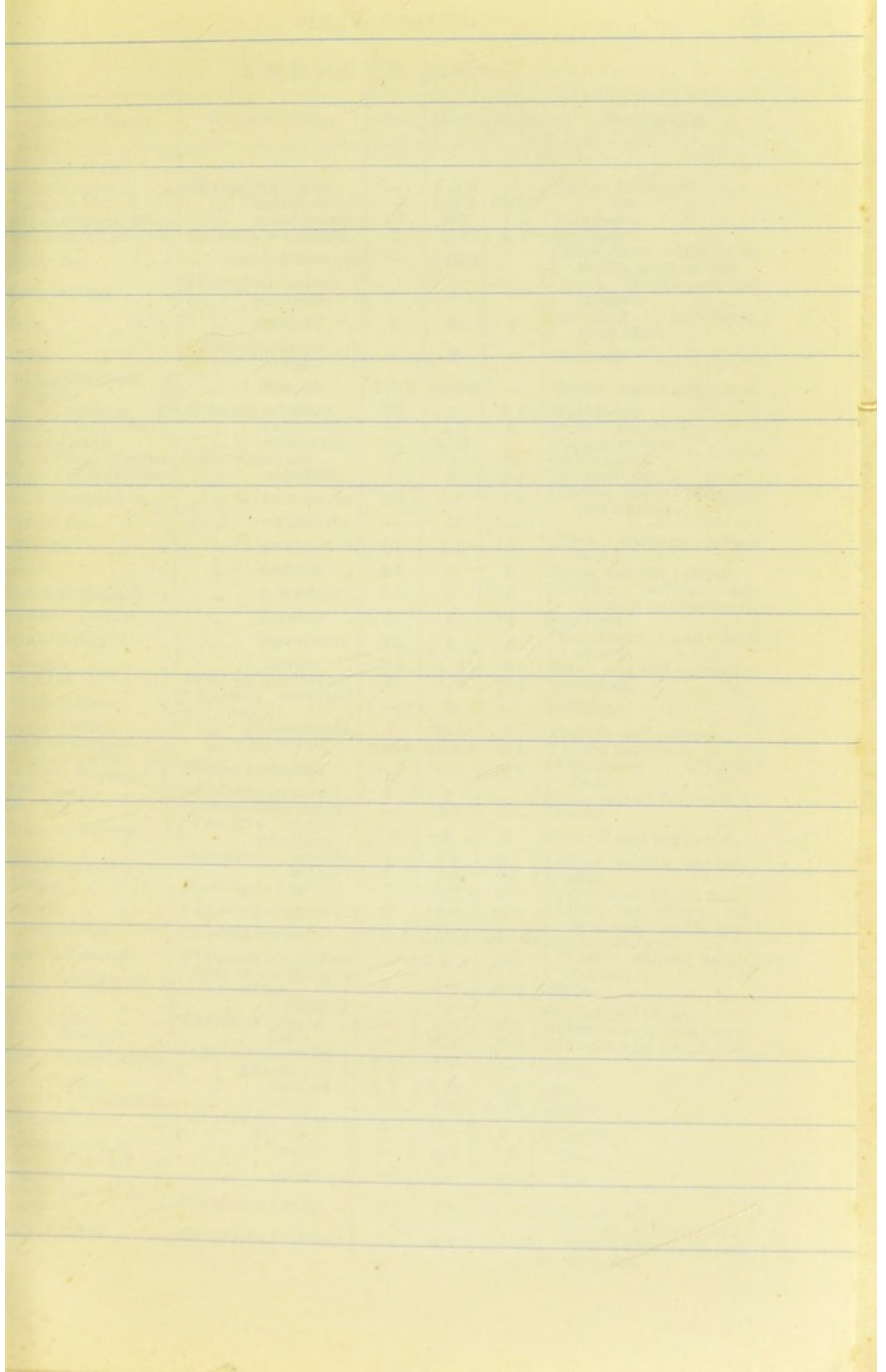
| Popular Name.                           | Scientific Name.  | Ova. | Larva. | Pupa. | Food-plants.  |
|---|---|------|--------|-------|---|
| <b>MOTHS.</b>                           |   |      |        |       |   |
| Brussels Lace . . .                     | <i>Cleora lichenaria</i> . .                            | —    | 9-5    | 5, 6  | Lichens.  |
| Mottled Beauty . . .                    | <i>Boarmia repandata</i> . .                            | 7    | 9-4    | 5     | { Birch, sloe, bramble,<br>plum, spindle, &c.                 |
| Willow do. . . . .                      | „ <i>rhomboidaria</i> . . .                             | 7    | 9-4    | 5     | { Oak, birch, lilac, elder,<br>ivy, plum, &c.                 |
| Satin do. . . . .                       | „ <i>perfumaria</i> . . .                               | 7    | 4-6    | 6     | Lilac, clematis, ivy.   |
| Great Oak do. . . .                     | „ <i>abietaria</i> . . .                                | 7    | 9-6    | 6     | Larch and spruce fir.   |
| Pale Oak do. . . . .                    | „ <i>roboraria</i> . . .                                | 7    | 9-5    | 5     | Oak.  |
|   | „ <i>consortaria</i> . . .                              | 7    | 8      | —     | Do.   |
| Annulet . . . . .                       | <i>Gnophos obscurata</i> . .                            | 7, 8 | 9-5    | 6     | { Sun cistus, thyme,<br>creeping cinquefoil,<br>salad burnet. |
| Scotch do. . . . .                      | <i>Dasydia obfuscata</i> . .                            | 7    | 9-6    | 7     | Heath, vetches.   |
| Black Mountain<br>Moth . . . . .        | <i>Psodos trepidaria</i> . .                            | —    | —      | —     |   |
| Scarce Birch Moth . .                   | { <i>Mniophila cine-</i><br><i>raria</i> . . . . . }    | —    | 5, 6   | 6     | Lichens on walls.   |
| Grass Emerald . . . .                   | { <i>Pseudoterpnæ cy-</i><br><i>tisaria</i> . . . . . } | —    | 5, 6   | 6     | { Broom, and needle<br>greenwood.                             |
| Large do. . . . .                       | { <i>Geometra papi-</i><br><i>lionaria</i> . . . . . }  | —    | 10-5   | 6     | Birch, beech, nut, &c.  |
| Essex do. . . . .                       | „ <i>smaragdaria</i> . . .                              | —    | 5      | —     |   |
| Clematis do. . . . .                    | <i>Iodis vernaria</i> . . .                             | —    | 9-6    | 6     | Clematis.   |
| Blotched do. . . . .                    | { <i>Phorodesma ba-</i><br><i>jularia</i> . . . . . }   | 6, 7 | 7-5    | 6     | Oak.  |
| Dark do. . . . .                        | <i>Hemitheathymia</i> . .                               | —    | 5      | 5, 6  | Oak, hawthorn.  |
| Maiden's Blush . . .                    | <i>Ephyra punctaria</i> . .                             | 6    | 7-9    | 8-4   | Oak.  |
| Birch Mocha . . . . .                   | „ <i>pendularia</i> . . .                               | —    | 7      | 8-4   | Birch.  |
| Purple-bordered<br>Gold . . . . .       | <i>Hyria auroraria</i> . . .                            | —    | 8-5    | 5, 6  | Plantain.   |
| Waved Carpet . . . .                    | <i>Asthena sylvata</i> . . .                            | —    | 8      | —     | Alder.  |
| Blomer's Wave . . . .                   | „ <i>Blomeraria</i> . . .                               | —    | 8, 9   | 10-6  | Wych elm.   |
| Dingy Shell . . . . .                   | { <i>Eupisteria hepa-</i><br><i>rata</i> . . . . . }    | —    | 8, 9   | 10-5  | Alder.  |
| Welsh Wave . . . . .                    | { <i>Venusia cam-</i><br><i>bricaria</i> . . . . . }    | —    | 8, 9   | —     | Mountain ash.   |
| Tawny Red do. . . . .                   | <i>Acidalia rubricata</i> . .                           | 7    | 8-5    | 5     | { Knotgrass, trefoils, les-<br>ser meadow-rue, &c.            |
| Single Dotted do. . .                   | „ <i>scutulata</i> . . .                                | 7    | 8-5    | 5     | { Chervil, dandelion,<br>knotgrass.                           |
| Treble Brown<br>Spotted do. . . . .     | „ <i>bisetata</i> . . .                                 | 7    | 8-5    | 5     | Dandelion, knotgrass.   |
| Allied do. . . . .                      | „ <i>contiguaria</i> . . .                              | 7    | 8-5    | 5     | Crowberry, knotgrass.   |
| London do. . . . .                      | „ <i>herbariata</i> . . .                               | 7    | 10-5   | 5     | Tansy (?)   |
| Pretty Wave . . . . .                   | „ <i>rusticata</i> . . .                                | 7    | 8-5    | 5, 6  | Hawthorn.   |
| Dark Cream do. . . .                    | „ <i>interjectaria</i> . .                              | 7    | 8-5    | 5     | Dandelion.  |
| Silky do. . . . .                       | „ <i>holosericata</i> . . .                             | 7    | 7-5    | 5     | Sun-cistus, knotgrass.  |
| Small Dusky do. . . .                   | „ <i>incanata</i> . . .                                 | 7    | 9-5    | 6     | { Groundsel, dandelion,<br>knotgrass.                         |
| Lace Border . . . . .                   | „ <i>ornata</i> . . .                                   | 7    | 7-4    | 5, 6  | Marjoram, thyme, mint.  |
| Dotted Bordered<br>Cream Wave . . . . . | „ <i>straminata</i> . . .                               | 7    | 7-5    | 5, 6  | Knotgrass.  |
| Satin do. . . . .                       | „ <i>mancuniata</i> . . .                               | —    | 7      | —     | Do.   |
| Lesser Cream do. . .                    | „ <i>subsericata</i> . . .                              | 7    | 7      | —     | Do.   |
| Sub-angled do. . . .                    | „ <i>immutata</i> . . .                                 | —    | 8-5    | 5     | Do.   |
| Pink do. . . . .                        | „ <i>strigilata</i> . . .                               | 7    | 8-6    | 6     | { Clematis, betony,<br>woundwort, &c.                         |
| Riband do. . . . .                      | „ <i>emutaria</i> . . .                                 | 7    | 7-5    | 5, 6  | Couchgrass.   |
| Plain do. . . . .                       | „ <i>aversata</i> . . .                                 | 7    | 9-5    | 5     | { Nut, primrose, goose-<br>berry, wood avens.                 |
| Portland Riband<br>do. . . . .          | „ <i>inornata</i> . . .                                 | 7    | 8-5    | 6     | Low plants.   |
| Small Scallop . . . .                   | „ <i>degeneraria</i> . . .                              | 7    | 8-4    | 5     | Knotgrass.  |
| Blood Vein . . . . .                    | „ <i>emarginata</i> . . .                               | 7    | 7      | —     | { Convolvulus and bed<br>straws.                              |
| Sharp-angled Pea-<br>cock . . . . .     | { <i>Timandra ama-</i><br><i>taria</i> . . . . . }      | 7    | 9-5    | 5, 6  | Dock, knotgrass.  |
|   | <i>Macaria alternata</i> . .                            | —    | 9      | —     | Sallow, sloe.   |



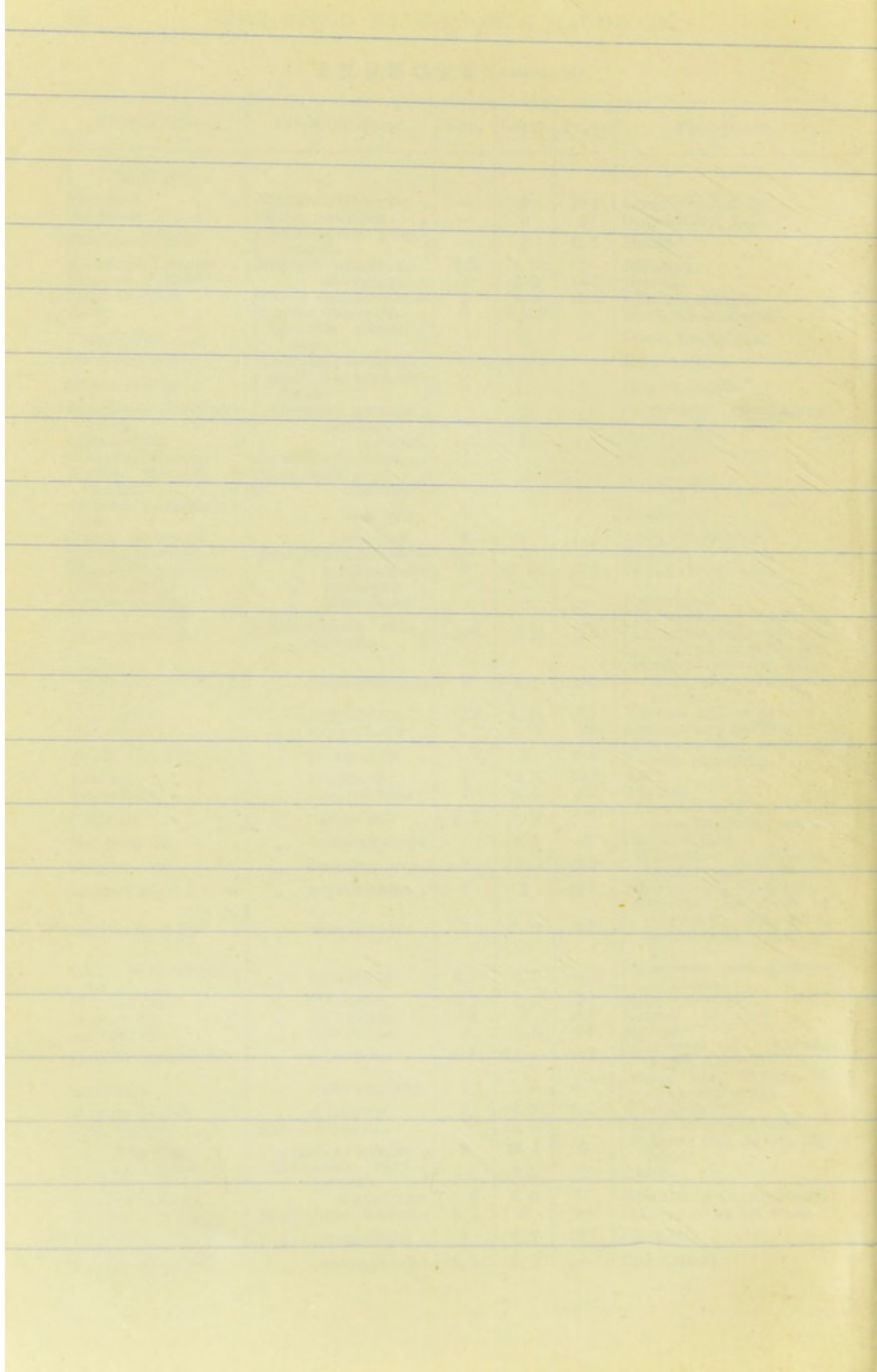
## INSECTS (continued).

| Popular Name.                    | Scientific Name.                            | Ova. | Larva. | Pupa. | Food-plants.  |
|----------------------------------|---|------|--------|-------|---|
| <b>MOTHS.</b>                    |   |      |        |       |   |
| Peacock . . .                    | <i>Macaria liturata</i> .                   | —    | 9      | 10-4  | Larch, Scotch fir.  |
| V. Moth . . .                    | <i>Halia vauaria</i> .                      | —    | 5      | 6     | Gooseberry, &c.   |
| Bordered Grey . . .              | <i>Selidosema plu-</i><br><i>maria</i> .    | —    | 5      | 6, 7  | Heath.  |
| Rannoch Looper . . .             | <i>Fidonia pinetaria</i> .                  | 7-3  | 4, 5   | 5     | Bilberry.   |
| Frosted Yellow . . .             | " <i>conspicua</i> .                        | 7    | 8, 9   | 10-5  | Broom.  |
| Drab Looper . . .                | <i>Minia euphorbiata</i> .                  | 7    | 8, 9   | 10-5  | Cypress spurge.   |
| Belle . . .                      | <i>Sterrhia sacraria</i> .                  | 8    | 6 & 9  | —     | Dock, chamomile.  |
| Purple Bar . . .                 | <i>Lythria purpu-</i><br><i>raria</i> .     | —    | 8      | —     | Dock, knotgrass.  |
| Rest Harrow . . .                | <i>Aplasta ononaria</i> .                   | —    | 4 & 9  | —     | Rest-harrow.  |
| Grass Wave . . .                 | <i>Aspilates strigil-</i><br><i>laria</i> . | 6    | 8-5    | 5     | Broom, heath.   |
| Magpie, or Currant<br>Moth . . . | <i>Abraxas grossu-</i><br><i>lariata</i> .  | —    | 5      | 6     | { Currant, gooseberry,<br>sloe, &c.                                       |
| Clouded do. . .                  | " <i>ulmata</i> .                           | —    | 9      | —     | Wych elm.   |
| Scorched Carpet . . .            | <i>Ligdia adustata</i> .                    | 5, 6 | 6, 7   | 9-4   | Spindle.  |
| Yellow Ringed<br>Carpet . . .    | <i>Larentia rufi-</i><br><i>cinctata</i> .  | —    | 5      | 6     | Saxifrage.  |
| Striped Twin Spot<br>do. . .     | " <i>salicata</i> .                         | —    | —      | —     | Bedstraw.   |
| Beech Green do. . .              | " <i>olivata</i> .                          | 8    | 10-4   | 5, 6  | Hedge bedstraw.   |
| Barred Rivulet . . .             | <i>Emmelesia tæniata</i> .                  | —    | 8      | —     | Holly (?)   |
| Single Barred do. . .            | " <i>unifasciata</i> .                      | 8    | 9, 10  | 10-6  | Wood chickweed.   |
| Heath Rivulet. . .               | " <i>ericetata</i> .                        | —    | —      | —     | —   |
| Pretty Pinion . . .              | " <i>blandiata</i> .                        | —    | 9      | —     | Eyebright.  |
| Lime-Speck Pug . . .             | <i>Eupithecia cen-</i><br><i>taureata</i> . | 5, 6 | 8, 9   | 9-5   | { Flowers and seeds of<br>yarrow, ragwort, gol-<br>den-rod, angelica, &c. |
| Bordered Lime<br>Speck do. . .   | " <i>succenturiata</i> .                    | 6    | 8, 9   | 9-7   | { Seeds of yarrow, mug-<br>wort, wormwood, va-<br>lerian.                 |
| Rufous do. . .                   | " <i>subfulvata</i> .                       | 6, 7 | 9, 10  | 9-7   | Yarrow and ox-eye.  |
| Freyer's do. . .                 | " <i>arceuthata</i> .                       | 6, 7 | 9, 10  | 9-7   | Juniper and savine.   |
| Triple Spotted do. . .           | " <i>trisignata</i> .                       | 6, 7 | 9      | 9-6   | { Flowers and seeds of<br>wild angelica.                                  |
| Ash do. . .                      | " <i>fraxinata</i> .                        | 8    | 8, 9   | 10-4  | Ash.  |
| Ribbed do. . .                   | " <i>constrictata</i> .                     | 7    | 8, 9   | 8-6   | Thyme.  |
| Plain do. . .                    | " <i>subnotata</i> .                        | 6, 7 | 8, 9   | 9-6   | { Flowers and seeds of<br>goosefoot and orache.                           |
| Harebell do. . .                 | " <i>campanulata</i> .                      | 7    | 8, 9   | 9-7   | Harebell, &c.   |
| Common do. . .                   | " <i>vulgata</i> .                          | 5    | 7 & 9  | 8-5   | { Willow, hawthorn,<br>golden-rod, ragwort.                               |
| Large Pale do. . .               | " <i>expallidata</i> .                      | 7    | 9      | 9-7   | Flowers of golden-rod.  |
| Wormwood do . . .                | " <i>absynthiata</i> .                      | 7    | 9, 10  | 9-7   | { Flowers and seeds of<br>ragwort, mugwort,<br>golden-rod, yarrow,<br>&c. |
| Small Wormwood<br>do. . .        | " <i>minutata</i> .                         | 6, 7 | 8, 9   | 5-7   | { Scabious, and flowers<br>of heath.                                      |
| Slender do. . .                  | " <i>tenuiata</i> .                         | 6, 7 | 3, 4   | 5-7   | Sallow catkins.   |
| Downy do. . .                    | " <i>subciliata</i> .                       | 8-4  | 5      | 5-7   | Maple.  |
| Juniper do. . .                  | " <i>sobrinata</i> .                        | 7    | 5, 6   | 5-7   | Juniper.  |
| Double Striped do. . .           | " <i>pumilata</i> .                         | 6-8  | 6 & —  | 8-6   | { Flowers of chervil,<br>gorse, clematis, &c.                             |
| Green do. . .                    | " <i>rectangulata</i> .                     | 7    | 4, 5   | 5, 6  | { Buds and flowers of<br>apple and crab.                                  |
| Manchester do. . .               | " <i>debiliata</i> .                        | 7    | 4, 5   | 6, 7  | Whortleberry.   |
| Pine Carpet . . .                | <i>Thera firmata</i> .                      | —    | 4, 5   | —     | Larch, and Scotch fir.  |
| July Highflyer . . .             | <i>Ypsipetes clutata</i> .                  | 7    | 10, 5  | 6     | { Sallow, nut, alder, bil-<br>berry.                                      |
| Blue Bordered<br>Carpet . . .    | <i>Melanthia rubi-</i><br><i>ginata</i> .   | 7-4  | 5, 6   | 6     | Alder.  |
| Beautiful do. . .                | " <i>albicillata</i> .                      | 5, 6 | 8, 9   | 8-5   | Bramble and raspberry.  |
| Argent and Sable . . .           | <i>Melanippe hastata</i> .                  | 6, 7 | 8      | 9-6   | Birch and sweet gale.   |
| Bordered Chalk<br>Carpet . . .   | " <i>procellata</i> .                       | 7    | 8, 9   | 10-5  | Clematis.   |
| Sharp-angled do. . .             | " <i>unangulata</i> .                       | 6, 7 | 7, 8   | —     | Chickweed.  |











## INSECTS (continued).

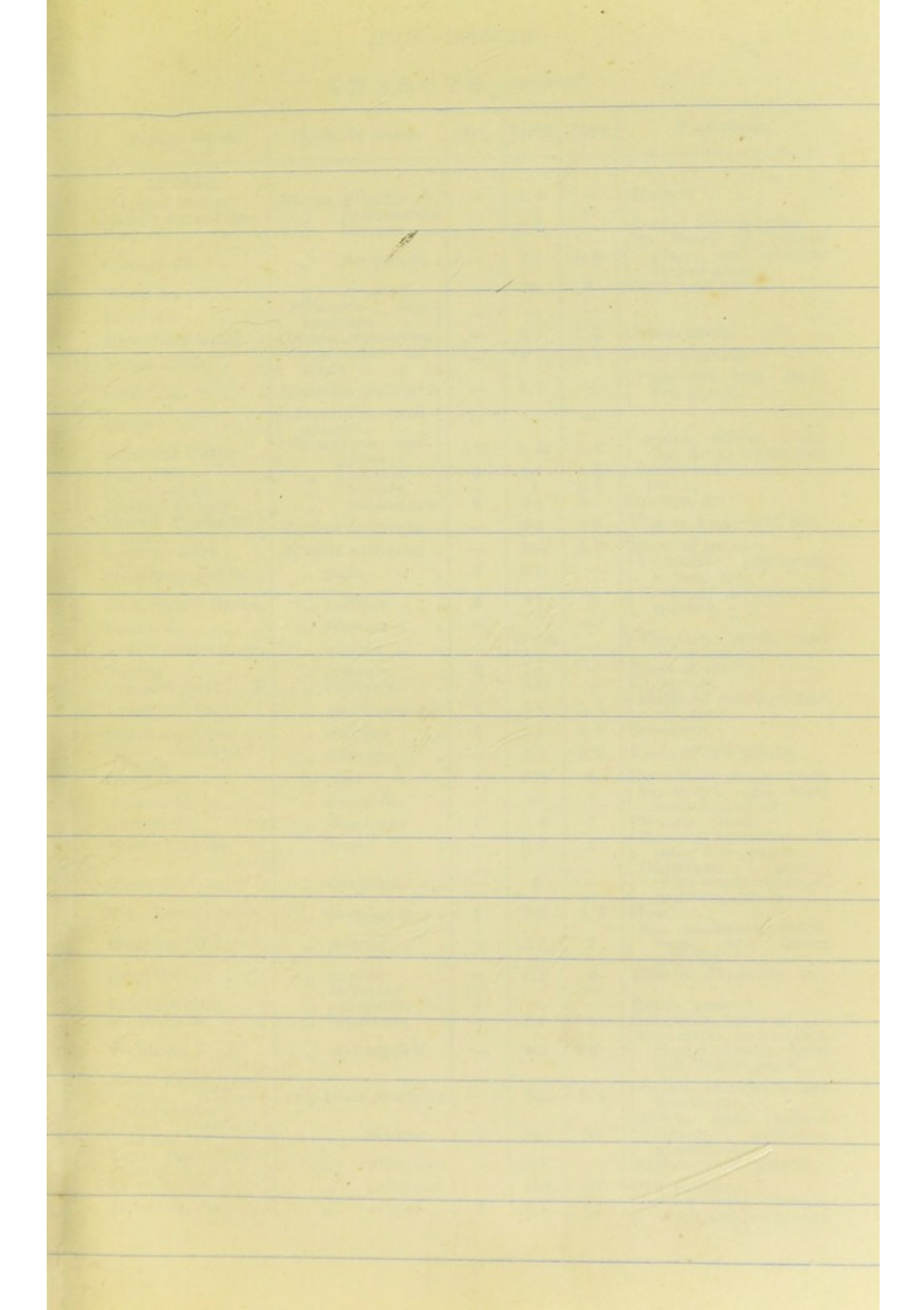
| Popular Name.                | Scientific Name.                               | Ova.  | Larva.   | Pupa.   | Food-plants.  |
|------------------------------|--|-------|----------|---------|---|
| <b>MOTHS.</b>                |  |       |          |         |   |
| Wood Carpet . . .            | <i>Melanippe rivata</i> .                      | —     | 6 & 9    | —       | Hedge bedstraw.                                     |
| Common do. . .               | " <i>subtristata</i> .                         | —     | 6 & 9    | 6 & 9-4 | Do.   |
| Silver Ground do. .          | " <i>montanata</i> .                           | 6-8   | 10-3     | 4, 5    | Primrose.   |
| Red Barred do. . .           | <i>Coremia munitata</i> .                      | 6     | 10-3     | 4, 5    | Groundsel.  |
| Large do. . . . .            | " <i>quadrifasciata</i> .                      | —     | 4, 5 & 8 | —       | { Hawthorn, white dead-nettle, knapweeds.           |
| Yellow Shell . . .           | { <i>Camptogramma</i> }<br><i>bilineata</i> }  | —     | 4        | —       | { Dock, chickweed, and grasses.                     |
| Gem . . . . .                | " <i>fluviata</i> .                            | 7     | 8        | 9       | { Spotted persicaria, groundsel.                    |
| Fern . . . . .               | { <i>Phibalapteryx</i> }<br><i>tersata</i> }   | —     | 9        | —       | Clematis.   |
| Oblique Striped Carpet . . . | " <i>lignata</i> .                             | 7 & 9 | 8 & 9-4  | —       | White water bedstraw.                               |
| Brown Scallop B . . .        | <i>Scotosia vetulata</i> .                     | 7-3   | 6        | 6, 7    | Buckthorn.  |
| Buckthorn Umber . .          | " <i>rharnnata</i> .                           | —     | 5, 6     | 6       | Buckthorn, birch.                                   |
| Scallop Shell . . .          | " <i>undulata</i> .                            | —     | 9, 10    | —       | Poplar, willow.                                     |
| Short Cloak Carpet .         | <i>Cidaria picata</i> .                        | 7     | 8        | 9-5     | Chickweed.  |
| Beautiful Marsh do. .        | " <i>sagittata</i> .                           | 7     | 8        | 10-5    | Meadow rue.   |
| Dark Marbled do. . .         | " <i>immanata</i> .                            | 8-3   | 5-7      | 7-8     | { Birch, alder, bilberry, strawberry.               |
| Netted do. . . . .           | " <i>reticulata</i> .                          | —     | —        | —       | —   |
| Phoenix . . . . .            | " <i>prunata</i> .                             | 7-4   | 5, 6     | 6       | { Sloe, currant, gooseberry.                        |
| Agate . . . . .              | " <i>testata</i> .                             | 8-4   | 5        | 6       | Birch, poplar, willow.                              |
| Clouded Spinach . .          | " <i>populata</i> .                            | 8-4   | 5        | 6       | { Poplar, willow, bilberry, whortleberry.           |
| Clouded Yellow . . .         | " <i>fulvata</i> .                             | 7     | 5        | 6       | Dog-rose.   |
| Straw Spinach . . .          | " <i>pyraliata</i> .                           | 8-3   | 5        | 6       | { Hawthorn, and bedstraws.                          |
| Spinach . . . . .            | " <i>dotata</i> .                              | 8-4   | 4, 5     | 5       | Black and red currant.                              |
| Dark do. . . . .             | <i>Pelurga comitata</i> .                      | 7     | 8, 9     | 10-6    | Goosefoot.  |
| Small Mallow . . .           | { <i>Eubolia mensu-</i> }<br><i>varia</i> }    | —     | 6        | —       | Grasses.  |
| Chalk Carpet . . .           | " <i>bipunctaria</i> .                         | 7     | 10-5     | 6       | Trefoils and clovers.                               |
| Oblique Striped . .          | " <i>lineolata</i> .                           | 5 & 8 | 5, 6 & 9 | 10-4    | Yellow bedstraw.                                    |
| Manchester . . . .           | <i>Carsia imbutata</i> .                       | 7—    | 6        | 6, 7    | { Cranberry, whortleberry.                          |
| Treble Barred . . .          | <i>Lithostege griseata</i> .                   | 6     | 7        | —       | Seed-pods of flaxweed.                              |
| Olive Drab . . . .           | <i>Chesias obliquaria</i> .                    | —     | 7-9      | 8-4     | Broom.  |
| Chevron . . . . .            | { <i>Tanagra chæro-</i> }<br><i>phyllata</i> } | 7-2   | 5        | 6       | Chervil and earth-nut.                              |
| Chimney Sweep . .            | <i>Dicranura furcula</i> .                     | 6     | 7-9      | 9-5     | Sallow, willow, poplar.                             |
| Kitten . . . . .             | " <i>bifida</i> .                              | 6     | 7-9      | 9-4     | Poplar.   |
| Broad Barred do. . .         | <i>Stauropus fagi</i> .                        | 7     | 8, 9     | 10-5    | Beech, oak, birch, nut.                             |
| Lobster . . . . .            | <i>Pygæra bucephala</i> .                      | 6     | 7-9      | 10-5    | { Lime, elm, willow, sallow, oak, beech, nut.       |
| Buff-tip . . . . .           | <i>Clostera curtula</i> .                      | 4 & 7 | 5 & 8, 9 | 6 & 9-3 | Poplar, willow.                                     |
| Chocolate Tip . . .          | <i>Ptilodontispalpina</i> .                    | —     | 7 & 9    | 10-6    | { Willow, willow, birch, poplar.                    |
| Pale Prominent . .           | { <i>Notodonta dictæ-</i> }<br><i>oides</i> }  | 6     | 7-9      | 10-5    | Birch.  |
| Small Swallow do. .          | " <i>trilophus</i> .                           | —     | 7-9      | —       | Poplar and birch.                                   |
| Dark do. . . . .             | <i>Thyatira derasa</i> .                       | —     | 8, 9     | 10-5    | Bramble and hawthorn.                               |
| Buff Arches . . . .          | " <i>batis</i> .                               | —     | 8, 9     | 10-5    | Bramble and raspberry.                              |
| Peach Blossom . . .          | { <i>Cymatophora du-</i> }<br><i>plaris</i> }  | 6, 7  | 8, 9     | 10-5    | Birch.  |
| Lesser Satin Carpet .        | " <i>fluctuosa</i> .                           | 6, 7  | 9, 10    | 10-5    | Do.   |
| Satin Carpet . . . .         | or   | —     | 6-8      | 9, 10   | Poplar.   |
| Poplar Lutestring B .        | { <i>Bryophila glan-</i> }<br><i>difera</i> }  | 9     | 10-5     | 6       | Lichens.  |
| Marbled Green . . .          | " <i>verla</i> .                               | —     | 10-5     | 5, 6    | Do.   |
| Marbled Beauty . .           | " <i>algæ</i> .                                | —     | —        | —       | Do.   |
| Scarce Marbled . .           | <i>Diphthera Orion</i> .                       | 6     | 7-9      | 10-5    | Oak, birch.   |
| Green . . . . .              | <i>Acronycta tridens</i> .                     | 7     | 8-10     | 10-5    | { Willow, willow, hawthorn, mountain ash, sloe, &c. |
| Scarce Marvel-de-jour .      |  |       |          |         |   |
| Dark Dagger . . . .          |  |       |          |         |   |



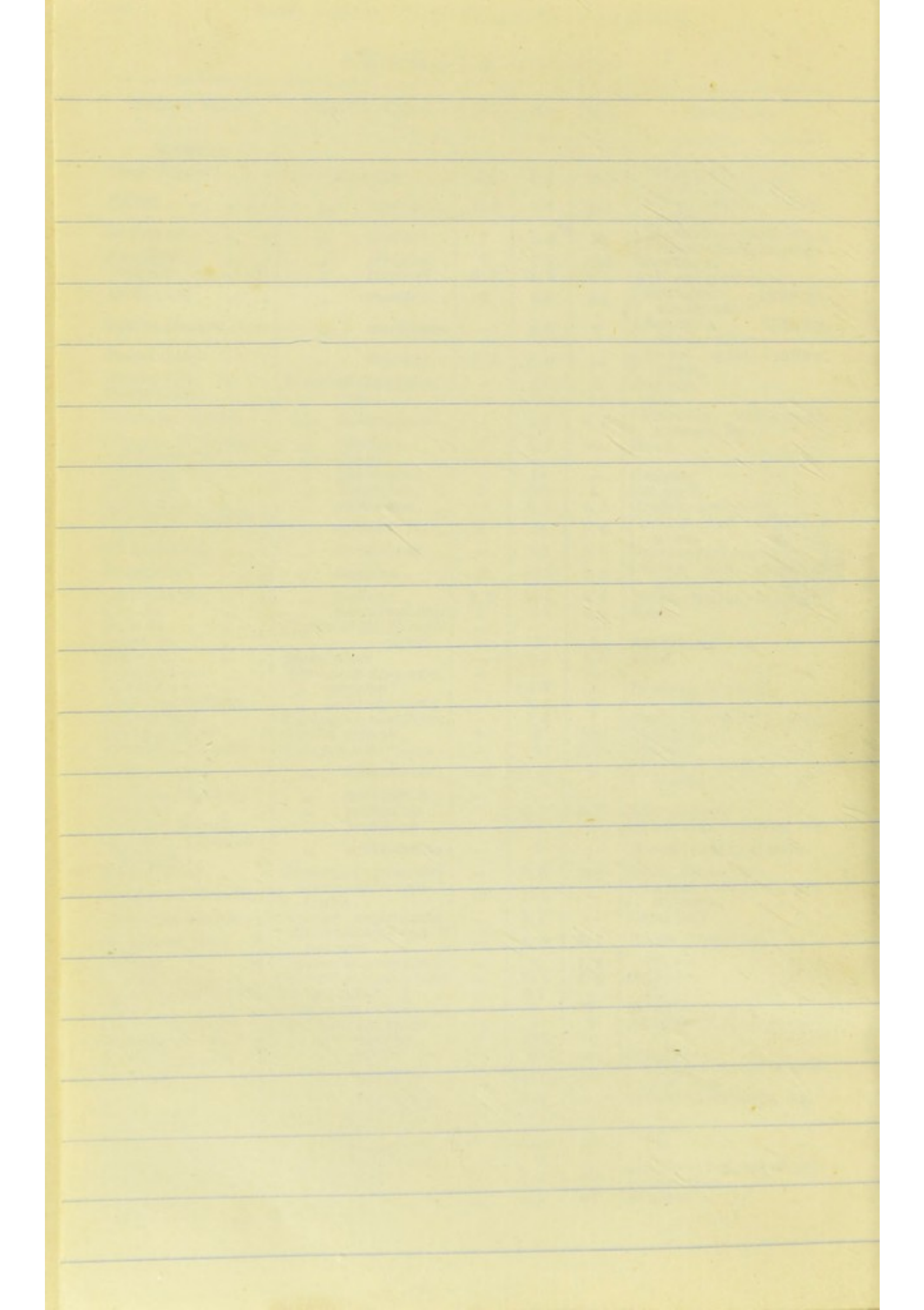
## INSECTS (continued).

| Popular Name.                     | Scientific Name.                     | Ova. | Larva.      | Pupa. | Food-plants.                                   |
|-----------------------------------|--------------------------------------|------|-------------|-------|--|
| <b>MOTHS.</b>                     |                                      |      |             |       |  |
| Grey Dagger . . .                 | <i>Acronycta psi</i> . . .           | 6, 7 | 8, 9        | 10-5  | { Poplar, elm, lime, hawthorn, and pear.       |
| Miller . . . . .                  | „ <i>leporina</i> . . .              | 5, 6 | 7-9         | 10-5  | { Birch, poplar, willow, alder.                |
| Sycamore . . . . .                | „ <i>aceris</i> . . .                | 7    | 8, 9        | 10    | { Sycamore, maple, birch, horse-chestnut, oak. |
| Streaked . . . . .                | „ <i>strigosa</i> . . .              | 6    | 7-9         | 10-5  | Hawthorn.                                      |
| Coronet . . . . .                 | „ <i>ligustri</i> . . .              | 6, 7 | 8, 9        | 10-5  | Ash and privet.                                |
| Knotgrass . . . . .               | „ <i>rumicis</i> . . .               | 6    | 6-8         | 9-4   | { Bramble, plantain, knotgrass.                |
| Scarce Dagger . . .               | „ <i>auricoma</i> . . .              | —    | 6, 7        | 7     | { Bramble, bilberry, birch, oak.               |
| Sweet Gale . . . . .              | „ <i>myricæ</i> . . .                | 6, 7 | 8, 9        | —     | { Sweet gale, willow, birch.                   |
| Bright Eye . . . . .              | <i>Leucania conigera</i> . . .       | —    | 3-5         | 5     | Grasses.                                       |
| Double-line . . . . .             | „ <i>turca</i> . . .                 | —    | 2, 3        | 4-5   | Do.  |
| Ochreous Brown . . .              | „ <i>lithargyria</i> . . .           | —    | 1-5         | 5, 6  | { Plantain, chickweed, grasses, &c.            |
| Obscure Wainscot . . .            | „ <i>obsoleta</i> . . .              | 7    | 8, 9        | —     | Reed.  |
| Confluent do. . . . .             | „ <i>loreyi</i> . . .                | —    | —           | —     | Grasses.                                       |
| Southern do. . . . .              | „ <i>putrescens</i> . . .            | —    | 10          | —     | Sea-reed.                                      |
| Shore do. . . . .                 | „ <i>littoralis</i> . . .            | 7    | 8-5         | 5     | Grasses and reed.                              |
| Striped do. . . . .               | „ <i>pudorina</i> . . .              | —    | 3, 4        | 4, 5  | { Sorrel and cocksfoot grass.                  |
| Shoulder Striped do. . . . .      | „ <i>comma</i> . . .                 | 6    | 8-4         | 5, 6  | { Grasses and reed.                            |
| Streaked do. . . . .              | „ <i>straminea</i> . . .             | —    | 2-4         | 5, 6  | { Sedge and cocksfoot grass.                   |
| Smoky do. . . . .                 | „ <i>impura</i> . . .                | 7    | 10-5        | 5, 6  | <i>Deschampsia cæspitosa</i> .                 |
| Common do. . . . .                | „ <i>pallens</i> . . .               | 8, 9 | 10-4        | 5, 6  | Reed.  |
| Fen do. . . . .                   | „ <i>phragmitidis</i> . . .          | 7    | 8-5         | 5, 6  | Sea lyme grass.                                |
| Pale do. . . . .                  | <i>Tapinostola Bondii</i> . . .      | —    | —           | —     | Reed.  |
| Coast do. . . . .                 | „ <i>elymi</i> . . .                 | —    | 5           | 6     | Reed.  |
| Silky do. . . . .                 | <i>Senta ulvæ</i> . . .              | —    | 9-4         | 5, 6  | In stems of reed.                              |
| Lineated do. . . . .              | <i>Nonagria despecta</i> . . .       | —    | —           | —     | Do.  |
| Nerved do. . . . .                | „ <i>neurica</i> . . .               | —    | 4-6         | —     | Roots of coltsfoot, rush.                      |
| Twin Spotted do. . . . .          | „ <i>geminipuncta</i> . . .          | —    | 5, 6        | 7     | Low plants.                                    |
| Golden Ear . . . . .              | <i>Hydræcia nictitans</i> . . .      | —    | 5, 6        | 7     | Grasses.                                       |
| Clouded Dart . . . . .            | <i>Axylia putris</i> . . .           | 7    | 8           | 10-5  | { Roots of grass and low plants.               |
| Bordered Brindle . . . . .        | <i>Xylophasia rurea</i> . . .        | —    | 4           | 4, 5  | Low plants.                                    |
| Light Arches . . . . .            | „ <i>lithoxylea</i> . . .            | —    | 5, 6        | 6     | Grasses.                                       |
| Reddish Light do. . . . .         | „ <i>sublustris</i> . . .            | —    | —           | —     | { Roots of grass and low plants.               |
| Dark do. . . . .                  | „ <i>polyodon</i> . . .              | —    | 4, 5        | 6, 7  | Low plants.                                    |
| Clouded Brindle . . . . .         | „ <i>hepatica</i> . . .              | —    | 8-4         | 5     | Chickweed, grasses, &c.                        |
| Slender Clouded Brindle . . . . . | „ <i>scolopacina</i> . . .           | —    | 5           | —     | Wood rushes, grasses.                          |
| Bird's Wing . . . . .             | <i>Dipterygia pinastri</i> . . .     | —    | 8, 9        | 10-5  | Dock, sorrel, &c.                              |
| Feathered Brindle . . . . .       | { <i>Aporophylla australis</i> . . . | 10   | 10-4        | —     | { Annual meadow grass, succory.                |
| Bordered Gothic . . . . .         | <i>Neuria saponaria</i> . . .        | —    | 7, 8        | —     | Campions.                                      |
| Feathered do. . . . .             | { <i>Heliophobus popularis</i> . . . | —    | 4, 5        | 6, 7  | Roots of grasses.                              |
| Antler . . . . .                  | <i>Charæas graminis</i> . . .        | —    | 6           | 7, 8  | Do.  |
| Feathered Ear . . . . .           | <i>Pachetra leucophæa</i> . . .      | —    | 10-4        | 5, 6  | Grasses.                                       |
| Straw Underwing E . . . . .       | <i>Cerigo cytherea</i> . . .         | —    | 9-4         | —     | Do.  |
| Exile . . . . .                   | <i>Crymodes exilis</i> . . .         | —    | 6           | 6     | Meadow grasses.                                |
| Dusky Nutmeg . . . . .            | <i>Mamestra abjecta</i> . . .        | —    | 5           | 6     | At roots of couchgrass.                        |
| Nutmeg . . . . .                  | „ <i>anceps</i> . . .                | —    | 12-2        | —     | Grasses.                                       |
| Dusky Brocade . . . . .           | „ <i>furva</i> . . .                 | —    | 6           | —     | { Cabbage, dock, goosefoot, &c.                |
| Cabbage . . . . .                 | „ <i>brassicæ</i> . . .              | —    | 5, 6 & 8, 9 | 9-4   | Spotted persicaria, &c.                        |
| Dot . . . . .                     | „ <i>persicaria</i> . . .            | 7    | 8, 9        | —     | Grasses.                                       |
| Union Rustic . . . . .            | <i>Apamea connexa</i> . . .          | —    | —           | —     | Do.  |
| Brown Pinion . . . . .            | „ <i>gemina</i> . . .                | 7    | 8-4         | 5     | { In flower-stems of yellow flag.              |
| Uniform Rustic . . . . .          | „ <i>unanimis</i> . . .              | —    | 9-4         | 4-6   | Grasses.                                       |
| Double Lobed . . . . .            | „ <i>ophiogramma</i> . . .           | —    | —           | —     | Do.  |
| Crescent Rustic . . . . .         | „ <i>fibrosa</i> . . .               | —    | 4, 5        | 5-7   | { In flower-stems of yellow flag.              |
| Common do. . . . .                | „ <i>oculea</i> . . .                | —    | 4, 5        | 5-7   | Grasses.                                       |











## INSECTS (continued).

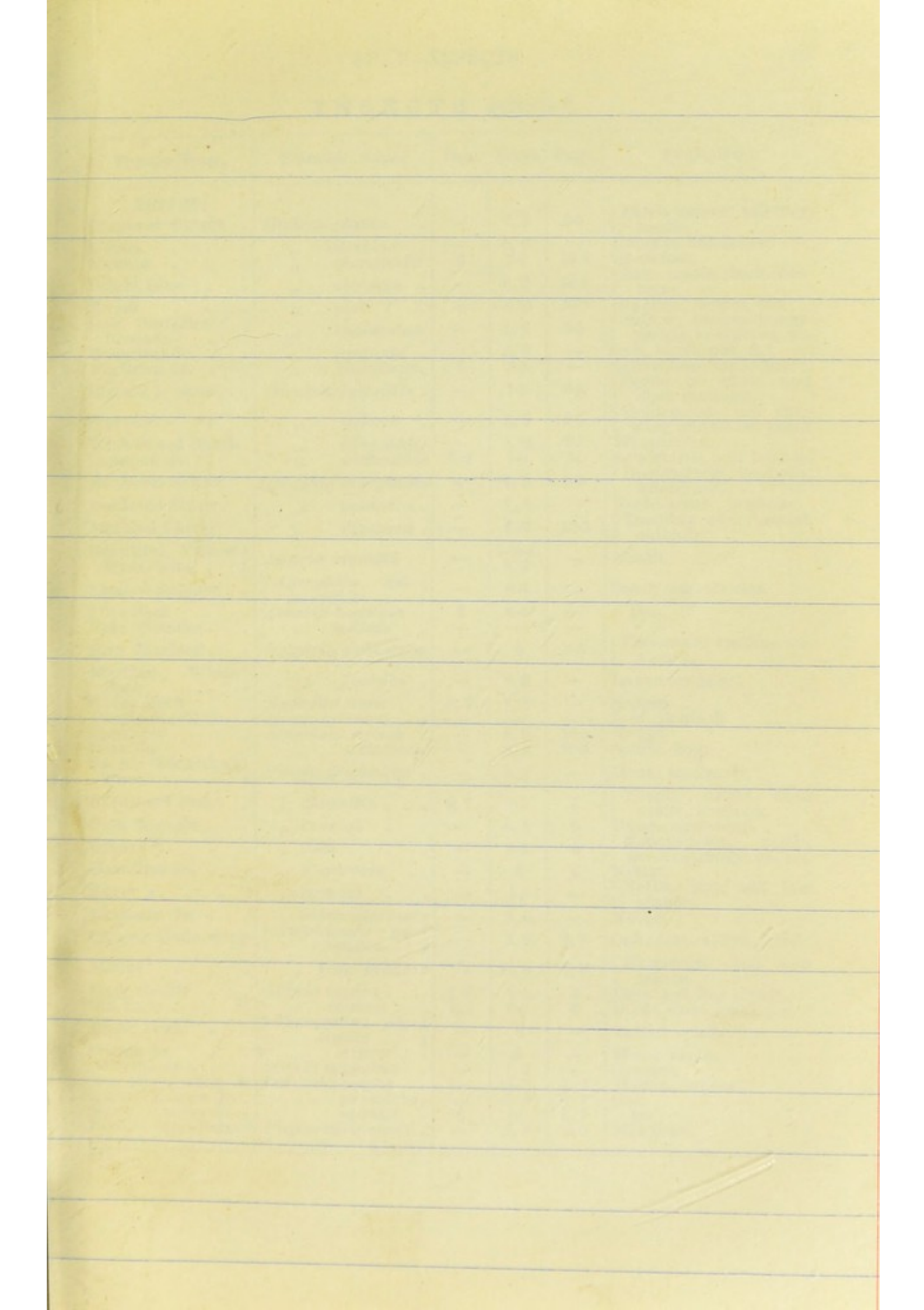
| Popular Name.                         | Scientific Name.                             | Ova. | Larva.         | Pupa. | Food-plants.  |
|---------------------------------------|--|------|----------------|-------|---|
| <b>MOTHS.</b>                         |  |      |                |       |   |
| Marbled Minor                         | <i>Miana strigilis</i>                       | —    | 3, 4           | —     | Grasses.  |
| Middle Barred do.                     | " <i>fasciuncula</i>                         | —    | —              | —     |   |
| Rosy do.                              | " <i>literosa</i>                            | —    | 5, 6           | —     | Slender foxtail grass.  |
| Cloaked do.                           | " <i>furuncula</i>                           | —    | 4-6            | 5, 6  | { In stems of fescue-grass and slender foxtail grass.         |
| Wood do.                              | " <i>arcuosa</i>                             | —    | 5              | 6     | Turfy hair grass.   |
| Least do.                             | { <i>Photedes capi-</i><br><i>tiuncula</i> } | —    | —              | —     |   |
| Haworth's Minor                       | <i>Celena Haworthii</i>                      | —    | 6, 7           | 7, 8  | Cotton grass.   |
| Triple Lines                          | { <i>Grammesia tri-</i><br><i>linea</i> }    | —    | 4, 5           | 5, 6  | Great plantain.   |
| Gold Line                             | <i>Hydrilla palustris</i>                    | —    | 7, 8           | —     | { Plantains and other low plants.                             |
| Dingy                                 | { <i>Acosmetia cali-</i><br><i>ginosa</i> }  | —    | —              | —     |   |
| Bordered Rustic                       | { <i>Caradrina mor-</i><br><i>pheus</i> }    | 7, 8 | 9, 10          | 5, 6  | { Orpine, sallow, bram-ble, dock, teasle, &c.                 |
| Dotted do.                            | " <i>alsines</i>                             | 8    | 9-4            | 5, 6  | Chickweed.  |
| Powdered do.                          | " <i>blanda</i>                              | —    | 4              | 5, 6  | Do.   |
| Mottled Beauty                        | " <i>cubicularis</i>                         | 8    | 9-4            | 5-7   | Grasses, &c.  |
| Brown Feathered Rustic                | <i>Rusina tenebrosa</i>                      | —    | 9-3            | 4-6   | Violets, knotgrass, &c.                                       |
| Archer's Dart                         | <i>Agrotis valligera</i>                     | —    | 10-5           | 5, 6  | Roots of grasses.   |
| Shuttle-shaped do.                    | " <i>puta</i>                                | 8    | 9-12           | —     | { Dandelion, knotgrass, lettuce, &c.                          |
| Dark Sword Grass.                     | " <i>suffusa</i>                             | 4    | 5-7            | 8     | { Roots of lettuce and spinach.                               |
| Scarce do.                            | " <i>fennica</i>                             | —    | —              | —     |   |
| Pearly Underwing.                     | " <i>saucia</i>                              | —    | 11-1 &<br>7, 8 | —     | { Plantain, dock, and other low plants.                       |
| Turnip                                | " <i>segetum</i>                             | 6    | 7-4            | —     | Roots of turnip.  |
| Crescent Dart. E                      | " <i>lunigera</i>                            | —    | 8-10           | —     | Knotgrass.  |
| Heart and Dart                        | " <i>exclamationis</i>                       | 6    | 9-5            | 5, 6  | { Roots of cabbage, turnip, &c.                               |
| Heart and Club                        | " <i>corticea</i>                            | 6    | 8-4            | 5, 6  | Goosefoot.  |
| Light Feathered Rustic                | " <i>cinerea</i>                             | —    | 9-5            | 5, 6  | Roots of low plants.  |
| Cloud Dart                            | " <i>ripae</i>                               | —    | 8-10           | 6     | Hound's-tongue on coast.                                      |
| Veined do.                            | " <i>cursoria</i>                            | —    | 5-7            | 7     | { Sandwort, and leafy branched spurge.                        |
| Garden do.                            | " <i>nigricans</i>                           | 7    | 5, 6           | 7     | Plantain, clover.   |
| White Line do.                        | " <i>tritici</i>                             | —    | 6, 7           | 7     | { Roots of sandwort and other low plants.                     |
| Eagle do.                             | " <i>aquilina</i>                            | —    | 5              | —     | { Bedstraw, poppy, chickweed, cabbage, plantain, clover.      |
| True Lover's Knot.                    | " <i>porphyrea</i>                           | 7    | 8-5            | 5, 6  | Heather.  |
| Portland Dart.                        | " <i>præcox</i>                              | —    | 5-7            | 7     | { Sea sandwort, chickweed, and dwarf willows.                 |
| Stout do.                             | " <i>ravida</i>                              | —    | 4, 5           | 6     | Thistles, dandelion, &c.                                      |
|                                       | " <i>helvetina</i>                           | —    | —              | —     |   |
| Dotted Rustic.                        | " <i>pyrophila</i>                           | —    | 8              | —     | Heath, grasses.   |
| Northern do.                          | " <i>lucernea</i>                            | —    | 2-4            | 6     | Dandelion, harebell.  |
| Welsh do.                             | " <i>Ashworthii</i>                          | —    | 9-5            | 6     | { Sun cistus, hawkweed, thyme, heath, harebell, fescue-grass. |
| Small Broad Bordered Yellow Underwing | <i>Triphaena janthina</i>                    | —    | 8-5            | 5, 6  | { Broom, chickweed, and low plants.                           |
| Broad Bordered do. do.                | " <i>fimbria</i>                             | 9    | 10-4           | 5-7   | { Birch, oak, sallow, broom, primrose, grasses, &c.           |
| Least Broad Bordered do. do.          | " <i>interjecta</i>                          | —    | 3, 4           | —     | Mallow, dock, grasses.  |
| Crescent do. do.                      | " <i>subsequa</i>                            | —    | 10-4           | 5-7   | Low plants.   |
| Lesser do. do.                        | " <i>orbona</i>                              | 7    | 8-5            | 5-7   | { Sallow buds, broom, nettle, and low plants.                 |



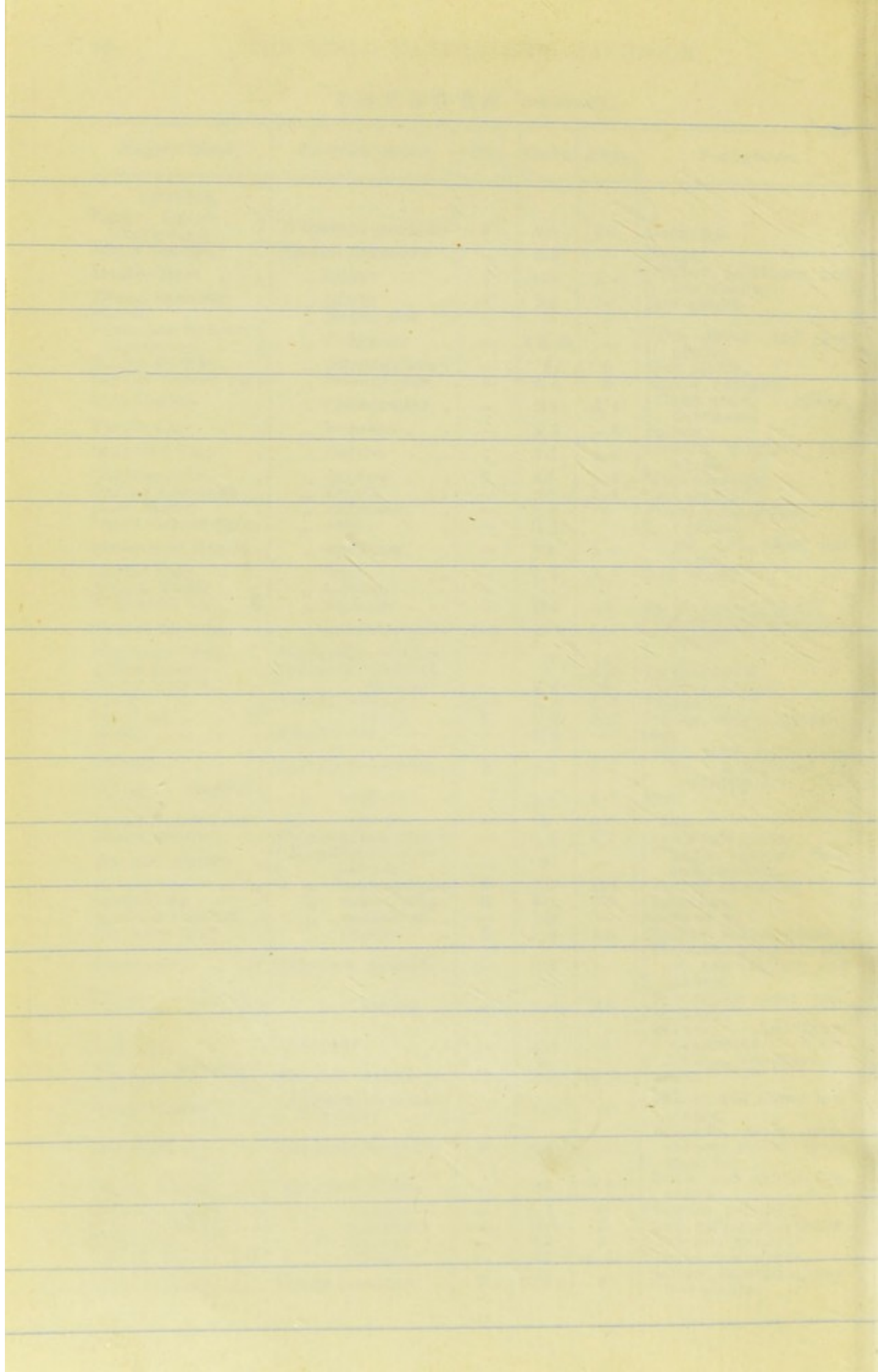
## INSECTS (continued).

| Popular Name.                | Scientific Name.                                | Ova. | Larva. | Pupa. | Food-plants.  |
|------------------------------|---|------|--------|-------|---|
| <b>MOTHS.</b>                |   |      |        |       |   |
| Large Yellow Underwing .     | <i>Triphaena pronuba</i>                        | 7    | 8-5    | 5-7   | Dock, &c.   |
| Black Spotted .              | <i>Noctua depuncta</i>                          | —    | 4, 5   | —     | Sorrel.   |
| Double Dart .                | „ <i>augur</i> .                                | 7    | 8-5    | 5, 6  | { Sallow, hawthorn, and low plants.                       |
| Flame Shoulder .             | „ <i>plecta</i> .                               | 6    | 7-4    | 5-7   | Low plants.   |
| Flame .                      | „ <i>flammatra</i> .                            | —    | —      | —     |   |
| Setaceous Hebrew Character . | „ <i>C-nigrum</i> .                             | —    | 4 & 10 | —     | { Pea - stems and low plants.                             |
| Scarce Rustic .              | „ <i>ditrapezium</i> .                          | —    | 5      | 6     | Low plants.   |
| Double Square Spot .         | „ <i>triangulum</i> .                           | —    | 4, 5   | 6     | Sallow, bramble.  |
| Clay Rustic .                | „ <i>rhomboidea</i> .                           | —    | 9-5    | 6, 7  | { Chickweed, sallow, hawthorn.                            |
| Purple Clay .                | „ <i>brunnea</i> .                              | —    | 4, 5   | 5, 6  | Sallow.   |
| Ingrailed Clay .             | „ <i>festiva</i> .                              | 7    | 7-5    | 5, 6  | { Sallow, foxglove, violet, &c.                           |
| Confluent do. .              | „ <i>conflua</i> .                              | 7    | 8-5    | 5, 6  | Moss campion.   |
| Barred Chestnut .            | „ <i>Dahlia</i> .                               | —    | 9-5    | 5, 6  | Low plants.   |
| Rosy Marsh .                 | „ <i>subrosea</i> .                             | —    | 5, 6   | 6     | Sweet gale, sallow.                                       |
| Small Square Spot .          | „ <i>rubi</i> .                                 | —    | 6, 7   | —     | Low plants.   |
| Six-striped Rustic .         | „ <i>umbrosa</i> .                              | —    | 8-5    | 5, 6  | { Dock and other low plants.                              |
| Dotted Clay .                | „ <i>baja</i> .                                 | —    | 4, 5   | 5, 6  | Low plants.   |
| Scotch Rustic .              | „ <i>sobrina</i> .                              | —    | —      | —     |   |
| Neglected do. . E            | „ <i>neglecta</i> .                             | —    | 10-5   | 5-7   | Birch, sallow, heath.                                     |
| Square Spot do. .            | „ <i>xanthographa</i>                           | 8, 9 | 10-5   | 6, 7  | { Plantain and many low plants.                           |
| Mountain Drab .              | <i>Pachnobia alpina</i> .                       | —    | —      | —     |   |
| Allied Rustic .              | <i>Orthosia suspecta</i> .                      | —    | 5      | 6, 7  | Poplar, birch.  |
| Dingy Shears .               | „ <i>upsilon</i> .                              | —    | 5, 6   | 6     | Willow, poplar.   |
| Olive .                      | <i>Tethea subtusa</i> .                         | 7, 8 | 4, 5   | 6, 7  | Poplar.   |
| Small do. . E                | „ <i>retusa</i> .                               | 9    | 5, 6   | 6, 7  | Poplar, willow, sallow.                                   |
| Heart .                      | <i>Dicycla Oo</i> .                             | —    | 5, 6   | —     | Oak.  |
| Dunbar .                     | <i>Cosmia trapezina</i> .                       | 8    | 4-6    | 6, 7  | { Oak, birch, hornbeam, &c. A cannibal in confinement.    |
| White Spotted } Pinion .     | „ <i>diffinis</i> .                             | —    | 5, 6   | 6, 7  | Elm.  |
| Lesser Spotted do. .         | „ <i>affinis</i> .                              | —    | 5      | 6, 7  | Do.   |
| Dusky Sallow .               | <i>Eremobia ochroleuca</i>                      | —    | 5, 6   | 6, 7  | Cock's-foot grass.  |
| Marbled Shears .             | { <i>Dianthæcia irre-</i><br><i>gularis</i> . } | —    | 8      | —     | { Viper's bugloss, Spanish catchfly.                      |
| Tawny do. .                  | „ <i>carpophaga</i>                             | 6    | 7-9    | 10-4  | Seeds of campions.  |
| Mottled do. .                | „ <i>capsophila</i> .                           | 6    | 6-9    | 8-5   | Campions.   |
| Marbled Coronet .            | „ <i>consersa</i> .                             | —    | 7-9    | —     | Seeds of do.  |
| Northern Grey .              | „ <i>cæsia</i> .                                | 6    | 7, 8   | 8-5   | Bladder, sea campions.                                    |
| Ranunculus . B               | <i>Hecatera dysodea</i> .                       | —    | 7, 8   | —     | { Flowers and seed-heads of sow - thistle and lettuce.    |
| Broad Barred } White . B     | „ <i>serena</i> .                               | —    | 7, 8   | 9-5   | { Sow-thistle and wild lettuce.                           |
| July Chi .                   | <i>Polia chi</i> .                              | —    | 4, 5   | 6     | { Sallow, hawthorn, hawkweed, dock, lettuce, sow-thistle. |
| Minor Shoulder } Knot . B    | <i>Epunda viminalis</i> .                       | 8    | 4-6    | 6, 7  | Sallow.   |
| Angle Shades .               | { <i>Phlogophora me-</i><br><i>ticulosa</i> . } | —    | 11-4   | —     | { Broom and many low plants.                              |
| Small do. .                  | <i>Euplexia lucipara</i> .                      | 6    | 8, 9   | —     | { Bracken, male fern, sallow, nettle, plantain, &c.       |
| Green Arches .               | <i>Aplecta herbida</i> .                        | —    | 8-4    | 5, 6  | { Dock and other low plants.                              |
| Great Brocade .              | „ <i>occulta</i> .                              | —    | 4, 5   | 6     | Plantain, primrose.                                       |
| Grey Arches .                | „ <i>nebulosa</i> .                             | —    | 10-5   | 6     | Birch, sallow, hawthorn.                                  |
| Silvery do. .                | „ <i>tincta</i> .                               | —    | 9-5    | 6     | Birch and grasses.  |
| Brown do. . B                | „ <i>advena</i> .                               | —    | 8-4    | 5, 6  | Various low plants.                                       |
| Dark Brocade .               | <i>Hadena adusta</i> .                          | 7    | 7-9    | 4     | { Sallow, hawthorn, and low plants.                       |











## INSECTS (continued).

| Popular Name.                         | Scientific Name.                               | Ova. | Larva.          | Pupa. | Food-plants.                                      |
|---------------------------------------|--|------|-----------------|-------|---|
| <b>MOTHS.</b>                         |  |      |                 |       |   |
| Glaucous Shears .                     | <i>Hadena glauca</i> .                         | —    | 7, 8            | 9-5   | { Birch, sallow, bilberry,<br>heath.              |
| Shears . . . .                        | " <i>dentina</i> .                             | —    | 5, 6            | —     | Roots of dandelion.                               |
| Nutmeg . . . .                        | " <i>chenopodii</i> .                          | 6    | 7-9             | 10-5  | Goosefoot.  |
| Bright Line . .                       | " <i>oleracea</i> .                            | —    | 8, 9            | 10-4  | { Elm, nettle, dock, cab-<br>bage.                |
| Broom . . . .                         | " <i>pisi</i> .                                | —    | 8-10            | 10-5  | Bracken, broom, &c.                               |
| Pale Shouldered }<br>Brocade . . . }  | " <i>thalassina</i> .                          | —    | 7, 8            | 8-5   | { Sallow, broom, honey-<br>suckle, knotgrass, &c. |
| Beautiful do. . .                     | " <i>contigua</i> .                            | —    | 8, 9            | —     | Oak, birch, nut, &c.                              |
| Northern do. . .                      | " <i>rectilinea</i> .                          | 6    | 8-3             | —     | Sallow, bramble, bilberry.                        |
| Striped Lychnis .                     | <i>Cucullia lychnitis</i> .                    | —    | 7-9             | 9-5   | { Seeds of white and<br>dark mulleins.            |
| Starwort . . . .                      | " <i>asteris</i> .                             | —    | 8, 9            | 9-5   | { Golden-rod, sea star-<br>wort, and China aster. |
| Wormwood Shark .                      | " <i>absynthii</i> .                           | —    | 8, 9            | 9-5   | Wormwood.   |
| Common do. . . .                      | " <i>umbratica</i> .                           | 6, 7 | 7-9             | 9-5   | Sow-thistle and lettuce.                          |
| Bordered Sallow .                     | <i>Heliothis marginata</i> .                   | —    | 7, 8            | 9-6   | { Rest-harrow, henbane,<br>knotgrass.             |
| Bordered Straw .                      | " <i>peltigera</i> .                           | —    | 7, 8            | —     | Rest-harrow, henbane.                             |
| Marbled Clover .                      | " <i>dipsacea</i> .                            | —    | 8, 9            | 10-5  | { Toadflax and Spanish<br>catchfly.               |
| Beautiful Yellow }<br>Underwing . . } | <i>Anarta myrtili</i> .                        | —    | 7-10 s.<br>3, 4 | —     | Heath.  |
| Spotted Sulphur .                     | { <i>Agrophila sul-</i><br><i>phuralis</i> . } | —    | 6-8             | —     | Small convolvulus.                                |
| Four Spot . . . .                     | <i>Acontia luctuosa</i> .                      | 6    | 6-8             | —     | Do.   |
| Pale Shoulder . .                     | " <i>solaris</i> .                             | —    | —               | —     | —   |
| Rosy Marbled . .                      | <i>Erastria venustula</i> .                    | —    | 8               | 9-5   | { Flowers of trailing tor-<br>mentil.             |
| Marbled White }<br>Spot . . . . }     | " <i>fuscula</i> .                             | —    | 8, 9            | —     | Lavender grass.                                   |
| Silver Hook . . .                     | <i>Hydrelia unca</i> .                         | 6, 7 | 7, 8            | —     | Sedges.   |
| Purple Marbled .                      | <i>Micra ostrina</i> .                         | —    | —               | —     | Low plants (?)                                    |
| Spectacle . . . .                     | <i>Abrostola urticae</i> .                     | —    | 8, 9            | 10-5  | Nettle.   |
| Dark do. . . . .                      | " <i>triplasia</i> .                           | —    | 8, 9            | 10-5  | Nettle, hop.                                      |
| Scarce Burnished }<br>Brass . . . . } | <i>Plusia orichalcea</i> .                     | —    | 6, 7            | —     | Hemp agrimony.                                    |
| Burnished Brass .                     | " <i>chrysitis</i> .                           | 6, 7 | 7-4             | 5     | { Thistle, nettle, dead<br>nettle, burdock.       |
| Gold Spangle . .                      | " <i>bractea</i> .                             | —    | 5, 6            | 6     | Hemp, agrimony.                                   |
| Golden Y. . . . .                     | " <i>iota</i> .                                | —    | 4-6             | 6     | { Honeysuckle, nettle,<br>dead nettle, groundsel. |
| Beautiful do. . .                     | " <i>V-aureum</i> .                            | —    | 5               | 6     | Nettle.   |
| Silver Y. . . . .                     | " <i>gamma</i> .                               | —    | 4-9             | —     | { Nettle, hop, and low<br>plants.                 |
| Northern do. . .                      | " <i>interrogationis</i> .                     | —    | 5, 6            | —     | Nettle.   |
| Copper Underwing                      | { <i>Amphipyra py-</i><br><i>ramidea</i> . }   | —    | 5, 6            | 7, 8  | Oak, elm, willow, birch.                          |
| Mouse . . . . .                       | " <i>tragopogonis</i> .                        | —    | 5, 6            | 7, 8  | { Hawthorn and low<br>plants.                     |
| Dark Gothic . .                       | <i>Mania typica</i> .                          | 7, 8 | 9-4             | 5     | Dock and low plants.                              |
| Old Lady . . . E                      | " <i>maura</i> .                               | 7, 8 | 9-5             | 6     | Dock, chickweed, ivy.                             |
| Black Neck . . .                      | { <i>Toxocampa pas-</i><br><i>tinum</i> . }    | —    | 5               | —     | Tufted vetch.                                     |
| Scarce do. . . .                      | " <i>cracce</i> .                              | —    | 6               | —     | Wood vetch.                                       |
| Anomalous . . .                       | <i>Stilbia anomala</i> .                       | —    | 1, 2            | —     | Grasses.  |
| Red Underwing E                       | <i>Catocala nupta</i> .                        | —    | 5-7             | 7, 8  | Willow, poplar.                                   |
| Light Crimson do.                     | " <i>promissa</i> .                            | —    | 5, 6            | 6, 7  | Oak.  |
| Dark Crimson do.                      | " <i>sponsa</i> .                              | 8    | 4-6             | 6, 7  | Do.   |
| Small Purple Barred                   | <i>Phytometra aenea</i> .                      | —    | 8, 9            | 10-5  | Milkwort.   |



## PLANTS.

| Popular Name.                          | Scientific Name.                 | Localities.  | Duration.  |
|--|----------------------------------|--|------------|
| Alpine Meadow Rue .                    | <i>Thalictrum alpinum</i> .      | { Mountains of Scotland and Wales }                    | Perennial  |
| Lesser do. do. . . .                   | " <i>minus</i> .                 | { Limestone and chalky pastures }                      | "          |
| Yellow do. do. . . .                   | " <i>flavum</i> .                | { Banks of ditches and rivers }                        | "          |
| Water Crowfoot .                       | <i>Ranunculus aquatilis</i> .    | Streams, ditches, &c. .                                | "          |
| Ivy-leaved do. . . .                   | " <i>hederaceus</i> .            | Do. . . . .  | "          |
| Great Spearwort . .                    | " <i>lingua</i> .                | Watery places . . . .                                  | "          |
| Lesser do. . . . .                     | " <i>Flammula</i> .              | Do. . . . .  | "          |
| Celery-leaved Crowfoot                 | " <i>sceleratus</i> .            | Do. . . . .  | Annual.    |
| Creeping Buttercup .                   | " <i>repens</i> .                | { Meadows and sides of ditches . . . . }               | Perennial. |
| Meadow Crowfoot .                      | " <i>acris</i> .                 | Meadows . . . . .                                      | "          |
| Pale Hairy Buttercup .                 | " <i>hirsutus</i> .              | { Meadows and waste ground . . . . }                   | Annual.    |
| Small-flowered Crow-foot . . . . }     | " <i>parviflorus</i> .           | Fields and waste places .                              | "          |
| Mountain Globe-flower                  | <i>Trollius Europæus</i> .       | { Mountains of Scotland and Wales }                    | Perennial. |
| Columbine . . . . .                    | <i>Aquilegia vulgaris</i> .      | Woods and pastures .                                   | "          |
| Field Larkspur . . .                   | <i>Delphinium consolida</i> .    | { Sandy and chalky corn-fields . . }                   | Annual.    |
| Monk's - hood, or Wolf's-bane . . }    | <i>Aconitum Napellus</i> .       | River-sides. Rare . . .                                | Perennial. |
| Water Lily . . . . .                   | <i>Nymphæa alba</i> .            | { Clear pools and slow rivers }                        | "          |
| Yellow do. do. . . .                   | <i>Nuphar lutea</i> .            | Rivers and ditches . .                                 | "          |
| Least do. do. do. . .                  | " <i>pumila</i> .                | Highland lakes . . . .                                 | "          |
| Long Rough-headed Poppy . . . }        | <i>Papaver Argemone</i> .        | Corn-fields. . . . .                                   | Annual.    |
| Round do. do. . . .                    | " <i>hybridum</i> .              | Do. . . . .  | "          |
| Long Smooth-headed do.                 | " <i>dubium</i> .                | Cultivated fields . . .                                | "          |
| Common Red do. . . .                   | " <i>Rhæas</i> .                 | Corn-fields. . . . .                                   | "          |
| Opium do. . . . .                      | " <i>somniferum</i> .            | Waste ground . . . . .                                 | "          |
| Welsh do. . . . .                      | <i>Meconopsis Cambrica</i> .     | { Rocky places in Wales, Devonshire, &c. . }           | Perennial. |
| Horned do. . . . .                     | <i>Glaucium luteum</i> .         | Sea-shore . . . . .                                    | Biennial.  |
| Climbing Corydalis .                   | <i>Corydalis claviculata</i> .   | Bushy places . . . . .                                 | Annual.    |
| Ramping Fumitory .                     | <i>Fumaria capreolata</i> .      | Hedges and corn-fields .                               | "          |
| Common do. . . . .                     | " <i>officinalis</i> .           | Fields and waste places .                              | "          |
| Penny Cress, or Mithridate Mustard . } | <i>Thlaspi arvense</i> .         | { Waste ground. Not common . . . . }                   | "          |
| Alpine Penny Cress .                   | " <i>alpestre</i> .              | { Mountainous limestone pastures in North of England } | Perennial. |
| Shepherd's Purse .                     | <i>Capsella Bursa-pastoris</i> . | A common weed . . . .                                  | Annual.    |
| Broad-leaved Pepperwort . . . . }      | <i>Lepidium latifolium</i> .     | { Salt marshes and sea-coast . . . . }                 | Perennial. |
| Field do. . . . .                      | " <i>campestre</i> .             | Fields . . . . .                                       | Annual.    |
| Hairy do. . . . .                      | " <i>Smithii</i> .               | Hedges . . . . .                                       | Perennial. |
| English Scurvy Grass .                 | <i>Cochlearia Anglica</i> .      | Sea-shores . . . . .                                   | Annual.    |
| Great Water Radish .                   | <i>Armoracia amphibia</i> .      | River-banks . . . . .                                  | Perennial. |
| Twisted Whitlow Grass                  | <i>Draba incana</i> .            | Mountainous rocks . . .                                | Biennial.  |
| Purple Sea Rocket .                    | <i>Cakile maritima</i> .         | Sandy sea-shores . . . .                               | Annual.    |
| Wart Cress, or Swine's Cress . . . . } | <i>Senebiera Coronopus</i> .     | A common weed . . . .                                  | "          |
| Lesser do. do. . . .                   | " <i>didyma</i> .                | Do. . . . .  | "          |
| Hairy Bitter Cress .                   | <i>Cardamine hirsuta</i> .       | Do. . . . .  | "          |
| Hairy Rock Cress .                     | <i>Arabis hirsuta</i> .          | Walls and banks . . . .                                | Biennial.  |
| Alpine do. do. . . .                   | " <i>petræa</i> .                | { Rocks in Wales and Scotland . . . }                  | Perennial. |
| Common Winter Cress                    | <i>Barbarea vulgaris</i> .       | Damp waste ground . . .                                | "          |
| Early do. do. . . .                    | " <i>præcox</i> .                | Do. . . . .  | Biennial.  |
| Common Water do. .                     | <i>Nasturtium officinale</i> .   | Rivulets and ponds . . .                               | Perennial. |
| Creeping Yellow do. .                  | " <i>sylvestre</i> .             | Watery places . . . . .                                | "          |
| Annual do. do. . . .                   | " <i>terrestre</i> .             | Do. . . . .  | Annual.    |
| Hedge Mustard . . .                    | <i>Sisymbrium officinale</i> .   | { Waste places and road-sides . . . . }                | "          |



## PLANTS (continued).

| Popular Name.   | Scientific Name.   | Localities.   | Duration.  |
|---|--|---|------------|
| London Rocket . . .   | <i>Sisymbrium Iris</i> . . .                             | { Waste ground near }<br>London . . . . .                             | Annual.    |
| Flixweed . . . . .  | " <i>Sophia</i> . . . . .                                | Waste places . . . . .  | "          |
| Thale Cress, or Wart }<br>Cress . . . . .                     | " <i>thalianum</i> . . . . .                             | Dry banks and walls . . . . .   | "          |
| Worm-seed Treacle- }<br>mustard . . . . .                     | { <i>Erysimum cheiran-</i> }<br><i>thoides</i> . . . . . | Fields and waste places . . . . .                                     | "          |
| Common Wild Navew .   | <i>Brassica campestris</i> . . . . .                     | Borders of fields . . . . .   | "          |
| Isle of Man Cabbage .   | " <i>Monensis</i> . . . . .                              | { Sandy sea-shores on }<br>North-west coast of }<br>Britain . . . . . | Perennial. |
| Common Mustard . . .  | <i>Sinapis nigra</i> . . . . .                           | Waste places . . . . .  | Annual.    |
| Wall Rocket . . . . .   | <i>Diplotaxis tenuifolia</i> . . . . .                   | Walls, quarries, &c. . . . .  | Perennial. |
| Wild Radish . . . . .   | { <i>Raphanus Raphanis-</i> }<br><i>trum</i> . . . . .   | A common weed . . . . .   | Annual.    |
| Dyer's Rocket, Yellow- }<br>weed, or Weld . . . . .           | <i>Reseda Luteola</i> . . . . .                          | { Do., especially on a }<br>chalk soil . . . . .                      | Biennial.  |
| Wild Mignonette . . .   | " <i>lutea</i> . . . . .                                 | { Chalky hills and waste }<br>places . . . . .                        | "          |
| Common Rock Rose . .  | <i>Helianthemum vulgare</i> . . . . .                    | { Hilly pastures on chalk }<br>or gravel soil . . . . .               | Perennial. |
| Spotted Annual do. do.  | " <i>guttatum</i> . . . . .                              | Sandy pastures. Rare . . . . .  | Annual.    |
| Ledum-leaved do. do. .  | " <i>ledifolium</i> . . . . .                            | Sandy places. Rare . . . . .  | "          |
| Dotted Sun Cistus . . .                                       | " <i>surrejanum</i> . . . . .                            | Chalky pastures . . . . .   | Perennial. |
| White do. . . . .   | " <i>polifolium</i> . . . . .                            | { Rocky hills near sea. }<br>Rare . . . . .                           | "          |
| Pansy, or Heartsease .  | <i>Viola tricolor</i> . . . . .                          | Cultivated fields . . . . .   | Annual.    |
| Yellow Mountain }<br>Violet, or Mountain }<br>Pansy . . . . . | " <i>lutea</i> . . . . .                                 | Mountain pastures . . . . .   | Perennial. |
| Round-leaved Sundew .   | <i>Drosera rotundifolia</i> . . . . .                    | Bogs . . . . .  | "          |
| Long-leaved do. . . . .                                       | " <i>longifolia</i> . . . . .                            | Do. . . . .   | "          |
| Great do. . . . .   | " <i>Anglica</i> . . . . .                               | Do. . . . .   | "          |
| Common Milkwort . . .   | <i>Polygala vulgaris</i> . . . . .                       | Heaths and dry pastures . . . . .                                     | "          |
| Sea Heath . . . . .   | <i>Frankenia laevis</i> . . . . .                        | { Salt marshes on East }<br>coast of England . . . . .                | "          |
| Six-stamened Water- }<br>wort . . . . .                       | <i>Elatine hexandra</i> . . . . .                        | { Wet sandy places or }<br>shallow water . . . . .                    | Annual.    |
| Eight-stamened do. . .  | " <i>Hydropiper</i> . . . . .                            | Do. Rare . . . . .  | "          |
| Deptford Pink . . . . .                                       | <i>Dianthus Armeria</i> . . . . .                        | Waste places . . . . .  | "          |
| Proliferous do. . . . .                                       | " <i>prolifer</i> . . . . .                              | Gravelly pastures. Rare . . . . .                                     | "          |
| Clove do., Carnation, }<br>or Clove Gilly-flower }            | " <i>Caryophyllus</i> . . . . .                          | Old walls . . . . .   | Perennial. |
| Mountain do. . . . .  | " <i>cæsius</i> . . . . .                                | { Limestone cliffs at }<br>Cheddar, Somerset- }<br>shire . . . . .    | "          |
| Maiden do. . . . .  | " <i>deltoides</i> . . . . .                             | Gravelly banks . . . . .  | "          |
| Moss Campion . . . . .  | <i>Silene acaulis</i> . . . . .                          | Summits of mountains . . . . .  | "          |
| Bladder do. . . . .   | " <i>inflata</i> . . . . .                               | Corn-fields and pastures . . . . .                                    | "          |
| Sea do. . . . .   | " <i>maritima</i> . . . . .                              | { Sea-shore, and moun- }<br>tain streams . . . . .                    | "          |
| Spanish Catchfly . . .  | " <i>Otites</i> . . . . .                                | { Sandy fields in east of }<br>England . . . . .                      | "          |
| English do. . . . .   | " <i>Anglica</i> . . . . .                               | Dry fields . . . . .  | Annual.    |
| Nottingham do. . . . .  | " <i>nutans</i> . . . . .                                | { Limestone and chalk }<br>rocks . . . . .                            | Perennial. |
| Corn do. . . . .  | " <i>conica</i> . . . . .                                | Sandy fields . . . . .  | Annual.    |
| Night Flowering do. . .                                       | " <i>noctiflora</i> . . . . .                            | Do. . . . .   | "          |
| Red Robin, or Campion   | <i>Lychnis diurna</i> . . . . .                          | Hedges and banks . . . . .  | Perennial. |
| Evening Campion . . .   | " <i>vespertina</i> . . . . .                            | Do. . . . .   | "          |
| Corn Cockle . . . . .   | <i>Agrostemma Githago</i> . . . . .                      | Corn-fields . . . . .   | "          |
| Procumbent Pearl-wort   | <i>Sagina procumbens</i> . . . . .                       | A common weed . . . . .   | "          |
| Sea do. . . . .   | " <i>maritima</i> . . . . .                              | { Sea-shore, and summit }<br>of Ben Nevis . . . . .                   | Annual.    |
| Spurrey . . . . .   | <i>Spergula arvensis</i> . . . . .                       | Corn-fields . . . . .   | "          |
| Knotted do. . . . .   | " <i>nodosa</i> . . . . .                                | Wet sandy places . . . . .  | Perennial. |
| Smooth do. . . . .  | " <i>saginoides</i> . . . . .                            | Highland mountains . . . . .  | "          |
| Small Hairy do. . . . .                                       | " <i>subulata</i> . . . . .                              | Gravelly pastures . . . . .   | "          |
| Chickweed . . . . .   | <i>Stellaria media</i> . . . . .                         | A common weed . . . . .   | Annual.    |



PLANTS (*continued*).

| Popular Name.  | Scientific Name.                 | Localities.   | Duration.  |
|--|----------------------------------|---|------------|
| Lesser Stitchwort . . .  | <i>Stellaria graminea</i> . . .  | Dry heathy places . . .   | Perennial. |
| Marsh do. . . . .  | " <i>glauca</i> . . .            | Marshy places. Local . . .  | "          |
| Sea Sandwort, Sea }<br>Purslane, or Sea }<br>Pimpernel . . . . . | <i>Arenaria peploides</i> . . .  | Sandy sea-shores . . .  | "          |
| Thyme-leaved Sandwort . . .                                      | " <i>serpyllifolia</i> . . .     | Dry banks and walls . . .   | Annual.    |
| Norway do. . . . .   | " <i>Norvegica</i> . . .         | Unst, Shetland . . .  | Perennial. |
| Spring or Vernal do. . . . .                                     | " <i>verna</i> . . .             | Mountain pastures . . .   | "          |
| Alpine do. . . . .   | " <i>rubella</i> . . .           | Mountains. Very rare . . .  | "          |
| Red do. . . . .  | " <i>rubra</i> . . .             | Fields and dry places . . .   | Annual.    |
| Sea do. . . . .  | " <i>marina</i> . . .            | Sandy sea-shores . . .  | "          |
| Narrow-leaved Mouse }<br>Ear . . . . .                           | <i>Cerastium viscosum</i> . . .  | Fields and road-sides . . .   | Perennial. |
| Field Chickweed . . . . .  | " <i>arvense</i> . . .           | Gravelly and chalky fields . . .                                    | "          |
| Mountain do. . . . .   | " <i>alpinum</i> . . .           | Mountains. . . . .  | "          |
| Broad-leaved Moun- }<br>tain do. . . . .                         | " <i>latifolium</i> . . .        | Do. . . . .   | "          |
| Water do. . . . .  | " <i>aquaticum</i> . . .         | Watery places . . .   | "          |
| Mossy Cyphel. . . . .  | <i>Cherleria sedoides</i> . . .  | Highland mountains . . .  | "          |
| Perennial Flax . . . . .   | <i>Linum perenne</i> . . .       | Chalky fields . . .   | "          |
| Narrow-leaved do. . . . .  | " <i>angustifolium</i> . . .     | { Chalky and sandy pas- }<br>tures . . . . .                        | "          |
| Little or Cathartic do. . . . .                                  | " <i>catharticum</i> . . .       | Dry pastures . . .  | Annual.    |
| Flax Seed . . . . .  | <i>Radiola millegrana</i> . . .  | Damp heaths . . .   | "          |
| Common Mallow . . . . .  | <i>Malva sylvestris</i> . . .    | { Roadsides and waste }<br>places . . . . .                         | Perennial. |
| Dwarf do. . . . .  | " <i>rotundifolia</i> . . .      | Do. . . . .   | Annual.    |
| Musk do. . . . .   | " <i>moschata</i> . . .          | { Hedges and borders of }<br>fields . . . . .                       | Perennial. |
| Tree do. . . . .   | <i>Lavatera arborea</i> . . .    | { Rocks and cliffs on sea- }<br>shore. Rare . . . . .               | Biennial.  |
| Marsh do. . . . .  | <i>Althæa officinalis</i> . . .  | Marshes near sea . . .  | Perennial. |
| Hairy Marsh do. . . . .  | " <i>hirsuta</i> . . .           | Cobham, Kent . . .  | Annual.    |
| Lime, or Linden . . . . .  | <i>Tilia Europæa</i> . . .       | Woods . . . . .   | Tree.      |
| Small-leaved do. . . . .   | " <i>parvifolia</i> . . .        | Do. . . . .   | "          |
| Large-flowered St. }<br>John's-wort. . . . .                     | <i>Hypericum calycinum</i> . . . | Bushy places . . .  | Perennial. |
| Tutsan . . . . .   | " <i>androscæmum</i> . . .       | Woods and hedges . . .  | Shrub.     |
| Square-stalked St. }<br>John's-wort. . . . .                     | " <i>quadrangulum</i> . . .      | Wet places . . .  | Perennial. |
| Perforated do. . . . .   | " <i>perforatum</i> . . .        | Woods and hedges . . .  | "          |
| Imperforate do. . . . .  | " <i>dubium</i> . . .            | { Mountainous places. }<br>Not common . . . . .                     | "          |
| Trailing do. . . . .   | " <i>humifusum</i> . . .         | { Walls and gravelly }<br>banks . . . . .                           | "          |
| Mountain do. . . . .   | " <i>montanum</i> . . .          | Limestone hills . . .   | "          |
| Narrow-leaved do. . . . .  | " <i>linarifolium</i> . . .      | { Sea-coast of Devon }<br>and Cornwall . . . . .                    | "          |
| Hairy do. . . . .  | " <i>hirsutum</i> . . .          | { Woods on limestone }<br>or chalk soil . . . . .                   | "          |
| Small do. . . . .  | " <i>pulchrum</i> . . .          | Heaths and woods . . .  | "          |
| Water do. . . . .  | " <i>clodes</i> . . .            | Bogs and peaty pools . . .  | "          |
| Crimson Crane's-bill . . . . .                                   | <i>Geranium sanguineum</i> . . . | { Limestone and mag- }<br>nesian rocks . . . . .                    | "          |
| Wood do. . . . .   | " <i>sylvaticum</i> . . .        | Woods and meadows . . .   | "          |
| Meadow do. . . . .   | " <i>pratense</i> . . .          | Damp pastures . . .   | "          |
| Pyrenean do. . . . .   | " <i>Pyrenaicum</i> . . .        | { Road sides and mea- }<br>dows. Local . . . . .                    | "          |
| Herb Robert . . . . .  | " <i>Robertianum</i> . . .       | Road-sides and hedges . . .   | Annual.    |
| Shining Crane's-bill . . . . .                                   | " <i>lucidum</i> . . .           | Walls and stony places . . .  | "          |
| Dove's-foot do. . . . .  | " <i>molle</i> . . .             | Fields and waste places . . .                                       | "          |
| Round-leaved do. . . . .   | " <i>rotundifolium</i> . . .     | Do. . . . .   | "          |
| Small-flowered do. . . . .                                       | " <i>pusillum</i> . . .          | Do. . . . .   | "          |
| Long-stalked do. . . . .   | " <i>columbinum</i> . . .        | Do. Not common . . .  | "          |
| Stork's-bill . . . . .   | <i>Erodium cicutarium</i> . . .  | Fields and waste places . . .                                       | "          |
| Musk do. . . . .   | " <i>moschatum</i> . . .         | Do. . . . .   | "          |
| Sea do. . . . .  | " <i>maritimum</i> . . .         | { Sandy sea-shores, and }<br>at Dartmoor. Not }<br>common . . . . . | Perennial  |



## P L A N T S (continued).

| Popular Name.                              | Scientific Name.                            | Localities.                                       | Duration.  |
|--|---|---|------------|
| Balsam . . . .                             | { <i>Impatiens Noli-me-tangere.</i> }       | { Damp shady woods and stony river-banks. Local } | Annual.    |
| Tawny do. . . .                            | " <i>fulva.</i> . . .                       | { Banks of the Wey, Surrey . . . }                | "          |
| Yellow Wood Sorrel .                       | <i>Oxalis corniculata.</i> .                | { Damp places in west of England. Rare }          | "          |
| Green Weed, or Petty Whin                  | <i>Genista Anglica</i> . .                  | Heaths and moors . .                              | Shrub.     |
| Dyer's do., or Woad Waxen . . . .          | " <i>tinctoria</i> . . .                    | Heathy places and fields                          | "          |
| Rest Harrow . . .                          | <i>Ononis spinosa</i> . .                   | Heaths and dry commons                            | Perennial. |
| Small do. . . .                            | " <i>reclinata</i> . . .                    | Coast of Galloway . .                             | Annual.    |
| Black Medick, or Non-such                  | <i>Medicago lupulina.</i> .                 | Pastures . . . .                                  | "          |
| Lucerne, or Purple Medick . . . .          | " <i>sativa</i> . . . .                     | Fields. Not native. .                             | Perennial. |
| Sickle do. . . .                           | " <i>falcata</i> . . . .                    | Fields . . . .                                    | "          |
| Yellow Melilot . .                         | <i>Melilotus officinalis</i> .              | Waste places . . . .                              | Annual.    |
| White do. . . .                            | " <i>leucantha</i> . . .                    | Sandy fields . . . .                              | "          |
| Bird's-foot Clover, or Fenugreek           | { <i>Trigonella ornithopodioides.</i> . . } | Dry sandy places . .                              | "          |
| White or Dutch Clover, or Trefoil . . . .  | <i>Trifolium repens</i> . .                 | Meadows . . . .                                   | Perennial. |
| Purple do. . . .                           | " <i>pratense</i> . . . .                   | Do. . . .   | "          |
| Zigzag do. . . .                           | " <i>medium.</i> . . .                      | { Dry pastures and bushy places }                 | "          |
| Sulphur-coloured do. .                     | " <i>ochroleucrum</i> . .                   | Pastures . . . .                                  | "          |
| Hare's-foot Trefoil .                      | " <i>arvense.</i> . . .                     | { Sandy places and dry fields }                   | Annual.    |
| Teazle-headed do. .                        | " <i>maritimum</i> . . .                    | Salt marshes . . . .                              | "          |
| Rough do. . . .                            | " <i>scabrum.</i> . . .                     | Dry fields . . . .                                | "          |
| Knotted do. . . .                          | " <i>striatum</i> . . . .                   | Sandy fields . . . .                              | "          |
| Round-headed do. .                         | " <i>glomeratum.</i> . .                    | Dry pastures . . . .                              | "          |
| Starry-headed do. .                        | " <i>stellatum</i> . . . .                  | Shoreham, Sussex . .                              | "          |
| Strawberry do. . .                         | " <i>fragiferum</i> . . .                   | Damp pastures . . .                               | Perennial. |
| Hop do. . . .                              | " <i>procumbens</i> . .                     | Dry do. . . .                                     | Annual.    |
| Great Bird's-foot do. .                    | <i>Lotus major</i> . . . .                  | Bushy places . . . .                              | Perennial. |
| Common do. do. . .                         | " <i>corniculatus.</i> .                    | Dry pastures . . . .                              | "          |
| Lady's Fingers, Kidney Vetch, or Woundwort | <i>Anthyllis Vulneraria</i> .               | Do. . . .   | "          |
| Hairy Mountain Oxytropis                   | <i>Oxytropis Uralensis</i> .                | { Dry mountain pastures in Scotland }             | "          |
| Yellowish do. do. .                        | " <i>campestris</i> . . .                   | Clova Mountains, Angus                            | "          |
| Sweet Milk Vetch . .                       | <i>Astragalus glycyphyllos</i>              | Woods and dry fields                              | "          |
| Purple do. . . .                           | " <i>hypoglottis.</i> . .                   | { Chalky and gravelly places }                    | "          |
| Mountain do. . . .                         | " <i>alpinus</i> . . . .                    | Clova Mountains, Angus                            | "          |
| Wood do. . . .                             | <i>Vicia Sylvatica</i> . .                  | Mountainous woods .                               | "          |
| Tufted do. . . .                           | " <i>cracca</i> . . . .                     | Bushy places . . . .                              | "          |
| Common do. . . .                           | " <i>sativa</i> . . . .                     | Fields. Doubtful native                           | Annual.    |
| Yellow do. . . .                           | " <i>lutea</i> . . . .                      | Sea-coast . . . .                                 | Perennial. |
| Hairy do., or Tare. .                      | " <i>hirsuta</i> . . . .                    | Fields and hedges . .                             | Annual.    |
| Smooth do. do. . .                         | " <i>tetrasperma.</i> . .                   | Do. . . .   | "          |
| Yellow Vetchling . .                       | <i>Lathyrus Aphaca</i> . .                  | { Sandy and gravelly fields. Rare }               | "          |
| Meadow do. . . .                           | " <i>pratensis.</i> . .                     | Grassy places . . . .                             | Perennial. |
| Narrow-leaved Everlasting Pea              | " <i>sylvestris.</i> . . .                  | Woods and thickets .                              | "          |
| Blue Marsh Vetchling                       | " <i>palustris.</i> . . .                   | Boggy meadows . . .                               | "          |
| Sea-side Everlasting Pea                   | " <i>maritimus</i> . . .                    | Pebbly sea-shores . .                             | "          |
| Crimson Vetchling                          | " <i>Nissolia</i> . . . .                   | Grassy places . . . .                             | Annual.    |
| Rough-podded do. .                         | " <i>hirsutus.</i> . . .                    | Fields. Rare . . . .                              | "          |
| Black Bitter Vetch .                       | <i>Orobanch niger</i> . . .                 | Rocks in the Highlands.                           | Perennial. |
| Bird's-foot . . . .                        | <i>Ornithopus perpusillus.</i>              | Sandy heaths . . . .                              | "          |
| Joint Vetch . . . .                        | " <i>cracteatus.</i> . .                    | Scilly Islands . . . .                            | Annual.    |
| Horse-shoe Vetch . .                       | <i>Hippocrepis comosa</i> .                 | Chalky banks . . . .                              | Perennial. |



## PLANTS (continued).

| Popular Name.   | Scientific Name.                                   | Localities.                                     | Duration.  |
|---|--|---|------------|
| Sainfoin . . . . .  | <i>Onobrychis sativa</i> . . .                     | { Chalky and limestone }<br>hills . . . . .     | Perennial  |
| Meadow Sweet, or }<br>Queen of the Mea- }<br>dows . . . . . | <i>Spiræa Ulmaria</i> . . .                        | Damp meadows . . .                              | "          |
| Dropwort . . . . .  | " <i>Filipendula</i> . . .                         | Dry pastures . . .                              | "          |
| Mountain Avens . . .  | <i>Dryas octopetala</i> . . .                      | Mountain pastures . . .                         | "          |
| Common do. . . . .  | <i>Geum urbanum</i> . . .                          | Hedges and thickets . . .                       | "          |
| Water do. . . . .   | " <i>rivale</i> . . .                              | { Damp meadows and }<br>marshes . . . . .       | "          |
| Silver Weed, or Goose }<br>Grass . . . . .                  | <i>Potentilla Anserina</i> . . .                   | Waste ground . . .                              | "          |
| Creeping Cinquefoil . . .                                   | " <i>reptans</i> . . .                             | Meadows and way-sides . . .                     | "          |
| Shrubby do. . . . .   | " <i>fruticosa</i> . . .                           | Mountain thickets . . .                         | "          |
| Strawberry - flowered }<br>do. . . . .                      | " <i>rupestris</i> . . .                           | { Rocks in Wales. Very }<br>rare . . . . .      | "          |
| Alpine do. . . . .  | " <i>alpestris</i> . . .                           | Mountains . . .                                 | "          |
| Saw-leaved do. . . . .                                      | " <i>opaca</i> . . .                               | Do. Rare . . .                                  | "          |
| White Rock do. . . . .                                      | " <i>alba</i> . . .                                | Mountains . . .                                 | "          |
| Hoary do. . . . .   | " <i>argentea</i> . . .                            | Pastures. Local . . .                           | "          |
| Common Tormentil . . .                                      | <i>Tormentilla officinalis</i> . . .               | Woods and banks . . .                           | "          |
| Trailing do. . . . .  | " <i>reptans</i> . . .                             | Do. . . . .                                     | "          |
| Procumbent Sibbaldia . . .                                  | <i>Sibbaldia procumbens</i> . . .                  | Highland mountains . . .                        | "          |
| Marsh Cinquefoil . . .                                      | <i>Comarum palustre</i> . . .                      | Bogs . . .                                      | "          |
| Wood Strawberry . . .                                       | <i>Fragaria vesca</i> . . .                        | Woods and thickets . . .                        | "          |
| Bramble, or Blackberry . . .                                | <i>Rubus fruticosus</i> . . .                      | Common everywhere . . .                         | Shrub.     |
| Dewberry . . . . .  | " <i>cæsius</i> . . .                              | { Thickets and borders }<br>of fields . . . . . | "          |
| Stone Bramble . . . . .                                     | " <i>saxatilis</i> . . .                           | { Stony, mountainous }<br>places . . . . .      | Perennial. |
| Agrimony . . . . .  | <i>Agrimonia Eupatoria</i> . . .                   | Waste ground . . .                              | "          |
| Common Lady's Mantle . . .                                  | <i>Alchemilla vulgaris</i> . . .                   | Hilly pastures . . .                            | "          |
| Alpine do. . . . .  | " <i>alpina</i> . . .                              | Mountains . . .                                 | "          |
| Field do. . . . .   | " <i>arvensis</i> . . .                            | A common weed . . .                             | Annual.    |
| Burnet . . . . .  | <i>Sanguisorba officinalis</i> . . .               | Damp meadows . . .                              | Perennial. |
| Salad do. . . . .   | <i>Poterium sanguisorba</i> . . .                  | Dry do. . . . .                                 | "          |
| Soft-leaved Rose . . .                                      | <i>Rosa mollis</i> . . .                           | Mountain thickets . . .                         | Shrub.     |
| Sweet Briar . . . . .                                       | " <i>rubiginosa</i> . . .                          | Bushy places . . .                              | "          |
| Dog Rose . . . . .  | " <i>canina</i> . . .                              | Hedges and bushy places . . .                   | "          |
| Trailing do. do. . . . .                                    | " <i>arvensis</i> . . .                            | Woods and hedges . . .                          | "          |
| Rose Bay, or Flower- }<br>ing Willow . . . . .              | <i>Epilobium angusti- }<br/>florum . . . . .</i>   | Damp woods . . .                                | Perennial. |
| Great Hairy Willow- }<br>herb . . . . .                     | " <i>hirsutum</i> . . .                            | Wet places . . .                                | "          |
| Small-flowered do. . . . .                                  | " <i>parviflorum</i> . . .                         | Do. . . . .                                     | "          |
| Broad-leaved do. . . . .                                    | " <i>montanum</i> . . .                            | { Dry banks and hilly }<br>places . . . . .     | "          |
| Square-stalked do. . . . .                                  | " <i>tetragonum</i> . . .                          | Wet places . . .                                | "          |
| Narrow-leaved do. . . . .                                   | " <i>palustre</i> . . .                            | Do. . . . .                                     | "          |
| Chickweed do. . . . .                                       | " <i>alsinifolium</i> . . .                        | Mountain streams . . .                          | "          |
| Alpine do. . . . .  | " <i>alpinum</i> . . .                             | Do. . . . .                                     | "          |
| Evening Primrose . . .                                      | <i>Oenothera biennis</i> . . .                     | Waste ground . . .                              | Biennial.  |
| Marsh Isnardia . . . . .                                    | <i>Isnardia palustris</i> . . .                    | Bogs . . .                                      | Annual.    |
| Enchanter's Nightshade . . .                                | <i>Circea Lutetiana</i> . . .                      | Damp, shady places . . .                        | Perennial. |
| Alpine do. do. . . . .                                      | " <i>alpina</i> . . .                              | Mountainous woods . . .                         | "          |
| Mare's-tail . . . . .                                       | <i>Hippuris vulgaris</i> . . .                     | Stagnant water . . .                            | "          |
| Spiked Water Milfoil . . .                                  | <i>Myriophyllum spicatum</i> . . .                 | Do. . . . .                                     | "          |
| Purple Loose Strife, or }<br>Willow Strife . . . . .        | <i>Lythrum Salicaria</i> . . .                     | Watery places . . .                             | "          |
| Water Purslane . . . . .                                    | <i>Peplis Portula</i> . . .                        | Do. . . . .                                     | Annual.    |
| Tamarisk . . . . .  | <i>Tamarix Gallica</i> . . .                       | Cliffs on south coast . . .                     | Shrub.     |
| White Bryony . . . . .                                      | <i>Bryonia dioica</i> . . .                        | Hedges . . .                                    | Perennial. |
| Water Blinks . . . . .                                      | <i>Montia fontana</i> . . .                        | Wet places . . .                                | Annual.    |
| Rupturewort . . . . .                                       | <i>Herniaria glabra</i> . . .                      | Sandy places . . .                              | Perennial. |
| Knot Grass . . . . .  | <i>Illecebrum verticillatum</i> . . .              | Bogs . . .                                      | "          |
| Four-leaved All-seed . . .                                  | { <i>Polycarpon tetra- }<br/>phyllum . . . . .</i> | South coast . . .                               | Annual.    |
| Wall Pennywort . . . . .                                    | <i>Cotyledon Umbilicus</i> . . .                   | Damp rocks and walls . . .                      | Perennial. |
| Houseleek . . . . .   | <i>Sempervivum tectorum</i> . . .                  | Roofs and walls . . .                           | "          |



## P L A N T S (continued).

| Popular Name.                         | Scientific Name.                           | Localities.                               | Duration.  |
|---------------------------------------|--|---|------------|
| Orpine, or Live-long                  | <i>Sedum Telephium</i>                     | Bushy places                              | Perennial. |
| Thick-leaved Stonecrop                | " <i>dasyphyllum</i>                       | Rocks                                     | "          |
| Mountain do.                          | " <i>anglicum</i>                          | Do.                                       | "          |
| White do.                             | " <i>album</i>                             | Rocks and walls                           | "          |
| Hairy do.                             | " <i>villosum</i>                          | Damp rocks                                | "          |
| Tasteless do.                         | " <i>sexangulare</i>                       | { Old walls and sandy }<br>places. Scarce | "          |
| Crooked do.                           | " <i>reflexum</i>                          | Walls and roofs                           | "          |
| Glaucous do.                          | " <i>glaucum</i>                           | Walls and dry places                      | "          |
| Welsh do.                             | " <i>Forsterianum</i>                      | Rocks                                     | "          |
| Starry Saxifrage                      | <i>Saxifraga stellaris</i>                 | Mountains                                 | "          |
| Alpine do.                            | " <i>nivalis</i>                           | Do.                                       | "          |
| Yellow Mountain do.                   | " <i>aizoides</i>                          | { Boggy places on moun- }<br>tains        | "          |
| Drooping do.                          | " <i>cernua</i>                            | Mountain rocks                            | "          |
| Alpine Brook do.                      | " <i>rivularis</i>                         | Damp rocks                                | "          |
| Hairy do.                             | " <i>hirta</i>                             | Mountains                                 | "          |
| Broad-flowered do.                    | " <i>platypetala</i>                       | Do.                                       | "          |
| Ladies' Cushion                       | " <i>hypnoides</i>                         | Do.                                       | "          |
| Opposite-leaved Gol-<br>den Saxifrage | <i>Chrysosplenium oppo-<br/>sitifolium</i> | Damp places                               | "          |
| Sea Holly, or Eryngo                  | <i>Eryngium maritimum</i>                  | Sandy coasts                              | "          |
| Field Eryngo                          | " <i>campestre</i>                         | Waste ground. Rare                        | "          |
| Wild Celery, or Small-<br>age         | <i>Apium graveolens</i>                    | Marshes                                   | Biennial.  |
| Parsley                               | <i>Petroselinum sativum</i>                | Old walls                                 | "          |
| Marshwort                             | { <i>Helosciadium nodi-<br/>florum</i> }   | Ditches                                   | Perennial. |
| Creeping do.                          | " <i>repens</i>                            | Watery places                             | "          |
| Fool's Parsley                        | <i>Æthusa Cynapium</i>                     | A common weed                             | Annual.    |
| Fennel                                | <i>Foeniculum vulgare</i>                  | { Chalky fields and way- }<br>sides       | Perennial. |
| Scottish Lovage                       | <i>Ligusticum Scoticum</i>                 | Northern sea-cliffs                       | "          |
| Pepper Saxifrage                      | <i>Silene pratensis</i>                    | Damp meadows                              | "          |
| Spiguel, Meu, or Bald<br>Money        | <i>Meum Athamanticum</i>                   | Mountain pastures                         | "          |
| Wild Angelica                         | <i>Angelica sylvestris</i>                 | Watery places                             | "          |
| Sea Hog's Fennel                      | <i>Peucedanum officinale</i>               | Salt marshes. Rare                        | "          |
| Milk Parsley, or Hog's<br>Fennel      | " <i>palustre</i>                          | Marshes                                   | "          |
| Masterwort                            | " <i>Ostruthium</i>                        | { Damp pastures. Doubt- }<br>ful native   | "          |
| Wild Parsnip                          | <i>Pastinaca sativa</i>                    | Fields and road-sides                     | Biennial.  |
| Cow do.                               | { <i>Heracleum Sphondy-<br/>lium</i> }     | Fields                                    | "          |
| Small Hartwort                        | <i>Tordylium officinale</i>                | { Corn-fields. Doubtful }<br>native       | Annual.    |
| Great do.                             | " <i>maximum</i>                           | Do. do.                                   | "          |
| Wild Carrot, or Bird's-<br>nest       | <i>Daucus carota</i>                       | Fields                                    | Biennial.  |
| Sea-side do.                          | " <i>maritima</i>                          | South coast                               | "          |
| Great Bur Parsley                     | <i>Caucalis latifolia</i>                  | Corn-fields                               | Annual.    |
| Upright Hedge Parsley                 | <i>Torilis Anthriscus</i>                  | A common weed                             | "          |
| Spreading do.                         | " <i>infesta</i>                           | Do.                                       | "          |
| Knotted do.                           | " <i>nodosa</i>                            | Fields and banks                          | "          |
| Venus's Comb, or<br>Shepherd's Needle | <i>Scandix Pecten-veneris</i>              | A common weed                             | "          |
| Rough Chervil                         | { <i>Chærophyllum temu-<br/>lentum</i> }   | Hedge banks                               | Biennial.  |
| Prickly Samphire                      | <i>Echinophora spinosa</i>                 | Sandy coasts. Rare                        | Perennial. |
| Hemlock                               | <i>Conium maculatum</i>                    | Hedge banks.                              | Biennial.  |
| Cornish Bladder Seed                  | { <i>Physospermum cor-<br/>nubiense</i> }  | Fields in Cornwall                        | Perennial. |
| Dwarf Cornel                          | <i>Cornus suecica</i>                      | Mountain pastures                         | "          |
| Dwarf Elder, or Dane-<br>wort         | <i>Sambucus Ebulus</i>                     | Waste ground                              | "          |
| Common Honeysuckle,<br>or Woodbine    | <i>Lonicera Periclymenum</i>               | Woods                                     | Shrub.     |
| Wild Madder                           | <i>Rubia peregrina</i>                     | Shady thickets                            | Perennial  |



## PLANTS (continued).

| Popular Name.             | Scientific Name.                  | Localities.                                      | Duration.  |
|---------------------------|-----------------------------------|--|------------|
| Yellow Bedstraw . . .     | <i>Galium verum</i> . . .         | Dry fields . . .                                 | Perennial. |
| White Water do. . .       | " <i>palustre</i> . . .           | Ditches . . .                                    | "          |
| Rough Heath do. . .       | " <i>Witheringii</i> . . .        | Boggy heaths . . .                               | "          |
| Smooth Heath do. . .      | " <i>saxatile</i> . . .           | Heaths . . .                                     | "          |
| Rough Marsh do. . .       | " <i>uliginosum</i> . . .         | Wet places. . .                                  | "          |
| Grey do. . .              | " <i>cinereum</i> . . .           | Scotland. Rare . . .                             | "          |
| Rough-fruited do. . .     | " <i>saccharatum</i> . . .        | Corn-fields. Rare . . .                          | Annual.    |
| Corn do. . .              | " <i>tricornne</i> . . .          | Dry fields . . .                                 | "          |
| Smooth-fruited Corn do.   | " <i>spurium</i> . . .            | Forfar . . .                                     | "          |
| Little Mountain do. . .   | " <i>pusillum</i> . . .           | Limestone hills . . .                            | Perennial. |
| Great Hedge do. . .       | " <i>Mollugo</i> . . .            | Hedges . . .                                     | "          |
| Wall do. . .              | " <i>Anglicum</i> . . .           | Walls . . .                                      | Annual.    |
| Cross-leaved do. . .      | " <i>Boreale</i> . . .            | Rocky places . . .                               | Perennial. |
| Goose Grass, or Cleavers  | " <i>Aparine</i> . . .            | Hedge banks . . .                                | Annual.    |
| Field Madder . . .        | <i>Sherardia arvensis</i> . . .   | Fields . . .                                     | "          |
| Field Woodruff . . .      | <i>Asperula arvensis</i> . . .    | Near Davenport . . .                             | "          |
| Squinancy-wort . . .      | " <i>cynanchica</i> . . .         | Dry banks . . .                                  | Perennial. |
| Red Valerian . . .        | <i>Centranthus rubra</i> . . .    | { Chalky banks and old<br>walls . . . }          | "          |
| Heart-leaved do. . .      | " <i>pyrenaica</i> . . .          | { Scotch woods. Doubt-<br>ful native . . . }     | "          |
| Lamb's Lettuce . . .      | <i>Fedia dentata</i> . . .        | Corn-fields. . .                                 | Annual.    |
| Fuller's Teazle . . .     | <i>Dipsacus Fullonum</i> . . .    | Waste places. Not native                         | Biennial.  |
| Wild do. . .              | " <i>sylvestris</i> . . .         | { Ditch banks and road-<br>sides . . . }         | "          |
| Field Scabious . . .      | <i>Scabiosa arvensis</i> . . .    | Corn-fields and pastures                         | Perennial. |
| Small do. . .             | " <i>columbaria</i> . . .         | Pastures . . .                                   | "          |
| Yellow Goat's Beard . . . | <i>Tragopogon pratensis</i> . . . | Do. . .  | Biennial.  |
| Ox Tongue . . .           | <i>Helminthia echioides</i> . . . | Hedge banks . . .                                | Annual.    |
| Yellow Succory . . .      | <i>Picris Hieracioides</i> . . .  | Road-sides . . .                                 | Biennial.  |
| Blue Sow-thistle . . .    | <i>Sonchus alpinus</i> . . .      | Scottish mountains. . .                          | Perennial. |
| Marsh do. . .             | " <i>palustris</i> . . .          | River-sides. Rare . . .                          | "          |
| Common do. . .            | " <i>oleraceus</i> . . .          | A common weed . . .                              | Annual.    |
| Ivy-leaved Wall Lettuce   | <i>Prenanthes muralis</i> . . .   | Walls and cliffs . . .                           | Perennial. |
| Hawk-weed do. . .         | " <i>hieracifolia</i> . . .       | Near Forfar . . .                                | Annual.    |
| Dandelion . . .           | <i>Leontodon Taraxacum</i> . . .  | A common weed . . .                              | Perennial. |
| Rough Hawk Bit . . .      | <i>Apargia hispida</i> . . .      | Dry pastures and heaths.                         | "          |
| Hairy do. . .             | <i>Thrinicia hirta</i> . . .      | Gravelly commons . . .                           | "          |
| Mouse-ear Hawkweed.       | <i>Hieracium Pilosella</i> . . .  | Dry places . . .                                 | "          |
| Orange do. . .            | " <i>aurantiacum</i> . . .        | Northern woods . . .                             | "          |
| Wood do. . .              | " <i>sylvaticum</i> . . .         | Dry woods . . .                                  | "          |
| Succory-leaved do. . .    | " <i>paludosum</i> . . .          | Shady places . . .                               | "          |
| Soft do. . .              | " <i>molle</i> . . .              | Northern woods . . .                             | "          |
| Shrubby do. . .           | " <i>sabaudum</i> . . .           | Woods . . .                                      | "          |
| Smooth Hawk's-beard . . . | <i>Crepis tectorum</i> . . .      | Walls and dry places                             | Annual.    |
| Rough do. . .             | " <i>biennis</i> . . .            | Dry pastures . . .                               | Biennial.  |
| Stinking do. . .          | <i>Borkhausia fetida</i> . . .    | Chalky fields . . .                              | "          |
| Spotted Cat's-ear . . .   | <i>Hypochaeris maculata</i> . . . | Dry pastures . . .                               | Perennial. |
| Smooth do. . .            | " <i>glabra</i> . . .             | Do. . .  | Annual.    |
| Long-rooted do. . .       | " <i>radicata</i> . . .           | Meadows . . .                                    | Perennial. |
| Nipple-wort . . .         | <i>Lapsana communis</i> . . .     | A common weed . . .                              | Annual.    |
| Dwarf do. . .             | " <i>pusilla</i> . . .            | Sandy fields . . .                               | "          |
| Chicory, or Succory . . . | <i>Cichorium Intybus</i> . . .    | { Chalky and dry fields<br>and way-sides . . . } | Perennial  |
| Burdock . . .             | <i>Arctium Lappa</i> . . .        | { Waste places and<br>road-sides . . . }         | Biennial.  |
| Musk Thistle . . .        | <i>Carduus nutans</i> . . .       | Waste places . . .                               | Annual.    |
| Wetted do. . .            | " <i>acanthoides</i> . . .        | Road-sides. . .                                  | "          |
| Slender-flowered do. . .  | " <i>tenuiflorus</i> . . .        | Waste places . . .                               | "          |
| Milk do. . .              | " <i>Marianus</i> . . .           | Do. . .  | Biennial.  |
| Spear do. . .             | <i>Ciricus lanceolatus</i> . . .  | Do. . .  | "          |
| Marsh do. . .             | " <i>palustris</i> . . .          | Marshes . . .                                    | "          |
| Common do. . .            | " <i>arvensis</i> . . .           | A common weed . . .                              | Perennial  |
| Woolly-headed do. . .     | " <i>criophorus</i> . . .         | { Limestone pastures<br>and waste places }       | "          |
| Dark Plume do. . .        | " <i>heterophyllus</i> . . .      | Northern pastures . . .                          | "          |
| Meadow Plume do. . .      | " <i>pratensis</i> . . .          | { Wet meadows and<br>heaths . . . }              | "          |
| Dwarf do. do. . .         | " <i>acaulis</i> . . .            | Chalk pastures . . .                             | "          |



## P L A N T S (continued).

| Popular Name.                             | Scientific Name.  | Localities.                         | Duration.  |
|---|---|-------------------------------------|------------|
| Carlina Thistle . . . . .                 | <i>Carlina vulgaris</i> . . . . .                           | Dry pastures . . . . .              | Biennial.  |
| Nodding Bur Marigold . . . . .            | <i>Bidens cernua</i> . . . . .                              | Ditches . . . . .                   | Annual.    |
| Common do. . . . .                        | <i>tripartita</i> . . . . .                                 | Do. . . . .                         | "          |
| Hemp Agrimony . . . . .                   | { <i>Eupatorium canna-</i><br><i>binum</i> . . . . . }      | Do. . . . .                         | Perennial. |
| Tansy . . . . .                           | <i>Tanacetum vulgare</i> . . . . .                          | Fields . . . . .                    | "          |
| Cat's-foot . . . . .                      | <i>Antennaria dioica</i> . . . . .                          | Dry heaths. . . . .                 | "          |
| Jersey Cudweed . . . . .                  | { <i>Gnaphalium luteo-</i><br><i>album</i> . . . . . }      | Dry fields . . . . .                | Annual.    |
| Dwarf do. . . . .                         | <i>supinum</i> . . . . .                                    | Highland mountains . . . . .        | Perennial. |
| Narrow-leaved do. . . . .                 | <i>Gallicum</i> . . . . .                                   | Dry fields. Rare . . . . .          | Annual.    |
| Least do. . . . .                         | <i>minimum</i> . . . . .                                    | Dry ground . . . . .                | "          |
| Common do. . . . .                        | <i>Germanicum</i> . . . . .                                 | Do. . . . .                         | "          |
| Alpine Flea-bane . . . . .                | <i>Erigeron alpinum</i> . . . . .                           | Highland mountains . . . . .        | Perennial. |
| Groundsel . . . . .                       | <i>Senecio vulgaris</i> . . . . .                           | A common weed . . . . .             | Annual.    |
| Stinking do. . . . .                      | <i>viscosus</i> . . . . .                                   | Waste ground . . . . .              | "          |
| Mountain do. . . . .                      | <i>sylvaticus</i> . . . . .                                 | Dry pastures . . . . .              | "          |
| Inelegant Ragwort . . . . .               | <i>squalidus</i> . . . . .                                  | Walls and waste places . . . . .    | "          |
| Hoary do. . . . .                         | <i>tenuifolius</i> . . . . .                                | Banks and way-sides . . . . .       | Perennial. |
| Common do. . . . .                        | <i>Jacobæa</i> . . . . .                                    | Dry places . . . . .                | "          |
| Marsh do. . . . .                         | <i>aquaticus</i> . . . . .                                  | Wet places. . . . .                 | "          |
| Great do. . . . .                         | <i>paludosus</i> . . . . .                                  | Fens and ditches. Rare . . . . .    | "          |
| Broad-leaved do. . . . .                  | <i>Saracenicus</i> . . . . .                                | Damp meadows. Rare . . . . .        | "          |
| Golden-rod . . . . .                      | <i>Solidago virgaurea</i> . . . . .                         | Woods and heaths . . . . .          | "          |
| Elecampane . . . . .                      | <i>Inula Helenium</i> . . . . .                             | Damp pastures . . . . .             | "          |
| Marsh Flea-wort . . . . .                 | <i>Cineraria palustris</i> . . . . .                        | Fens. Local . . . . .               | "          |
| Common Leopard's-<br>bane . . . . .       | { <i>Doronicum Pardali-</i><br><i>anches</i> . . . . . }    | Damp woods . . . . .                | "          |
| Daisy . . . . .                           | <i>Bell's perennis</i> . . . . .                            | Pastures . . . . .                  | "          |
| Ox-eye do. . . . .                        | { <i>Chrysanthemum leu-</i><br><i>canthemum</i> . . . . . } | Dry meadows . . . . .               | "          |
| Corn Marigold . . . . .                   | <i>segetum</i> . . . . .                                    | Corn-fields . . . . .               | Annual.    |
| Feverfew . . . . .                        | <i>Pyrethrum Parthenium</i> . . . . .                       | Waste places . . . . .              | Perennial. |
| Sea-side do. . . . .                      | <i>maritimum</i> . . . . .                                  | Sandy sea-shores . . . . .          | "          |
| Wild Chamomile . . . . .                  | { <i>Matricaria Chamo-</i><br><i>milla</i> . . . . . }      | Corn-fields . . . . .               | Annual.    |
| Sea do. . . . .                           | <i>Anthemis maritima</i> . . . . .                          | Rocky coasts . . . . .              | "          |
| Corn do. . . . .                          | <i>arvensis</i> . . . . .                                   | Corn-fields . . . . .               | Biennial.  |
| Stinking do. . . . .                      | <i>Cotula</i> . . . . .                                     | A common weed . . . . .             | Annual.    |
| Ox-eye do. . . . .                        | <i>tinctoria</i> . . . . .                                  | Dry fields. Rare . . . . .          | Biennial.  |
| Sneeze-wort, or Goose-<br>wort . . . . .  | <i>Achillea Ptarmica</i> . . . . .                          | Damp pastures . . . . .             | Perennial. |
| Yarrow, or Milfoil . . . . .              | <i>Millefolium</i> . . . . .                                | Pastures and way-sides . . . . .    | "          |
| Golden Milfoil . . . . .                  | <i>tomentosa</i> . . . . .                                  | Dry hill-pastures. Scarce . . . . . | "          |
| Black Knapweed . . . . .                  | <i>Centaurea nigra</i> . . . . .                            | Pastures and way-sides . . . . .    | "          |
| Corn-flower, or Blue-<br>bottle . . . . . | <i>Cyanus</i> . . . . .                                     | Corn-fields . . . . .               | Annual.    |
| Great Knapweed . . . . .                  | <i>Scabiosa</i> . . . . .                                   | Corn-fields and pastures . . . . .  | Perennial. |
| Common Star Thistle . . . . .             | <i>calceitrapa</i> . . . . .                                | Waste places. Local . . . . .       | Annual.    |
| Yellow do. . . . .                        | <i>solstitialis</i> . . . . .                               | Waste places . . . . .              | "          |
| Blue-bell, or Hare-bell . . . . .         | { <i>Campanula rotundi-</i><br><i>folia</i> . . . . . }     | Heaths and dry meadows . . . . .    | Perennial. |
| Spreading Bell-flower . . . . .           | <i>patula</i> . . . . .                                     | Woods . . . . .                     | Biennial.  |
| Rampion do. . . . .                       | <i>Rapunculus</i> . . . . .                                 | Banks and fields . . . . .          | "          |
| Peach-leaved do. . . . .                  | <i>persicifolia</i> . . . . .                               | Woods. Very rare . . . . .          | Perennial. |
| Creeping do. . . . .                      | <i>rapunculoides</i> . . . . .                              | Northern corn-fields . . . . .      | "          |
| Nettle-leaved do. . . . .                 | <i>Trachelium</i> . . . . .                                 | Woods and hedges . . . . .          | "          |
| Clustered do. . . . .                     | <i>glomerata</i> . . . . .                                  | Chalky pastures . . . . .           | "          |
| Ivy-leaved do. . . . .                    | <i>hederacea</i> . . . . .                                  | Bogs . . . . .                      | "          |
| Sheep's Scabious . . . . .                | <i>Jasione montana</i> . . . . .                            | Dry pastures . . . . .              | Annual.    |
| Water Lobelia . . . . .                   | <i>Lobelia Dortmanna</i> . . . . .                          | Mountain lakes. . . . .             | Perennial  |
| Cross-leaved Heath . . . . .              | <i>Erica Tetralix</i> . . . . .                             | Heaths . . . . .                    | Shrub.     |
| Common do. . . . .                        | <i>cinerea</i> . . . . .                                    | Do. . . . .                         | "          |
| Cornish do. . . . .                       | <i>vagans</i> . . . . .                                     | Cornish heaths . . . . .            | "          |
| Fringe-leaved do. . . . .                 | <i>ciliaris</i> . . . . .                                   | Do. . . . .                         | "          |
| Ling, or Heather . . . . .                | <i>Calluna vulgaris</i> . . . . .                           | Heaths and moors . . . . .          | "          |
| Scotch Menziesia . . . . .                | <i>Menziesia cærulea</i> . . . . .                          | Highland moors . . . . .            | "          |
| St. Dabeoc's Heath . . . . .              | <i>polifolia</i> . . . . .                                  | West of Ireland . . . . .           | "          |
| Trailing Azalea . . . . .                 | <i>Azalea procumbens</i> . . . . .                          | Mountains . . . . .                 | "          |



## PLANTS (continued).

| Popular Name.                                   | Scientific Name.                        | Localities.                                    | Duration.  |
|---|---|--|------------|
| Round-leaved Winter-green . . . . .             | <i>Pyrola rotundifolia</i> . . . . .    | Damp woods. Rare . . . . .                     | Perennial  |
| Common do. . . . .                              | " <i>media</i> . . . . .                | Damp woods . . . . .                           | "          |
| Lesser do. . . . .                              | " <i>minor</i> . . . . .                | Damp mountain woods . . . . .                  | "          |
| Serrated do. . . . .                            | " <i>secunda</i> . . . . .              | Fir woods in Scotland . . . . .                | "          |
| Single-flowered do. . . . .                     | " <i>uniflora</i> . . . . .             | Damp mountain woods . . . . .                  | "          |
| Yellow Bird's-nest. . . . .                     | <i>Monotropa Hypopitrys</i> . . . . .   | { Roots of beech and fir }<br>trees . . . . .  | "          |
| Lesser Periwinkle. . . . .                      | <i>Vinca minor</i> . . . . .            | Thickets. Scarce . . . . .                     | "          |
| Gentianella . . . . .                           | <i>Exacum filiforme</i> . . . . .       | Bogs. Local . . . . .                          | Annual.    |
| Centaury . . . . .                              | <i>Erythraea Centaurium</i> . . . . .   | Dry pastures . . . . .                         | "          |
| Tufted do. . . . .                              | " <i>littoralis</i> . . . . .           | Sea-coast . . . . .                            | "          |
| Small Alpine Gentian . . . . .                  | <i>Gentiana nivalis</i> . . . . .       | { Mountain summits. }<br>Rare . . . . .        | "          |
| Yellow-wort . . . . .                           | <i>Chlora perfoliata</i> . . . . .      | Chalky hills . . . . .                         | "          |
| Small Bind-weed . . . . .                       | <i>Convolvulus arvensis</i> . . . . .   | Hedge-banks, &c. . . . .                       | Perennial. |
| Great do. . . . .                               | " <i>Sepium</i> . . . . .               | Hedges and ditch-banks. . . . .                | "          |
| Sea do. . . . .                                 | " <i>Soldanella</i> . . . . .           | Sandy shores. Local . . . . .                  | "          |
| Viper-grass . . . . .                           | <i>Echium vulgare</i> . . . . .         | Dry fields . . . . .                           | Biennial.  |
| Corn Gromwell . . . . .                         | <i>Lithospermum arvense</i> . . . . .   | Fields and waste places. . . . .               | Annual.    |
| Creeping do. . . . .                            | " <i>purpureo-ceruleum</i> . . . . .    | Do. . . . .                                    | Perennial. |
| Forget-me-not . . . . .                         | <i>Myosotis palustris</i> . . . . .     | Ditches . . . . .                              | "          |
| Creeping do. . . . .                            | " <i>repens</i> . . . . .               | Damp peaty places . . . . .                    | "          |
| Tufted do. . . . .                              | " <i>cæspitosa</i> . . . . .            | Watery places . . . . .                        | Annual.    |
| Alpine do. . . . .                              | " <i>alpestris</i> . . . . .            | Mountains . . . . .                            | Perennial. |
| Wood do. . . . .                                | " <i>sylvatica</i> . . . . .            | Shady places . . . . .                         | "          |
| Field do. . . . .                               | " <i>arvensis</i> . . . . .             | Dry places . . . . .                           | Annual.    |
| Early do. . . . .                               | " <i>collina</i> . . . . .              | Dry fields and walls . . . . .                 | "          |
| Changeable do. . . . .                          | " <i>versicolor</i> . . . . .           | Dry places . . . . .                           | "          |
| Alkanet . . . . .                               | <i>Anchusa officinalis</i> . . . . .    | Waste ground. Rare . . . . .                   | Perennial. |
| Comfrey . . . . .                               | <i>Symphytum officinale</i> . . . . .   | Watery places . . . . .                        | "          |
| Tuberous do. . . . .                            | " <i>tuberosum</i> . . . . .            | Do. Rare . . . . .                             | "          |
| Borage . . . . .                                | <i>Borago officinalis</i> . . . . .     | Waste ground . . . . .                         | Biennial.  |
| Madwort . . . . .                               | <i>Asperugo procumbens</i> . . . . .    | Do. Rare . . . . .                             | Annual.    |
| Hound's-tongue . . . . .                        | <i>Cynoglossum officinale</i> . . . . . | Waste ground . . . . .                         | Biennial.  |
| Green-leaved do. . . . .                        | " <i>sylvaticum</i> . . . . .           | Shady places . . . . .                         | "          |
| Thorn-apple . . . . .                           | <i>Datura Stramonium</i> . . . . .      | { Waste ground. Not }<br>native . . . . .      | Annual.    |
| Henbane . . . . .                               | <i>Hyoscyamus niger</i> . . . . .       | Do. . . . .                                    | "          |
| Woody Nightshade, or }<br>Bittersweet . . . . . | <i>Solanum Dulcamara</i> . . . . .      | Hedges . . . . .                               | Perennial. |
| Garden do. . . . .                              | " <i>nigrum</i> . . . . .               | A common weed . . . . .                        | Annual.    |
| Broom Rape . . . . .                            | <i>Orobanche major</i> . . . . .        | Roots of broom and furze . . . . .             | Perennial. |
| Clove-scented do. . . . .                       | " <i>caryophyllacea</i> . . . . .       | On roots of bedstraw . . . . .                 | "          |
| Red do. . . . .                                 | " <i>rubra</i> . . . . .                | On thyme . . . . .                             | "          |
| Tall do. . . . .                                | " <i>elatio</i> . . . . .               | { On knapweeds and }<br>other plants . . . . . | "          |
| Lesser do. . . . .                              | " <i>minor</i> . . . . .                | On clover . . . . .                            | "          |
| Ivy do. . . . .                                 | " <i>Hederæ</i> . . . . .               | Ivy-roots . . . . .                            | "          |
| Purple do. . . . .                              | " <i>cærulea</i> . . . . .              | { On wormwoods, mug- }<br>worts, &c. . . . .   | "          |
| Spiked Speedwell . . . . .                      | <i>Veronica spicata</i> . . . . .       | Dry meadows . . . . .                          | "          |
| Alpine do. . . . .                              | " <i>alpina</i> . . . . .               | Mountains . . . . .                            | "          |
| Blue Rock do. . . . .                           | " <i>saxatilis</i> . . . . .            | Do. . . . .                                    | "          |
| Shrubby do. . . . .                             | " <i>fruticulosa</i> . . . . .          | Highland do. . . . .                           | "          |
| Marsh do. . . . .                               | " <i>scutellata</i> . . . . .           | Bogs . . . . .                                 | "          |
| Water do. . . . .                               | " <i>Anagallis</i> . . . . .            | Ditches . . . . .                              | "          |
| Brooklime . . . . .                             | " <i>Beccabunga</i> . . . . .           | Do. . . . .                                    | "          |
| Common Speedwell . . . . .                      | " <i>officinalis</i> . . . . .          | Dry places . . . . .                           | "          |
| Mountain do. . . . .                            | " <i>montana</i> . . . . .              | { Shady woods. Not }<br>common . . . . .       | "          |
| Ivy-leaved do. . . . .                          | " <i>hederifolia</i> . . . . .          | A common weed . . . . .                        | Annual.    |
| Germander Chickweed . . . . .                   | " <i>agrestis</i> . . . . .             | Do. . . . .                                    | "          |
| Grey Speedwell . . . . .                        | " <i>polita</i> . . . . .               | Do. . . . .                                    | "          |
|   | " <i>Buxbaumii</i> . . . . .            | Fields . . . . .                               | "          |
| Alpine Painted-cup . . . . .                    | <i>Bartsia alpina</i> . . . . .         | Mountain pastures. Rare . . . . .              | Perennial. |
| Red Eye-bright . . . . .                        | " <i>Odontites</i> . . . . .            | A common weed . . . . .                        | Annual.    |
| Common do. . . . .                              | <i>Euphrasia officinalis</i> . . . . .  | Dry pastures . . . . .                         | "          |
| Large Yellowrattle . . . . .                    | <i>Rhinanthus major</i> . . . . .       | Corn-fields . . . . .                          | "          |



## P L A N T S (continued).

| Popular Name.                                | Scientific Name.                | Localities.                                       | Duration.  |
|--|---------------------------------|---|------------|
| Crested Cow-wheat . . . .                    | <i>Melampyrum cristatum</i>     | Woods and fields . . . .                          | Annual.    |
| Purple do. . . . .                           | " <i>arvense</i> . . . .        | Fields. Local . . . .                             | "          |
| Yellow do. . . . .                           | " <i>pratense</i> . . . .       | Woods. . . . .                                    | "          |
| Wood do. . . . .                             | " <i>sylvaticum</i> . . . .     | Mountain woods. Rare.                             | "          |
| Marsh Red Rattle, or<br>Louse-wort . . . . . | <i>Pedicularis palustris</i>    | Marshes . . . . .                                 | Perennial. |
| Dwarf do. . . . .                            | " <i>sylvatica</i> . . . .      | { Damp meadows and<br>bogs . . . . . }            | "          |
| Knotty Fig-wort . . . .                      | <i>Scrophularia nodosa</i>      | Woods . . . . .                                   | "          |
| Water do. . . . .                            | " <i>aquatica</i> . . . .       | Ditches . . . . .                                 | "          |
| Balm-leaved do. . . . .                      | " <i>Scorodonia</i> . . . .     | { Do. in Ireland and the<br>S. counties . . . . } | "          |
| Foxglove . . . . .                           | <i>Digitalis purpurea</i>       | Woods and hedge-banks                             | Biennial.  |
| Snapdragon . . . . .                         | <i>Antirrhinum majus</i>        | Old walls. Not native                             | Perennial. |
| Calf's-snout . . . . .                       | " <i>Orontium</i> . . . .       | Corn-fields . . . . .                             | Annual.    |
| Ivy-leaved Snap-<br>dragon, or Toad-flax }   | <i>Linaria Cymbalaria</i>       | Walls. Not native . . . .                         | Perennial. |
| Fluellen, or Toad-flax . .                   | " <i>spuria</i> . . . . .       | Dry fields . . . . .                              | Annual.    |
| Sharp-leaved do. . . . .                     | " <i>Elatine</i> . . . . .      | Do. . . . .                                       | "          |
| Creeping Toad-flax . . .                     | " <i>repens</i> . . . . .       | Rocks near sea . . . . .                          | Perennial. |
| Common do., or Butter<br>and eggs . . . . .  | " <i>vulgaris</i> . . . . .     | Hedges . . . . .                                  | "          |
| Small do. . . . .                            | " <i>minor</i> . . . . .        | Chalky fields. Local                              | Annual.    |
| Mudwort . . . . .                            | <i>Limosella aquatica</i>       | Muddy places . . . . .                            | "          |
| Cornish Money-wort . . .                     | <i>Sibthorpia Europæa</i>       | Damp places. Local                                | Perennial. |
| Great Mullein . . . . .                      | <i>Verbascum Thapsus</i>        | Hedge-banks . . . . .                             | Biennial.  |
| Hoary do. . . . .                            | " <i>pulverulentum</i> . . .    | { Waste ground and<br>hedge-banks . . . }         | "          |
| Dark do. . . . .                             | " <i>nigrum</i> . . . . .       | Hedge-banks . . . . .                             | Perennial. |
| Moth do. . . . .                             | " <i>Blattaria</i> . . . . .    | Do. Rare . . . . .                                | Annual.    |
| Gipsy-wort . . . . .                         | <i>Lycopus Europæus</i>         | Ditches and pool-sides                            | Perennial. |
| Wild Clary . . . . .                         | <i>Salvia verbenaca</i> . . .   | { Dry fields and hedge-<br>banks . . . . . }      | "          |
| Sharp-leaved Mint . . . .                    | <i>Mentha acutifolia</i> . . .  | Wet places. Rare . . . .                          | "          |
| Corn do. . . . .                             | " <i>arvensis</i> . . . . .     | Corn-fields . . . . .                             | "          |
| Wild Thyme . . . . .                         | <i>Thymus Serpyllum</i>         | Heaths and hedge-banks                            | "          |
| Marjoram . . . . .                           | <i>Origanum vulgare</i> . . .   | { Hedge-banks and<br>bushy places . . . }         | "          |
| Germander, or Wood<br>Sage . . . . .         | <i>Teucrium Scorodonia</i>      | Woods and commons . . .                           | "          |
| Water do. . . . .                            | " <i>Scordium</i> . . . . .     | Wet meadows. Local.                               | "          |
| Wall do. . . . .                             | " <i>Chamædrys</i> . . . . .    | Old walls. Naturalised                            | "          |
| Mountain Bugle . . . . .                     | <i>Ajuga alpina</i> . . . . .   | Mountains. Rare . . . .                           | "          |
| Black Horehound . . . . .                    | <i>Ballota nigra</i> . . . . .  | Hedges and waste ground                           | "          |
| Mother-wort . . . . .                        | <i>Leonurus Cardiaca</i>        | Hedge-banks . . . . .                             | "          |
| Dwarf Hemp-nettle . . . .                    | <i>Galeopsis villosa</i> . . .  | Sandy fields . . . . .                            | Annual.    |
| Bee-nettle . . . . .                         | " <i>versicolor</i> . . . . .   | Corn-fields . . . . .                             | "          |
| White Dead-nettle . . . .                    | <i>Lamium album</i> . . . . .   | Hedges and way-sides                              | Perennial. |
| Spotted do. . . . .                          | " <i>maculatum</i> . . . . .    | Hedge-banks. Rare                                 | "          |
| Red do. . . . .                              | " <i>purpureum</i> . . . . .    | A common weed . . . . .                           | Annual.    |
| Betony . . . . .                             | <i>Betonica officinalis</i>     | Woods . . . . .                                   | Perennial  |
| Hedge Woundwort . . . .                      | <i>Stachys sylvatica</i> . . .  | Hedge-banks . . . . .                             | "          |
| Corn do. . . . .                             | " <i>arvensis</i> . . . . .     | Corn-fields . . . . .                             | Annual.    |
| Cat-mint . . . . .                           | <i>Nepeta Cataria</i> . . . .   | Hedge-banks . . . . .                             | Perennial  |
| Calamint . . . . .                           | <i>Calamintha officinalis</i>   | Way-sides . . . . .                               | "          |
| Self-heal . . . . .                          | <i>Prunella vulgaris</i> . . .  | Fields . . . . .                                  | "          |
| Skull-cap . . . . .                          | <i>Scutellaria galericulata</i> | Wet places . . . . .                              | "          |
| Lesser do. . . . .                           | " <i>minor</i> . . . . .        | Do. . . . .                                       | "          |
| Vervain . . . . .                            | <i>Verbena officinalis</i> . .  | Waste places . . . . .                            | "          |
| Butterwort . . . . .                         | <i>Pinguicula vulgaris</i>      | Bogs . . . . .                                    | "          |
| Bladderwort . . . . .                        | <i>Utricularia vulgaris</i>     | Stagnant water . . . . .                          | "          |
| Intermediate do. . . . .                     | " <i>intermedia</i> . . . . .   | Water. Rare . . . . .                             | "          |
| Small do. . . . .                            | " <i>minor</i> . . . . .        | Pools on moors . . . . .                          | "          |
| Bird's-eye Primrose . . .                    | <i>Primula farinosa</i> . . .   | { Damp places on moun-<br>tains . . . . . }       | "          |
| Scotch do. . . . .                           | " <i>Scotica</i> . . . . .      | Northern Highlands                                | "          |
| Sea Milkwort . . . . .                       | <i>Glaux maritima</i> . . .     | { Sea-shores and salt-<br>marshes . . . . . }     | "          |
| Loosestrife . . . . .                        | <i>Lysimachia vulgaris</i>      | Damp places . . . . .                             | "          |



## PLANTS (continued).

| Popular Name.                                   | Scientific Name.                    | Localities.                               | Duration.  |
|---|-------------------------------------|---|------------|
| Tufted Loosetrife . . .                         | <i>Lysimachia thyrsiflora</i>       | Borders of lakes. Rare                    | Perennial. |
| Wood Pimpernel . . .                            | " <i>nemorum</i> . . .              | Woods                                     | "          |
| Moneywort . . .                                 | " <i>Nummularia</i>                 | { Ditch-banks and<br>shady places }       | "          |
| Scarlet Pimpernel . . .                         | <i>Anagallis arvensis</i>           | A common weed . . .                       | Annual.    |
| Bog do . . .                                    | " <i>tenella</i> . . .              | Bogs . . .                                | Perennial  |
| Chaffweed . . .                                 | <i>Centunculus minimus</i>          | Damp places . . .                         | Annual.    |
| Brookweed . . .                                 | <i>Samolus Valerandi</i>            | Do. . . . .                               | Perennial. |
| Sea Thrift . . .                                | <i>Armeria maritima</i>             | Sea-cliffs . . .                          | "          |
| Sea Lavender . . .                              | <i>Statice Limonium</i> . . .       | Sea-coast . . .                           | "          |
| Matted do. do. . .                              | " <i>reticulata</i> . . .           | Coast of Norfolk . . .                    | "          |
| Greater Plantain . . .                          | <i>Plantago major</i> . . .         | A common weed . . .                       | "          |
| Hoary do. . .                                   | " <i>media</i> . . .                | Chalky hills . . .                        | "          |
| Sea do. . .                                     | " <i>maritima</i> . . .             | Muddy sea-coasts . . .                    | "          |
| Buck's-horn do. . .                             | " <i>Coronopus</i> . . .            | Dry places . . .                          | Annual.    |
| Beet . . .                                      | <i>Beta maritima</i>                | Muddy sea-coasts . . .                    | Perennial. |
| Shrubby Goosefoot . . .                         | <i>Chenopodium fruticosum</i>       | South coast. Rare . . .                   | "          |
| Sea do. . .                                     | " <i>maritimum</i> . . .            | Sea-shores . . .                          | Annual.    |
| Wild Spinach . . .                              | " <i>Bonus-Henricus</i>             | Waste places . . .                        | Perennial. |
| White Goosefoot . . .                           | " <i>album</i> . . .                | A common weed . . .                       | Annual.    |
| Shrubby Orache, or }<br>Sea Purslane . . . }    | <i>Atriplex portulacoides</i> . . . | Sea-shores . . .                          | Perennial. |
| Frosted Sea do. . .                             | " <i>laciniata</i> . . .            | Sandy do. . . . .                         | Annual.    |
| Spreading do. . .                               | " <i>patula</i> . . .               | { Dunghills and waste<br>places }         | "          |
| Narrow-leaved do. . .                           | " <i>angustifolia</i>               | Waste ground . . .                        | "          |
| Grass-leaved do. . .                            | " <i>littoralis</i> . . .           | Salt-marshes . . .                        | "          |
| Marsh do. . .                                   | " <i>pedunculata</i>                | Marshes . . .                             | "          |
| Triangular-leaved do. . .                       | " <i>deltoidea</i> . . .            | Waste ground . . .                        | "          |
| Saltwort . . .                                  | <i>Salsola Kali</i> . . .           | Sea-coast . . .                           | "          |
| Knawel . . .                                    | <i>Scleranthus annuus</i>           | Corn-fields . . .                         | "          |
| Bistort, or Snakeweed                           | <i>Polygonum Bistorta</i>           | Damp meadows . . .                        | Perennial. |
| Alpine do. . .                                  | " <i>viviparum</i> . . .            | Mountain pastures . . .                   | "          |
| Knotgrass . . .                                 | " <i>aviculare</i> . . .            | A common weed . . .                       | Annual.    |
| Sea do. . .                                     | " <i>maritimum</i> . . .            | Sandy shores . . .                        | Perennial. |
| Buckwheat . . .                                 | " <i>Fagopyrum</i> . . .            | Fields. Naturalised . . .                 | Annual.    |
| Black Bindweed, or }<br>Climbing Buckwheat }    | " <i>Convolvulus</i> . . .          | A common weed . . .                       | "          |
| Water Persicaria, or }<br>Water Bistort . . . } | " <i>amphibium</i> . . .            | Ponds and wet places . . .                | Perennial. |
| Spotted do. . .                                 | " <i>Persicaria</i> . . .           | Damp ground . . .                         | Annual.    |
| Pale-flowered do. . .                           | " <i>lapathifolium</i>              | { Dunghills and waste<br>ground }         | "          |
| Small Creeping Persi-<br>caria . . .            | " <i>minus</i> . . .                | Wet places . . .                          | "          |
| Great Water Dock . . .                          | <i>Rumex Hydrolapathum</i>          | Ditches . . .                             | Perennial. |
| Curled Dock . . .                               | " <i>crispus</i> . . .              | A common weed . . .                       | "          |
| Meadow do. . .                                  | " <i>pratensis</i> . . .            | Meadows. Rare . . .                       | "          |
| Broad-leaved do. . .                            | " <i>obtusifolius</i> . . .         | A common weed . . .                       | "          |
| Grainless Water do. . .                         | " <i>aquaticus</i> . . .            | Wet places . . .                          | "          |
| Monk's Rhubarb . . .                            | " <i>alpinus</i> . . .              | Mountains . . .                           | "          |
| Red-veined Dock . . .                           | " <i>sanguineus</i> . . .           | Woods and way-sides . . .                 | "          |
| Sharp do. . .                                   | " <i>acutus</i> . . .               | Wet places . . .                          | "          |
| Golden do. . .                                  | " <i>maritimus</i> . . .            | Marshes . . .                             | "          |
| Marsh do. . .                                   | " <i>palustris</i> . . .            | Do. . . . .                               | "          |
| Sorrel . . .                                    | " <i>acetosa</i> . . .              | Meadows . . .                             | "          |
| Sheep's do. . .                                 | " <i>acetosella</i> . . .           | Heaths . . .                              | "          |
| Mountain do. . .                                | <i>Oxyria reniformis</i> . . .      | Mountains . . .                           | "          |
| Flax-leaved Toad-flax . . .                     | <i>Thesium linophyllum</i>          | Chalky pastures<br>{ Ruins and thickets } | "          |
| Birthwort . . .                                 | <i>Aristolochia Clematitis</i>      | { Naturalised . . . }                     | "          |
| Purple Spurge . . .                             | <i>Euphorbia Peplis</i> . . .       | Sandy shores . . .                        | Annual.    |
| Sun do., or Wartweed . . .                      | " <i>Helioscopia</i> . . .          | A common weed . . .                       | "          |
| Broad-leaved do. . .                            | " <i>platyphylla</i> . . .          | Fields . . .                              | "          |
| Coral do. . .                                   | " <i>coralloides</i> . . .          | Hedges in Sussex . . .                    | Perennial. |
| Leafy-branched do. . .                          | " <i>Esula</i> . . .                | Shady woods . . .                         | "          |
| Cypress do. . .                                 | " <i>Cyparissias</i>                | Thickets. Local . . .                     | "          |
| Petty do. . .                                   | " <i>Peplus</i> . . .               | A common weed . . .                       | Annual.    |
| Dwarf do. . .                                   | " <i>exigua</i> . . .               | Corn-fields . . .                         | "          |



## PLANTS (continued).

| Popular Name.                             | Scientific Name.                               | Localities.                          | Duration.  |
|---|--|--------------------------------------|------------|
| Caper Spurge . . . . .                    | <i>Euphorbia Lathyris</i>                      | Thickets . . . . .                   | Biennial.  |
| Spring Water Starwort                     | <i>Callitriche verna</i>                       | Pools . . . . .                      | Annual.    |
| Stalked do. do. . . . .                   | " <i>pedunculata</i>                           | Do. . . . .                          | "          |
| Autumnal do. do. . . . .                  | " <i>autumnalis</i>                            | Do. . . . .                          | "          |
| Spiny-fruited Horn-<br>wort . . . . .     | { <i>Ceratophyllum de-</i><br><i>mersum</i> }  | Do. . . . .                          | Perennial. |
| Roman Nettle . . . . .                    | <i>Urtica pilulifera</i>                       | Waste ground . . . . .               | Annual.    |
| Small do. . . . .                         | " <i>urens</i>                                 | Do. . . . .                          | "          |
| Common do. . . . .                        | " <i>dioica</i>                                | Way-sides and fields                 | Perennial. |
| Pellitory . . . . .                       | <i>Parietaria officinalis</i>                  | Old walls . . . . .                  | "          |
| Hop . . . . .                             | <i>Humulus Lupulus</i>                         | Hedges . . . . .                     | "          |
| Smooth Willow . . . . .                   | <i>Salix triandra</i>                          | { Wet woods and osier-<br>beds }     | Tree.      |
| Net-leaved do. . . . .                    | " <i>reticulata</i>                            | Scottish mountains . . . . .         | "          |
| Downy do. . . . .                         | " <i>glaucæ</i>                                | Highlands . . . . .                  | "          |
| Water Thyme . . . . .                     | <i>Eudorea Canadensis</i>                      | Canals. Not native.                  | Perennial. |
| Frog-bit . . . . .                        | { <i>Hydrocharis Morsus</i><br><i>Ranæ</i> }   | Ponds and streams . . . . .          | "          |
| Water Soldier, or<br>Water Aloe . . . . . | <i>Stratiotes aloides</i>                      | Pools . . . . .                      | "          |
| Pyramidal Orchis . . . . .                | <i>Orchis pyramidalis</i>                      | Pastures . . . . .                   | "          |
| Lizard do. . . . .                        | " <i>hircina</i>                               | Chalky thickets . . . . .            | "          |
| Marsh do. . . . .                         | " <i>latifolia</i>                             | Marshes . . . . .                    | "          |
| Spotted do. . . . .                       | " <i>maculata</i>                              | Heaths . . . . .                     | "          |
| Fragrant do. . . . .                      | <i>Gymnadenia conopsea</i>                     | Chalk hills . . . . .                | "          |
| Frog do. . . . .                          | <i>Habenaria viridis</i>                       | Hill pastures . . . . .              | "          |
| Small White do. . . . .                   | " <i>albida</i>                                | Mountains . . . . .                  | "          |
| Green Musk do. . . . .                    | <i>Herminium Monorchis</i>                     | Chalky pastures . . . . .            | "          |
| Mountain Tway-blade . . . . .             | <i>Listera Nidus-Avis</i>                      | Mountains . . . . .                  | "          |
| Helleborine . . . . .                     | <i>Epipactis latifolia</i>                     | Woods . . . . .                      | "          |
| Marsh do. . . . .                         | " <i>palustris</i>                             | Marshy pastures . . . . .            | "          |
| White do. . . . .                         | " <i>grandiflora</i>                           | Woods on chalk soil . . . . .        | "          |
| Two-leaved Bog Orchis                     | <i>Liparis Loeselii</i>                        | Sandy marshes . . . . .              | "          |
| Coral-root . . . . .                      | <i>Corallorrhiza innata</i>                    | Scotland . . . . .                   | "          |
| Lady's Slipper . . . . .                  | <i>Cypripedium Calceolus</i>                   | { Northern Woods. }<br>Very scarce.  | "          |
| Yellow Iris . . . . .                     | <i>Iris Pseud-Acorus</i>                       | Watery places . . . . .              | "          |
| Stinking do. . . . .                      | " <i>fatidissima</i>                           | Pastures and thickets . . . . .      | "          |
| Sand Garlic . . . . .                     | <i>Allium arenarium</i>                        | Woods and pastures . . . . .         | "          |
| Mountain do. . . . .                      | " <i>carinatum</i>                             | Pastures . . . . .                   | "          |
| Wild do. . . . .                          | " <i>oleraceum</i>                             | Fields . . . . .                     | "          |
| Crow do. . . . .                          | " <i>vineale</i>                               | Dry do. . . . .                      | "          |
| Spiked Star of Beth-<br>lehem . . . . .   | { <i>Ornithogalum pyre-</i><br><i>naicum</i> } | Pastures. Naturalised . . . . .      | "          |
| Scottish Asphodel . . . . .               | <i>Tofieldia palustris</i>                     | { Boggy places on<br>mountains }     | "          |
| Bog do. . . . .                           | <i>Narthecium ossifragum</i>                   | Bogs . . . . .                       | "          |
| Great Sea Rush . . . . .                  | <i>Juncus acutus</i>                           | Sandy shores . . . . .               | "          |
| Common do. . . . .                        | " <i>conglomeratus</i>                         | Damp ground . . . . .                | "          |
| Soft do. . . . .                          | " <i>effusus</i>                               | Do. . . . .                          | "          |
| Hard do. . . . .                          | " <i>glaucus</i>                               | Do. . . . .                          | "          |
| Thread do. . . . .                        | " <i>filiformis</i>                            | Lake shores in North . . . . .       | "          |
| Baltic do. . . . .                        | " <i>Balticus</i>                              | Sandy shores . . . . .               | "          |
| Sharp-flowered do. . . . .                | " <i>acutiflorus</i>                           | Damp ground . . . . .                | "          |
| Jointed do. . . . .                       | " <i>lamprocarpus</i>                          | Wet places . . . . .                 | "          |
| Small Jointed do. . . . .                 | " <i>uliginosus</i>                            | Damp heaths . . . . .                | "          |
| Round-fruited do. . . . .                 | " <i>compressus</i>                            | Marshes . . . . .                    | "          |
| Slender Spreading do. . . . .             | " <i>Gesneri</i>                               | Highlands . . . . .                  | "          |
| Toad do. . . . .                          | " <i>bufonius</i>                              | Damp heaths . . . . .                | Annual.    |
| Three-leaved do. . . . .                  | " <i>trifidus</i>                              | Mountain bogs . . . . .              | Perennial. |
| Clustered do. . . . .                     | " <i>castaneus</i>                             | Do. . . . .                          | "          |
| Moss do. . . . .                          | " <i>squarrosus</i>                            | Do. . . . .                          | "          |
| Three-flowered do. . . . .                | " <i>triglumis</i>                             | Mountain rills . . . . .             | "          |
| Curved Hairy do. . . . .                  | <i>Luzula arcuata</i>                          | { Summits of Highland<br>mountains } | "          |
| Spiked do. . . . .                        | " <i>spicata</i>                               | High mountains . . . . .             | "          |
| Flowering do. . . . .                     | <i>Rutomus umbellatus</i>                      | Ponds and slow streams . . . . .     | "          |
| Star Fruit . . . . .                      | { <i>Actinocarpus Dama-</i><br><i>sonium</i> } | Pools . . . . .                      | "          |



## PLANTS (continued).

| Popular Name.                                 | Scientific Name.                                       | Localities.                                       | Duration.  |
|---|--|---|------------|
| Water Plantain . . .                          | <i>Alisma Plantago</i> . . .                           | Ditches . . . . .                                 | Perennial. |
| Floating do. . . . .                          | " <i>natans</i> . . . . .                              | Lakes. Local . . . . .                            | "          |
| Arrowhead . . . . .                           | <i>Sagittaria sagittifolia</i> . . . . .               | Ditches and pools . . . . .                       | "          |
| Sea-side Arrow-grass . . . . .                | <i>Triglochin maritimum</i> . . . . .                  | { Salt - marshes and }<br>muddy shores . . . . .  | "          |
| Marsh Scheuchzeria . . . . .                  | <i>Scheuchzeria palustris</i> . . . . .                | Bogs. Rare . . . . .                              | "          |
| Bull-rush, or Cat's-tail . . . . .            | <i>Typha latifolia</i> . . . . .                       | Pools . . . . .                                   | "          |
| Lesser do. . . . .                            | " <i>angustifolia</i> . . . . .                        | Do. . . . .                                       | "          |
| Dwarf do. . . . .                             | " <i>minor</i> . . . . .                               | Marshes. Doubtful native . . . . .                | "          |
| Branched Bur Reed . . . . .                   | <i>Sparganium ramosum</i> . . . . .                    | Ditches . . . . .                                 | "          |
| Upright do. . . . .                           | " <i>simplex</i> . . . . .                             | Do. . . . .                                       | "          |
| Floating do. . . . .                          | " <i>natans</i> . . . . .                              | Lakes . . . . .                                   | "          |
| Sweet Flag . . . . .                          | <i>Acorus Calamus</i> . . . . .                        | River-sides . . . . .                             | "          |
| Ivy-leaved Duckweed . . . . .                 | <i>Lemna trisulca</i> . . . . .                        | Ditches and ponds . . . . .                       | Annual.    |
| Broad-leaved Pond-weed . . . . .              | <i>Potamogeton natans</i> . . . . .                    | Pools and streams . . . . .                       | Perennial. |
| Plantain-leaved do. . . . .                   | " <i>plantagineus</i> . . . . .                        | Pools . . . . .                                   | "          |
| Various-leaved do. . . . .                    | " <i>heterophyllus</i> . . . . .                       | Do. . . . .                                       | "          |
| Perfoliate do. . . . .                        | " <i>perfoliatus</i> . . . . .                         | Ponds . . . . .                                   | "          |
| Curled do. . . . .                            | " <i>crispus</i> . . . . .                             | Pools and ditches . . . . .                       | "          |
| Oblong-leaved do. . . . .                     | " <i>oblongus</i> . . . . .                            | Do. . . . .                                       | "          |
| Long-stalked do. . . . .                      | " <i>prælongus</i> . . . . .                           | Pools . . . . .                                   | "          |
| Flat-stalked do. . . . .                      | " <i>compressus</i> . . . . .                          | Ditches . . . . .                                 | "          |
| Grassy do. . . . .                            | " <i>gramineus</i> . . . . .                           | Do. . . . .                                       | "          |
| Small do. . . . .                             | " <i>pusillus</i> . . . . .                            | Ponds and ditches . . . . .                       | "          |
| Sharp-leaved do. . . . .                      | " <i>acutifolius</i> . . . . .                         | Ditches . . . . .                                 | "          |
| Grass-wrack do. . . . .                       | " <i>zosteræfolius</i> . . . . .                       | Ponds and lakes . . . . .                         | "          |
| Sea Ruppia . . . . .                          | <i>Ruppia maritima</i> . . . . .                       | Salt-ditches . . . . .                            | "          |
| Sweet Cyperus . . . . .                       | <i>Cyperus longus</i> . . . . .                        | Bogs . . . . .                                    | Annual.    |
| Brown do. . . . .                             | " <i>fuscus</i> . . . . .                              | Do. Rare . . . . .                                | Perennial. |
| Black Bog Rush . . . . .                      | <i>Schænus nigricans</i> . . . . .                     | Bogs . . . . .                                    | "          |
| Compressed do. . . . .                        | " <i>compressus</i> . . . . .                          | Do. . . . .                                       | "          |
| Brown do. . . . .                             | " <i>rufus</i> . . . . .                               | Scotch bogs . . . . .                             | "          |
| Twig Rush . . . . .                           | <i>Cladium mariscus</i> . . . . .                      | Bogs . . . . .                                    | "          |
| White Beak Rush . . . . .                     | <i>Rhynchospora alba</i> . . . . .                     | Do. Rare . . . . .                                | "          |
| Brown do. . . . .                             | " <i>fusca</i> . . . . .                               | Do. Do. . . . .                                   | "          |
| Creeping Spike Rush . . . . .                 | <i>Eleocharis palustris</i> . . . . .                  | Ditches and bogs . . . . .                        | "          |
| Sealy do. . . . .                             | " <i>cæspitosa</i> . . . . .                           | Mountains and heaths . . . . .                    | "          |
| Chocolate do. . . . .                         | " <i>pauciflora</i> . . . . .                          | Moors . . . . .                                   | "          |
| Floating Water Rush . . . . .                 | <i>Eleogiton fluitans</i> . . . . .                    | Pools . . . . .                                   | "          |
| Bull Rush, or Great Club Rush . . . . .       | <i>Scirpus lacustris</i> . . . . .                     | Ditches and pools . . . . .                       | "          |
| Least Club Rush . . . . .                     | " <i>setaceus</i> . . . . .                            | Watery places . . . . .                           | "          |
| Savi's do. . . . .                            | " <i>Savii</i> . . . . .                               | Bogs . . . . .                                    | "          |
| Sea do. . . . .                               | " <i>maritimus</i> . . . . .                           | Sea-shores . . . . .                              | "          |
| Wood do. . . . .                              | " <i>sylvaticus</i> . . . . .                          | Woods . . . . .                                   | "          |
| Hare's-foot Sledge . . . . .                  | <i>Carex leporina</i> . . . . .                        | Highlands . . . . .                               | "          |
| Rigid do. . . . .                             | " <i>rigida</i> . . . . .                              | Mountains . . . . .                               | "          |
| Straight-leaved Mountain do. . . . .          | " <i>aquatilis</i> . . . . .                           | Scotch marshes . . . . .                          | "          |
| Loose-spiked Rock do. . . . .                 | " <i>Mielichhoferi</i> . . . . .                       | Mountains . . . . .                               | "          |
| Dwarf do. . . . .                             | " <i>capillaris</i> . . . . .                          | Do. . . . .                                       | "          |
| Scorched do. . . . .                          | " <i>ustulata</i> . . . . .                            | Highlands . . . . .                               | "          |
| Black do. . . . .                             | " <i>atrata</i> . . . . .                              | Mountains . . . . .                               | "          |
| Short-spiked do. . . . .                      | " <i>speirostachya</i> . . . . .                       | Bogs . . . . .                                    | "          |
| Short Brown-spiked do. . . . .                | " <i>phæostachya</i> . . . . .                         | Mountains . . . . .                               | "          |
| Alpine Fox-tail Grass . . . . .               | <i>Alopecurus alpinus</i> . . . . .                    | Do. Rare . . . . .                                | "          |
| Slender do. do., or }<br>Black Bent . . . . . | " <i>agrestis</i> . . . . .                            | Waste ground . . . . .                            | Annual.    |
| Bulbous do. do. . . . .                       | " <i>bulbosus</i> . . . . .                            | Salt-marshes . . . . .                            | Perennial. |
| Floating do. do. . . . .                      | " <i>geniculatus</i> . . . . .                         | Wet places . . . . .                              | "          |
| Canary Grass . . . . .                        | <i>Phalaris Canariensis</i> . . . . .                  | { Uncultivated places. }<br>Naturalised . . . . . | Annual.    |
| Reed do. . . . .                              | " <i>arundinacea</i> . . . . .                         | Pools and ditches . . . . .                       | Perennial  |
| Sea Reed or Marram . . . . .                  | { <i>Ammophila arundi-</i><br><i>nacea</i> . . . . . } | Sandy shores . . . . .                            | "          |
| Cat's-tail Grass . . . . .                    | <i>Phleum pratense</i> . . . . .                       | Pastures . . . . .                                | "          |
| Mountain do. do. . . . .                      | " <i>alpinum</i> . . . . .                             | Mountains . . . . .                               | "          |
| Rough do. do. . . . .                         | " <i>asperum</i> . . . . .                             |   | Annual.    |



## PLANTS (continued).

| Popular Name.                              | Scientific Name.                   | Localities.               | Duration.  |
|--|------------------------------------|---------------------------|------------|
| Purple-stalked Cat's Tail Grass . . . }    | <i>Phleum Bæhmeri</i> . . .        | Pastures . . . .          | Perennial. |
| Annual Beard Grass . . . }                 | { <i>Polypogon monspeliensis</i> } | Way-sides . . . .         | Annual.    |
| Perennial do. . . . .                      | " <i>littoralis</i> . . . .        | Salt marshes . . . .      | Perennial. |
| Close Reed . . . . .                       | <i>Calamagrostis stricta</i> . . . | Bogs. Rare . . . .        | "          |
| Silky Bent Grass . . . .                   | <i>Agrostis Spica-venti</i> . . .  | Sandy fields . . . .      | Annual.    |
| Brown do. . . . .                          | " <i>canina</i> . . . .            | Damp fields . . . .       | Perennial. |
| Bristle-leaved do. . . .                   | " <i>setacea</i> . . . .           | Turfy heaths . . . .      | "          |
| Marsh do. . . . .                          | " <i>alba</i> . . . .              | Marshes . . . .           | "          |
| Turfy Hair Grass . . . .                   | <i>Aira cæspitosa</i> . . . .      | Pastures . . . .          | "          |
| Alpine do. . . . .                         | " <i>alpina</i> . . . .            | Mountains . . . .         | "          |
| Waved do. . . . .                          | " <i>flexuosa</i> . . . .          | Heaths . . . .            | "          |
| Grey do. . . . .                           | " <i>canescens</i> . . . .         | Sandy fields near the sea | "          |
| Wood Melic Grass . . . .                   | <i>Melica uniflora</i> . . . .     | Shady woods . . . .       | "          |
| Creeping Soft Grass . . .                  | <i>Holcus mollis</i> . . . .       | Pastures . . . .          | "          |
| Crested Hair Grass . . .                   | <i>Kœhleria cristata</i> . . . .   | Dry do. . . .             | "          |
| Panick Grass . . . . .                     | <i>Panicum Crus-galli</i> . . . .  | Fields . . . .            | Annual.    |
| Rough do. . . . .                          | <i>Setaria verticillata</i> . . .  | Do. . . .                 | "          |
| Green do. . . . .                          | " <i>viridis</i> . . . .           | Do. . . .                 | "          |
| Reed Meadow Grass . . .                    | <i>Poa aquatica</i> . . . .        | Ditches . . . .           | Perennial. |
| Reflexed do. . . . .                       | " <i>distans</i> . . . .           | Pastures . . . .          | "          |
| Sea do. . . . .                            | " <i>maritima</i> . . . .          | Salt marshes . . . .      | "          |
| Procumbent do. . . . .                     | " <i>procumbens</i> . . . .        | Do. . . .                 | Annual.    |
| Flat-stalked do. . . . .                   | " <i>compressa</i> . . . .         | Dry places . . . .        | Perennial. |
| Alpine do. . . . .                         | " <i>alpina</i> . . . .            | Mountains . . . .         | "          |
| Wavy do. . . . .                           | " <i>laxa</i> . . . .              | Grampians . . . .         | "          |
| Annual do. . . . .                         | " <i>annua</i> . . . .             | Waste ground . . . .      | Annual.    |
| Wood do. . . . .                           | " <i>nemoralis</i> . . . .         | Woods . . . .             | Perennial. |
| Borrer's do. . . . .                       | " <i>Borreri</i> . . . .           | Salt marshes . . . .      | "          |
| Sweet Grass . . . . .                      | " <i>Poa fluitans</i> . . . .      | Ditches and pool margins  | "          |
| Heath Grass . . . . .                      | <i>Triodia decumbens</i> . . . .   | Moors . . . .             | "          |
| Smaller Quaking Grass . .                  | <i>Briza minor</i> . . . .         | Fields. Rare . . . .      | Annual.    |
| Cock's-foot Grass . . . .                  | <i>Dactylis glomerata</i> . . . .  | Fields . . . .            | Perennial. |
| Dog's-tail Grass . . . .                   | <i>Cynosurus cristatus</i> . . .   | Pastures . . . .          | "          |
| Rough do. . . . .                          | " <i>echinatus</i> . . . .         | Southern sea-shores . .   | Annual.    |
| Barren Fescue Grass . . .                  | <i>Festuca bromoides</i> . . . .   | Dry ground . . . .        | "          |
| Hard do. . . . .                           | " <i>duriuscula</i> . . . .        | Pastures . . . .          | Perennial. |
| Giant do. . . . .                          | " <i>gigantea</i> . . . .          | Shady places . . . .      | "          |
| Reed do. . . . .                           | " <i>calamaria</i> . . . .         | Damp woods . . . .        | "          |
| Spiked do. . . . .                         | " <i>lohiacea</i> . . . .          | Pastures . . . .          | "          |
| Tall do. . . . .                           | " <i>elator</i> . . . .            | Damp do. . . .            | "          |
| Upright Brome Grass . . .                  | <i>Bromus erectus</i> . . . .      | Sandy pastures . . . .    | "          |
| Hairy do. . . . .                          | " <i>asper</i> . . . .             | Woods . . . .             | Annual.    |
| Barren do. . . . .                         | " <i>sterilis</i> . . . .          | Fields . . . .            | "          |
| Rye do. . . . .                            | " <i>Secalinus</i> . . . .         | Do. . . .                 | "          |
| Field do. . . . .                          | " <i>arvensis</i> . . . .          | Sea-coast . . . .         | "          |
| Corn do. . . . .                           | " <i>squarrosus</i> . . . .        | Corn-fields. Rare . . .   | "          |
| Wild Oat, or Haver . . .                   | <i>Avena fatua</i> . . . .         | Do. . . .                 | "          |
| Bristle do. . . . .                        | " <i>strigosa</i> . . . .          | Do. . . .                 | "          |
| Narrow-leaved Oat }<br>Grass . . . . . }   | " <i>pratensis</i> . . . .         | Dry pastures . . . .      | Perennial. |
| Alpine do. . . . .                         | " <i>alpina</i> . . . .            | Mountains . . . .         | "          |
| Flat-stemmed do. . . . .                   | " <i>planiculmis</i> . . . .       | Do. . . .                 | "          |
| Yellow do. . . . .                         | " <i>flavescens</i> . . . .        | Chalky fields . . . .     | "          |
| Reed . . . . .                             | <i>Arundo Phragmites</i> . . . .   | Ditches and river-sides . | "          |
| Lyme Grass . . . . .                       | <i>Elymus arenarius</i> . . . .    | Sandy shores . . . .      | "          |
| Drooping do. . . . .                       | " <i>geniculatus</i> . . . .       | Salt marshes . . . .      | "          |
| Wood Barley . . . . .                      | <i>Hordeum sylvaticum</i> . . .    | Woods . . . .             | "          |
| Wall do. . . . .                           | " <i>murinum</i> . . . .           | Road-sides . . . .        | Annual.    |
| Meadow do. . . . .                         | " <i>pratense</i> . . . .          | Damp pastures . . . .     | "          |
| Sea do. . . . .                            | " <i>maritimum</i> . . . .         | Sea-side do. . . .        | "          |
| Crested Wheat Grass . . .                  | <i>Triticum cristatum</i> . . . .  | Sea-side . . . .          | Perennial. |
| Rushy do. . . . .                          | " <i>juncum</i> . . . .            | Sand-dunes . . . .        | "          |
| Couch Grass, or Dog }<br>Grass . . . . . } | " <i>repens</i> . . . .            | A common weed . . . .     | "          |
| Bearded do. . . . .                        | " <i>caninum</i> . . . .           | Woods . . . .             | "          |
| False Brome Grass . . .                    | { <i>Brachypodium sylvaticum</i> } | Copses and hedge-banks    | "          |



## P L A N T S (continued).

| Popular Name.   | Scientific Name.                                  | Localities.   | Duration.  |
|---|---|---|------------|
| Heath Brome Grass                                       | { <i>Brachypodium pin-</i><br><i>natum</i> }      | Heaths . . . .  | Perennial. |
| Darnel, or Rye Grass                                    | <i>Lolium perenne</i> . . .                       | Pastures . . . .  | "          |
| Annual Rye Grass  | " <i>linicola</i> . . . .                         | Fields. Rare . . . .  | Annual.    |
| Bearded Darnel  | " <i>temulentum</i> . . .                         | Do. . . . .   | "          |
| Hard Grass  | <i>Lepturus incurvatus</i> .                      | Sea-coast . . . .   | "          |
| Dog's-tooth Grass                                       | <i>Cynodon dactylon</i> . .                       | Sandy shores . . . .  | Perennial. |
| Hairy Finger Grass                                      | <i>Digitaria sanguinalis</i> .                    | Fields. Rare . . . .  | Annual.    |
| Finger Grass  | " <i>humifusa</i> . . . .                         | Fields . . . . .  | "          |
| FERNS.  |   |   |            |
| Common Polypody   | <i>Polypodium vulgare</i> .                       | { Mossy banks, damp<br>rocks, &c. . . . }                           | Perennial  |
| Welsh do.   | " <i>cambricum</i> . . . .                        | Shady banks . . . .   | "          |
| Mountain do., or }<br>Beech Fern . . . }                | " <i>Phegopteris</i> . . . .                      | { Damp woods and<br>mountains. Local }                              | "          |
| Smooth Three-<br>branched do., or }<br>Oak Fern . . . } | " <i>Dryopteris</i> . . . .                       | Damp places. Local .  | "          |
| Limestone do. . . .                                     | " <i>calcareum</i> . . . .                        | { Limestone rocks.<br>Rare and local. }                             | "          |
| Alpine do. . . . .                                      | " <i>alpestre</i> . . . . .                       | Scotch mountains . .  | "          |
| Rock Brakes, or }<br>Mountain Parsley }                 | <i>Allosorus crispus</i> . .                      | { Stony hills. Rare and<br>local . . . . }                          | "          |
| Alpine Shield Fern, or }<br>Holly Fern . . . }          | <i>Polystichum Lonchitis</i> .                    | { Mountain rocks, espe-<br>cially in Scotland<br>and Ireland. . . } | "          |
| Prickly do. . . . .                                     | " <i>aculeatum</i> . . . .                        | Shady places . . . .  | "          |
| Marsh Buckler Fern                                      | <i>Lastrea palustris</i> . .                      | Marshes . . . . .   | "          |
| Heath Shield Fern                                       | " <i>Oreopteris</i> . . . .                       | Heaths . . . . .  | "          |
| Male Fern . . . . .                                     | " <i>Filix-mas</i> . . . .                        | Shady places . . . .  | "          |
| Crested Buckler Fern                                    | " <i>cristata</i> . . . .                         | { Boggy heaths. Rare<br>and local . . . }                           | "          |
| Broad do. do. . . .                                     | " <i>dilatata</i> . . . .                         | Wet shady places . .  | "          |
| Lady Fern . . . . .                                     | { <i>Asplenium Filix-fæ-</i><br><i>mina</i> }     | Do. . . . .   | "          |
| Forked Spleenwort                                       | " <i>septentrionale</i> . .                       | Rocks. Rare . . . .   | "          |
| Alternate do. . . .                                     | " <i>alternifolium</i> . . .                      | { Shady rocks in Scot-<br>land and Lake Dis-<br>trict. Rare . . }   | "          |
| Rue-leaved do. . . .                                    | " <i>Ruta-muraria</i> . . .                       | Shady rocks . . . .   | "          |
| Green do. . . . .                                       | " <i>viride</i> . . . . .                         | { Damp mountain rocks<br>in Wales and Scot-<br>land . . . . }       | "          |
| Maidenhair do. . . .                                    | " <i>Trichomanes</i> . . . .                      | Shady rocks . . . .   | "          |
| Sea do. . . . .   | " <i>marinum</i> . . . .                          | Rocks. . . . .  | "          |
| Smooth Rock do. . .                                     | " <i>fontanum</i> . . . .                         | { Mountain rocks. Very<br>scarce . . . . }                          | "          |
| Lanceolate do. . . .                                    | " <i>lanceolatum</i> . . . .                      | Rocks. Local . . . .  | "          |
| Black Maidenhair do.                                    | " <i>Adiantum-nigrum</i> . .                      | Shady places . . . .  | "          |
| Hart's-tongue . . . .                                   | { <i>Scolopendrium offi-</i><br><i>narum</i> }    | Damp do. do., and walls   | "          |
| Scale Fern . . . . .                                    | <i>Ceterach officinarum</i> .                     | Limestone rocks . .   | "          |
| Hard Fern . . . . .                                     | <i>Blechnum boreale</i> . .                       | Heaths . . . . .  | "          |
| Bracken, or Brakes                                      | <i>Pteris aquilina</i> . . .                      | Woods and heaths . .  | "          |
| Maidenhair Fern . .                                     | { <i>Adiantum Capillus-</i><br><i>Veneris</i> }   | Rocks. Local . . . .  | "          |
| Brittle Bladder Fern                                    | <i>Cystopteris fragilis</i> .                     | Walls . . . . .   | "          |
| Oblong Woodsia . . .                                    | <i>Woodsia ilvensis</i> . .                       | Rocks. Rare . . . .   | "          |
| Alpine do. . . . .                                      | " <i>hyperborea</i> . . . .                       | { Scotch mountain<br>rocks. Rare . . }                              | "          |
| Flowering Fern . . .                                    | <i>Osmunda regalis</i> . . .                      | Shady bogs . . . .  | "          |
| Bristle Fern . . . .                                    | <i>Trichomanes brevisetum</i>                     | Damp rocks. Rare . .  | "          |
| Tunbridge Film Fern                                     | { <i>Hymenophyllum Tun-</i><br><i>bridgense</i> } | Damp rocks . . . .  | "          |
| Wilson's do. . . . .                                    | " <i>Wilsoni</i> . . . . .                        | Do. . . . .   | "          |
| Moonwort . . . . .                                      | <i>Botrychium lunaria</i> .                       | Hill pastures. Local .  | "          |
| Adder's-tongue . . .                                    | { <i>Ophioglossum vulga-</i><br><i>tum</i> }      | { Damp meadows and<br>pastures . . . }                              | "          |



# AUGUST.

## GENERAL HINTS.

PALINGS, tree-trunks, butterflies, and moths, as before. In this month there will be ripe fruit in plenty, and fallen fruit is sure to attract the insects by day as well as does the treacle by night. The Red Admiral and the Painted Lady will come freely to fruit or ivy blossom. The latter, however, belongs rather to September than August. This is a splendid month for clover and lucerne, especially in fields near the sea. Bright sunshine after light rains will bring out the sweet fragrance of the flowers, and the butterflies will crowd to them.

I must, however, give the reader one or two warnings.

In the first place, the owners of the fields are not, as a rule, very favourable towards entomologists, and if they catch one of them running over their fields will probably prosecute him for damaging the crops.

In the next place, chasing butterflies in lucerne on a hot August day is very tiring work, the crop being very heavy, and entangling the feet at every step.

Also, lucerne holds the wet nearly as much as turnips, so that the thickest of ordinary boots will be soaked in a few minutes, and the legs will be wet up to the knee.

Clover is scarcely better than lucerne in these respects, but is not quite so entangling to the feet, and does not occasion so many falls.

Caterpillars will be plentiful both by day and night. There are several caterpillars which will soon retire to their hiding places for the purpose of hibernation. Unless they are very rare and valuable it will be as well to let them alone. For some occult reason hibernating caterpillars are very difficult to rear, as they are apt to die in the winter when taken into a house.

Beating and shaking for caterpillars will still be required. Both processes have been described, but the latter needs a few words of further explanation.

As a rule, the object of shaking is to startle the larva and cause it to loosen its hold. Most of them will drop when thus startled, but there are some, notably those of the Puss Moth and the Purple Emperor, which employ just the opposite plan, clinging tighter the more they are frightened. How firmly these caterpillars can cling may be tested by allowing that of the Puss Moth to crawl up the finger, when the strength of the claspers will be very clearly evidenced.

But as these, especially the latter, are too valuable to be neglected, they must be dislodged in some way. It is found that even their firm hold is not proof against a long continued shaking, and that they can be tired out at last. So, if the branch be low enough, seize it with the hands and keep shaking it downwards, not allowing the vibration to cease for a moment. A higher branch can be shaken in like manner with a stout hooked stick, which can be elongated to any extent by tying other sticks to it.

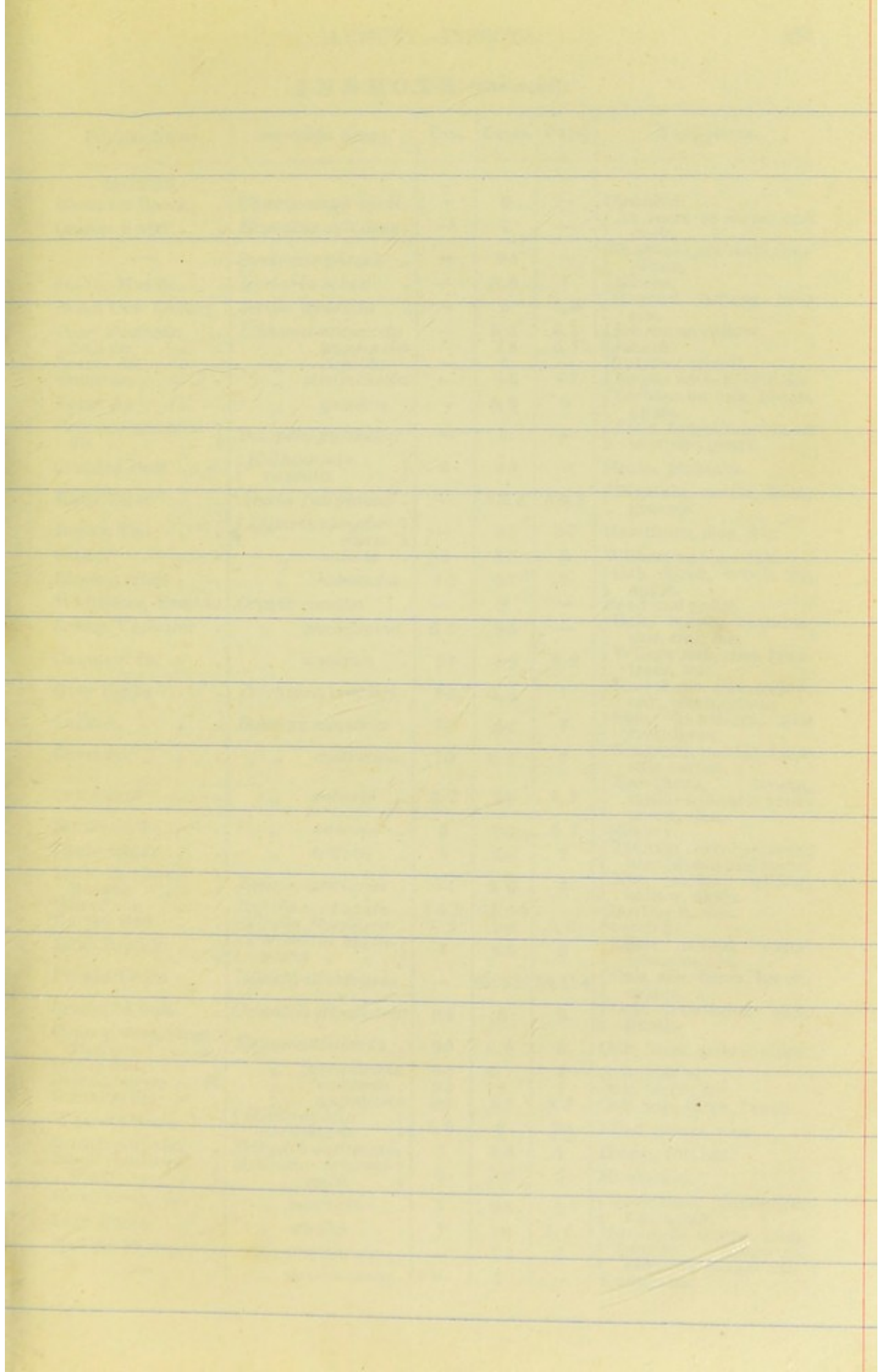
Some collectors carry with them a stout iron hook which can be fastened to the end of a long stick when required.



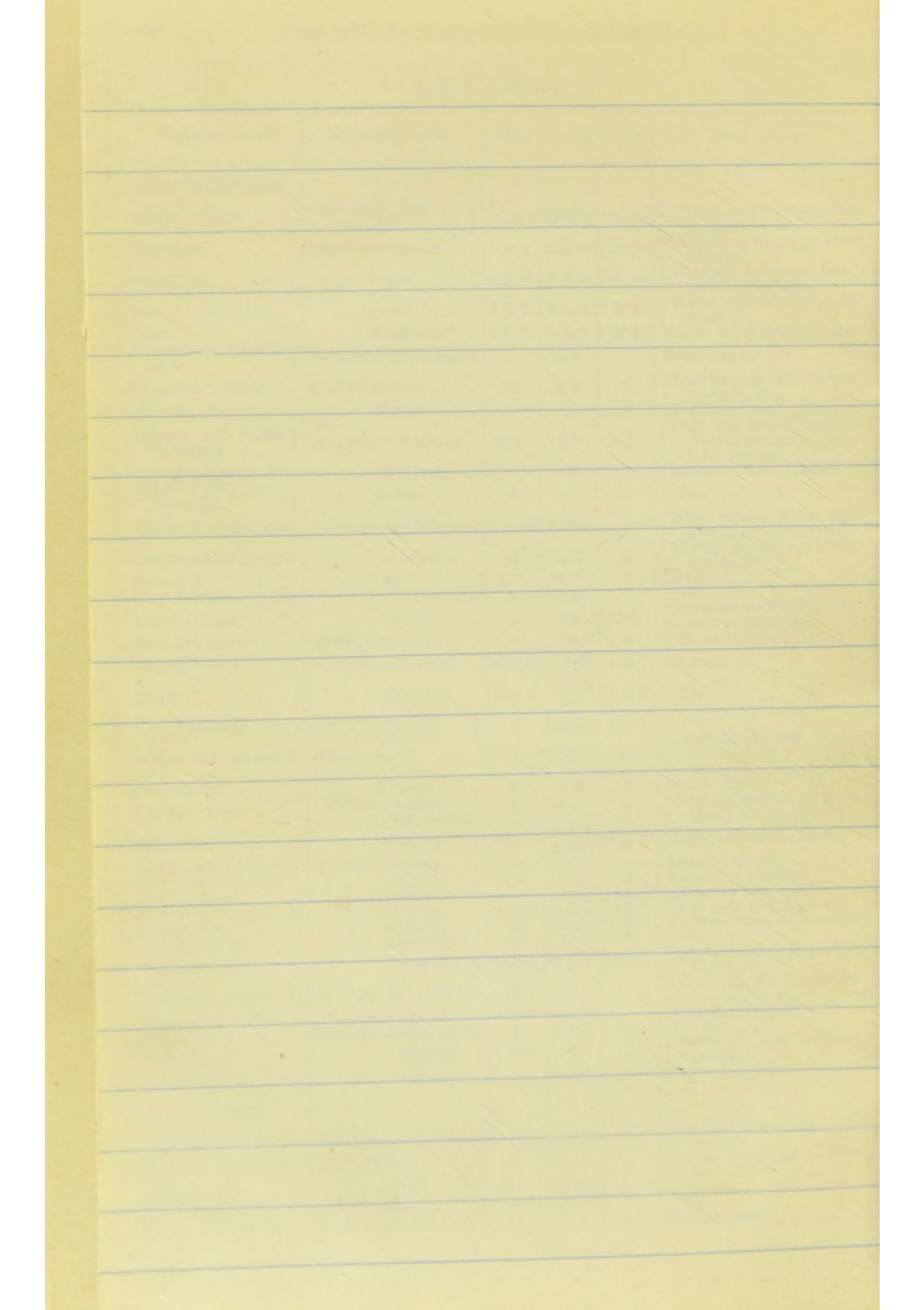
## INSECTS.

| Popular Name.                          | Scientific Name.                  | Ova.      | Larva.         | Pupa.    | Food-plants.  |
|--|-----------------------------------|-----------|----------------|----------|---|
| <b>BUTTERFLIES.</b>                    |                                   |           |                |          |   |
| Wood White . . .                       | { <i>Leucophasia Sinapis</i> . }  | 5, 6, & 8 | 6 & 9, 10      | 7 & 9-4  | { Tufted vetch, tuberous orobus.                            |
| ✓ Large do. . . .                      | <i>Pieris brassicae</i> .         | 5 & 8     | 6 & 9          | 7 & 9-4  | { Cabbage, &c., and nasturtium.                             |
| ✓ Small do. . . .                      | „ <i>rapae</i> . . .              | 5 & 8     | 6 & 9          | 7 & 9-4  | { Turnip, cabbage, &c., and nasturtium.                     |
| ✓ Green-veined do. .                   | „ <i>napi</i> . . .               | 5 & 8     | 6 & 9          | 7 & 9-4  | { Rape, and other cruciferae.                               |
| Bath do. . . . .                       | „ <i>daphidice</i> .              | 5 & 8     | 6 & 9          | 7 & 9-4  | Weld, wild mignonette.                                      |
| ✓ Brimstone, or Sulphur . . .          | <i>Gonepteryx rhamni</i>          | 4         | 6, 7           | 7        | Buckthorn.  |
| Clouded Yellow . .                     | <i>Colias Edusa</i> . .           | 9-5       | 6, 7           | 8        | { Lucerne, Dutch clover, trefoils, &c.                      |
| Pale do. do. . . .                     | „ <i>Hyale</i> . . .              | 5         | 7              | 8        | Melilot, clover, lucerne.                                   |
| Queen of Spain }<br>Fritillary . . . . | <i>Argynnis Latona</i> .          | 8, 9      | 8-5            | 6, 7     | { Dog and sweet violets, wild heartsease, sainfoin, borage. |
| Pearl-bordered do                      | „ <i>Euphrosyne</i>               | 6         | 7-5            | 5        | Dog and other violets.                                      |
| Small Pearl-bordered do.               | „ <i>Selene</i> . . .             | 6         | 7-5            | 5        | Do.   |
| Large Tortoiseshell                    | <i>Vanessa polychloros</i>        | 5 s. 10   | s 10-6         | 7        | { Elm, aspen, osier, willow, and fruit-trees.               |
| Camberwell Beauty                      | „ <i>Antiope</i> . . .            | 5         | 6, 7           | 7        | { Birch, poplar, willow, and nettle                         |
| Peacock . . . . .                      | „ <i>Io</i> . . . . .             | 4, 5      | 6, 7           | 7        | Nettle.   |
| ✓ Red Admiral . . .                    | „ <i>Atalanta</i> . .             | 5         | 6, 7           | 7        | Do.   |
| ✓ Painted Lady . . .                   | „ <i>cardui</i> . . .             | 6         | 6-9            | 7-9      | { Thistles, nettle, mallow, and scarlet bean                |
| Scotch Ringlet . .                     | <i>Erebia Medea</i> . .           | 8         | 9-5            | 6        | Poa and other grasses.                                      |
| Wood Argus : . . .                     | <i>Satyrus Aegeria</i> .          | 5 & 8     | 6, 7, & 9-3    | 4 & 7    | Grasses.  |
| ✓ Wall . . . . .                       | „ <i>Megæra</i> . . .             | 5 & 8     | 6, 7, & 9-4    | 4 & 7    | Do.   |
| ✓ Small Heath . . .                    | { <i>Cænonympha Pamphilus</i> . } | 5         | 5, 6, & 8      | 4 & 7    | Do.   |
| Green Hairstreak S                     | <i>Thecla rubi</i> . . .          | 5         | 7 & 10         | 8-4      | { Bramble, broom, birch, greenwood, creeping willow.        |
| Brown do. . . . .                      | „ <i>betulae</i> . . .            | 10        | 5, 6           | 7        | Birch, sloe.  |
| Large Copper . . .                     | { <i>Polyommatus Hippothoe</i> }  | 8         | 8-6            | 7        | { Great water dock (probably now extinct).                  |
| ✓ Small do. . . . .                    | „ <i>phloas</i> . . .             | 6 & 10    | 5, 6, 8 & 10-4 | 4 & 10   | Ragwort, dock, sorrel.                                      |
| Long-tailed Blue .                     | <i>Lycæna bœtica</i> . .          | —         | 7-9            | —        | Bladder senna.  |
| ✓ Silver-studded do. .                 | „ <i>Ægon</i> . . . .             | 7-2       | 5, 6           | 6        | Birdsfoot broom.  |
| Brown Argus . . .                      | „ <i>Agestis</i> . . .            | 8         | 7 & 9-4        | 4 & 7    | Hemlock storksbill.   |
| ✓ Common Blue . . E                    | „ <i>Alexis</i> . . .             | 5 & 9     | 4 & 8          | 5 & 8    | Birdsfoot trefoil.  |
| Clifton do. . . . .                    | „ <i>Adonis</i> . . .             | 10        | 5 & 7, 8       | 5 & 8    | Tufted horse-shoe vetch.                                    |
| Chalk-hill do. . . B                   | „ <i>Corydon</i> . . .            | 9         | 10-6           | 7        | Do.   |
| ✓ Holly, or Azure do.                  | „ <i>Argiolus</i> . . .           | 5 & 8     | 6 & 9          | 7 & 10-4 | { Flowers of holly, buck thorn, ivy.                        |
| Grizzled Skipper S                     | <i>Syrichthus Alveolus</i>        | 5         | 5              | —        | { Wild raspberry, bramble, silver weed.                     |
| Dingy do. . . . .                      | <i>Thanaos Tages</i> . .          | 5 & 8     | 7 & 9-4        | —        | Birdsfoot trefoil.  |
| ✓ Large do. . . . .                    | <i>Hesperia sylvanus</i> .        | 7         | 5 & 7          | —        | Grasses.  |
| Pearl do. . . . .                      | „ <i>comma</i> . . .              | 8-3       | 6              | 7        | { Birdsfoot and birdsfoot trefoil.                          |
| Lulworth do. . . .                     | „ <i>Actæon</i> . . .             | —         | 6              | 7        | In wood reed.   |
| <b>MOTHS.</b>                          |                                   |           |                |          |   |
| Convolvulus Hawk                       | <i>Sphinx convolvuli</i> .        | —         | 7              | —        | { Small convolvulus and balsam.                             |
| Spotted Elephant }<br>do. . . . .      | { <i>Deilephila euphorbiae</i> }  | —         | 8, 9           | —        | { Cypress spurge and sea spurge.                            |
| Madder do. . . . .                     | „ <i>galii</i> . . . .            | —         | 8-10           | —        | Bedstraws.  |
| Silver-striped do. .                   | „ <i>lineata</i> . . .            | —         | 6, 7           | —        | Do.   |
| Sharp-winged do. .                     | <i>Chærocampa celerio</i>         | —         | 8, 9           | —        | Bedstraws.  |











## INSECTS (continued).

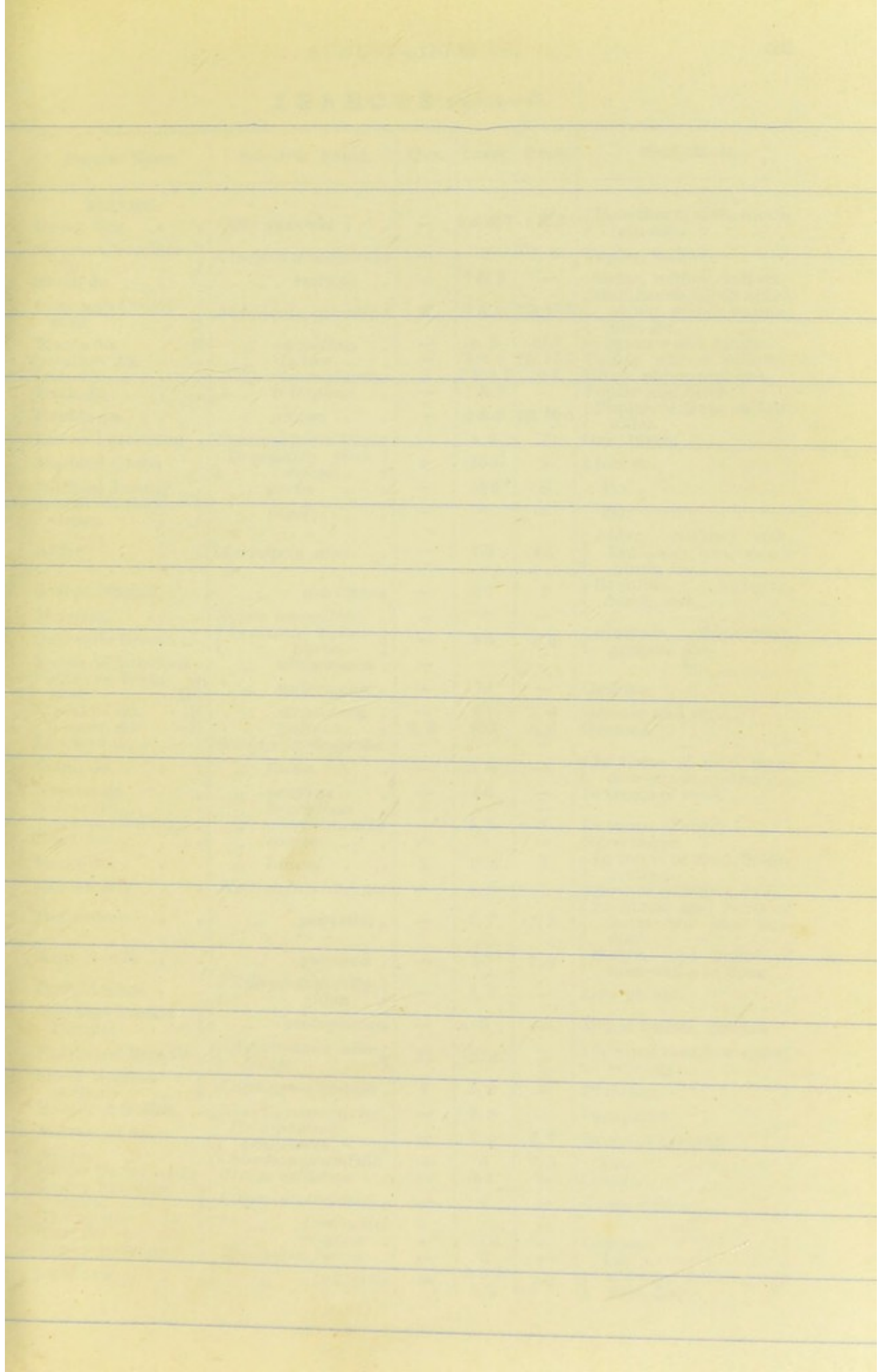
| Popular Name.               | Scientific Name.                               | Ova.  | Larva.   | Pupa.    | Food-plants.  |
|-----------------------------|--|-------|----------|----------|---|
| <b>MOTHS.</b>               |  |       |          |          |   |
| Oleander Hawk .             | <i>Chærocampa nerii</i> .                      | —     | 9        | —        | Oleander.   |
| Orange Swift .              | <i>Hepialus sylvinus</i> .                     | —     | 7        | —        | { At roots of sorrel and dock.                      |
| —                           | <i>Syntomis phegea</i> .                       | —     | 9-5      | —        | { Scabious, plantain, dandelion.                    |
| Scarce Muslin .             | <i>Nudaria senex</i> .                         | —     | 5, 6     | 7        | Lichens.  |
| Small Dew Lackey .          | <i>Setina irrorella</i> .                      | —     | 5        | 5, 6     | { Ground lichens near sea.                          |
| Pearl Footman .             | <i>Lithosia muscerda</i> .                     | —     | 5, 6     | 6, 7     | Lichens on willow.                                  |
| Small do. .                 | „ <i>pygmaeola</i> .                           | —     | 4-6      | 6, 7     | Lichens.  |
| Scarce do. .                | „ <i>caniola</i> .                             | —     | 6        | —        | Birdsfoot trefoil.                                  |
| Straw do. .                 | „ <i>stramineola</i> .                         | —     | 8-6      | 6-7      | Lichens on oak, sloe, &c.                           |
| Large do. .                 | „ <i>quadra</i> .                              | —     | 5, 6     | 6        | { Lichens on oak, beech, apple.                     |
| Crimson-speckled do. .      | <i>Deiopeia pulchella</i> .                    | —     | 7        | —        | { Field forget-me-not, or scorpion grass.           |
| Clouded Buff . S            | { <i>Euthemonia</i><br><i>russula</i> . }      | 6     | 9-5      | —        | Heath, plantain.                                    |
| Ruby Tiger .                | <i>Arctia fuliginosa</i> .                     | —     | 4 & 8    | 5 & 8    | { Plantain, nettle, dock, grasses.                  |
| Brown Tail .                | { <i>Liparis chrysor-</i><br><i>rhæa</i> }     | —     | 9-5      | 5-7      | Hawthorn, sloe, &c.                                 |
| Satin .                     | „ <i>salicis</i> .                             | 8     | 8-5      | 6        | Willow, poplar, oak.                                |
| Black Arches .              | „ <i>monacha</i> .                             | 8-3   | 5-7      | 7        | { Oak, birch, beech, fir, apple.                    |
| Whittlesea Ermine           | <i>Orgyia cænosa</i> .                         | —     | 8        | —        | Reed and sedge.                                     |
| Scarce Vapourer .           | „ <i>gonostigma</i> .                          | 6, 7  | 9-5      | —        | { Oak, beech, bramble, sloe, nut, &c.               |
| Common do. .                | „ <i>antiqua</i> .                             | 9-7   | 7-9      | 8, 9     | { Willow, oak, rose, fruit-trees, &c.               |
| Grey Eggar .                | <i>Trichiura cratægi</i> .                     | 9-3   | 5, 6     | 7        | { Hawthorn, sloe, willow, oak, birch, plum.         |
| Lackey .                    | <i>Bombyx neustria</i> .                       | 7-3   | 5-7      | 7        | { Sloe, hawthorn, and fruit-trees.                  |
| Coast do. .                 | „ <i>castrensis</i> .                          | 7-3   | 6, 7     | 7        | { Sea wormwood and sea-side carrot.                 |
| Oak Eggar .                 | „ <i>roboris</i> .                             | 7, 8  | 9-6      | 6, 7     | { Hawthorn, broom, bramble, heath, buckthorn, sloe. |
| Northern do. .              | „ <i>quercus</i> .                             | 8     | 9-5      | 6, 7     | Bilberry.   |
| Grass Eggar .               | „ <i>trifolii</i> .                            | 8     | 9-6      | 7        | { Trefoils, clover, grasses; also broom and furze.  |
| Dark Bordered Beauty .      | <i>Epione apiciaria</i> .                      | 8-4   | 5, 6     | 6        | { Nut, poplar, willow, willow, alder.               |
| Brimstone .                 | <i>Rumia cratægata</i> .                       | 4 & 9 | 6 & 9-3  | —        | Hawthorn, sloe.                                     |
| Barred Red .                | <i>Ellopiæ fasciaria</i> .                     | 7, 8  | 9-4      | 5, 6     | Scotch fir.   |
| Lilac Beauty .              | { <i>Pericallia syrin-</i><br><i>garia</i> . } | 7     | 9-6      | 6        | { Lilac, privet, elder, honeysuckle.                |
| Purple Thorn .              | <i>Selenia illustraria</i> .                   | —     | 6 & 9-10 | 7 & 11-4 | { Oak, ash, birch, beech, maple.                    |
| Scalloped Oak .             | <i>Crocallis elinguaris</i> .                  | 8-2   | 5        | 6        | { Oak, hawthorn, sloe, heath.                       |
| Canary-shouldered Thorn . E | <i>Ennomos tiliaria</i> .                      | 9-5   | 6, 7     | 8        | Oak, birch, willow, alder.                          |
| Dusky do. .                 | „ <i>fuscantaria</i> .                         | 9-5   | 6, 7     | 8        | Ash, privet.  |
| September do. . E           | „ <i>erosaria</i> .                            | 9-5   | 6        | 7        | Oak, birch, &c.                                     |
| Common do. .                | „ <i>angularia</i> .                           | 9-5   | 6-8      | 6, 7     | Oak, ash, birch, beech.                             |
| Waved Umber .               | { <i>Hemerophila</i><br><i>abruptaria</i> . }  | 5, 6  | 6        | 9-4      | Lilac, privet, rose.                                |
| Scotch Annulet .            | <i>Dasydia obfuscata</i> .                     | 7     | 9-6      | 7        | Heath, vetches.                                     |
| Small Bordered Wave .       | { <i>Acidalia trigemi-</i><br><i>nata</i> . }  | 6     | 7-5      | 5        | Knotgrass.  |
| Small Dusky do. .           | „ <i>incanata</i> .                            | 7     | 9-5      | 6        | { Groundsel, dandelion, knotgrass.                  |
| Lace Border .               | „ <i>ornata</i> .                              | 7     | 7-4      | 5, 6     | Marjoram, thyme, mint.                              |
| Mullein Wave .              | „ <i>promutata</i> .                           | —     | 7-5      | 5        | { Yarrow, mugwort, creeping cinquefoil.             |
| —                           | „ <i>mancuniata</i> .                          | —     | 7        | —        | Knotgrass.  |



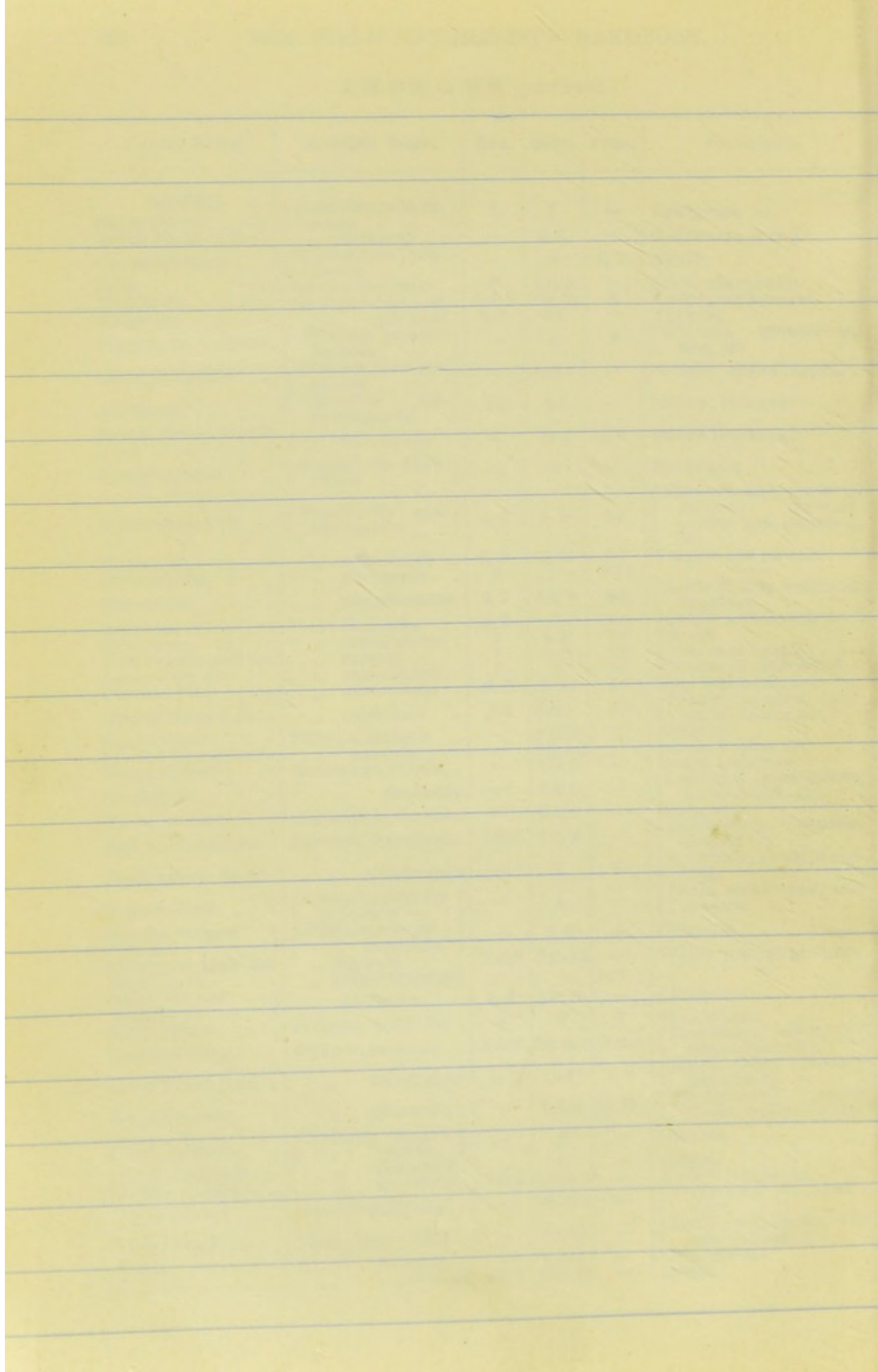
## INSECTS (continued.)

| Popular Name.                | Scientific Name.                   | Ova.  | Larva.    | Pupa.    | Food-plants.  |
|------------------------------|------------------------------------|-------|-----------|----------|---|
| <b>MOTHS.</b>                |                                    |       |           |          |   |
| Satin Wave . . .             | { <i>Acidalia subsericeata</i> }   | 7     | 7         | —        | Knotgrass.  |
| Small Blood-vein . . .       | { „ <i>imitaria</i> }              | —     | 5, 6      | —        | Bedstraws, sorrel.  |
| Bordered Grey . . .          | { <i>Sclidosema plumaria</i> }     | —     | 5         | 6, 7     | Heath.  |
| Belle . . .                  | <i>Sterrhia sacraria</i> . . .     | 8     | 6 & 9     | —        | Dock, chamomile.  |
| Yellow do. . .               | <i>Aspilates citraria</i> . . .    | 5 & 8 | 7 & 10    | 8        | Trefoil, wild carrot.   |
| Straw do. . .                | „ <i>gilvaria</i> . . .            | 8, 9  | 9-6       | —        | Yarrow.   |
| Magpie, or Currant . . .     | { <i>Abraxas grossulariata</i> }   | —     | 5         | 6        | { Currant, gooseberry, sloe, &c.                                  |
| Clouded Border . . .         | { <i>Lomaspilis marginata</i> }    | —     | 6 & 9     | —        | Willow, sallow, aspen.  |
| Autumnal . . .               | { <i>Oporabia filigrammaria</i> }  | 9-2   | 2-4       | —        | Sallow, bilberry.   |
| Beech Green Carpet . . .     | <i>Larentia olivata</i> . . .      | 8     | 10-4      | 5, 6     | Hedge bedstraw.   |
| Pretty Pinion . . .          | { <i>Emmelesia blandiata</i> }     | —     | 9         | —        | Eyebright.  |
| Lime-speck Pug . . .         | { <i>Eupithecia centaureata</i> }  | 5, 6  | 8, 9      | 9-5      | { Flowers and seeds of yarrow, ragwort, golden rod, angelica, &c. |
| Rufous do. . .               | „ <i>subfulvata</i> . . .          | 6, 7  | 9, 10     | 9-7      | Yarrow and ox-eye.  |
| Guenée's do. . .             | „ <i>pernotata</i> . . .           | 9     | —         | 9-7?     | —   |
| Burnet do. . .               | „ <i>pimpinellata</i> . . .        | 6, 7  | 6 & 9     | 9-6      | { Seeds of pimpinella and angelica.                               |
| Ochreous do. . .             | „ <i>indigata</i> . . .            | 5, 6  | 7         | 7-5      | Juniper and Scotch fir.   |
| Ribbed do. . .               | „ <i>constrictata</i> . . .        | 7     | 8, 9      | 8-6      | Thyme.  |
| Narrow-winged do. . .        | „ <i>nanata</i> . . .              | 7     | 8, 9      | 9-6      | Flowers of heath.   |
| Large Pale do. . .           | „ <i>expallidata</i> . . .         | 7     | 9         | 9-7      | Flowers of golden-rod.  |
| Currant Pug . . .            | „ <i>assimilata</i> . . .          | 6, 7  | 9, 10     | 9-6      | Hop, black-currant.   |
| Double-striped do. . .       | „ <i>pumilata</i> . . .            | 6-8   | 6 & —     | 8-6      | { Flowers of gorse, cher vil, clematis, &c.                       |
| Grey Carpet . . .            | <i>Thera simulata</i> . . .        | —     | 6 & 10    | —        | Juniper.  |
| Shaded Broad Bar . . .       | „ <i>variata</i> . . .             | —     | 7 & 3-5   | —        | Larch, Scotch fir.  |
| Wood Carpet . . .            | <i>Melanippe rivata</i> . . .      | —     | 6 & 9     | —        | Hedge bedstraw.   |
| Garden do. . .               | „ <i>fluctuata</i> . . .           | —     | 6 & 9     | —        | { Cabbage, nasturtium, horse-radish, &c.                          |
| Barberry do. . .             | <i>Anticlea berberata</i> . . .    | —     | 6 & 9     | —        | Barberry.   |
| Red Twin-spot do. . .        | <i>Coremia ferrugata</i> . . .     | 5 & 8 | 7 & 9     | —        | { Chickweed, bedstraw, ground ivy.                                |
| Dark-barred do. do. . .      | „ <i>unidentata</i> . . .          | —     | 8         | 4        | { Bedstraw, sweet wood-ruff.                                      |
| Yellow Shell . . .           | { <i>Campptogramma bilineata</i> } | —     | 4         | —        | { Dock, chickweed, and grasses.                                   |
| Slender-striped Carpet . . . | { <i>Phibalapteryx lapidata</i> }  | —     | 5, 6      | —        | Clematis.   |
| Oblique-striped do. . .      | „ <i>lignata</i> . . .             | 7 & 9 | 8 & 9-4   | —        | White water-bedstraw.   |
| Many-lined . . .             | „ <i>polygrammata</i> . . .        | —     | —         | —        | —   |
| Small Waved Umber . . .      | „ <i>vitalbata</i> . . .           | 7, 8  | 6 & 10    | —        | Clematis.   |
| Silky Tissue . . .           | <i>Scotosia dubitata</i> . . .     | 4     | 6         | 7        | Buckthorn.  |
| Marbled Carpet . . .         | <i>Cidaria russata</i> . . .       | 5 & 8 | 7 & 10-4  | 7 & 5    | { Hawthorn, birch, sal-low, strawberry.                           |
| Dark Marbled do. . .         | „ <i>immanata</i> . . .            | 8-3   | 5-7       | 7, 8     | { Birch, alder, bilberry, strawberry.                             |
| Small Phoenix . . .          | „ <i>silaceata</i> . . .           | —     | 7 & 9     | 7 & 10-4 | { Enchanter's night-shade, willow-herbs.                          |
| Small Mallow . . .           | { <i>Eubolia mensuraria</i> }      | —     | 6         | —        | Grasses.  |
| Fortified Carpet . . .       | „ <i>mæniata</i> . . .             | —     | 5         | —        | Broom.  |
| Oblique-striped . . .        | „ <i>lineolata</i> . . .           | 5 & 8 | 5, 6, & 9 | —        | Yellow bedstraw.  |
| Treble-barred . . .          | <i>Anaitis plagiata</i> . . .      | —     | 7 & 10-4  | —        | { Perforated St. John's wort.                                     |
| Pebble Hook-tip . . .        | <i>Platypteryx falcula</i> . . .   | —     | 7 & 10    | —        | { Birch, oak, poplar, willow, and alder.                          |
| Oak do. . .                  | „ <i>hamula</i> . . .              | —     | 6 & 9     | —        | Oak, birch.   |
| Beech do. . .                | „ <i>unguicula</i> . . .           | 6 & 8 | 7 & 9, 10 | —        | Beech.  |











## INSECTS (continued).

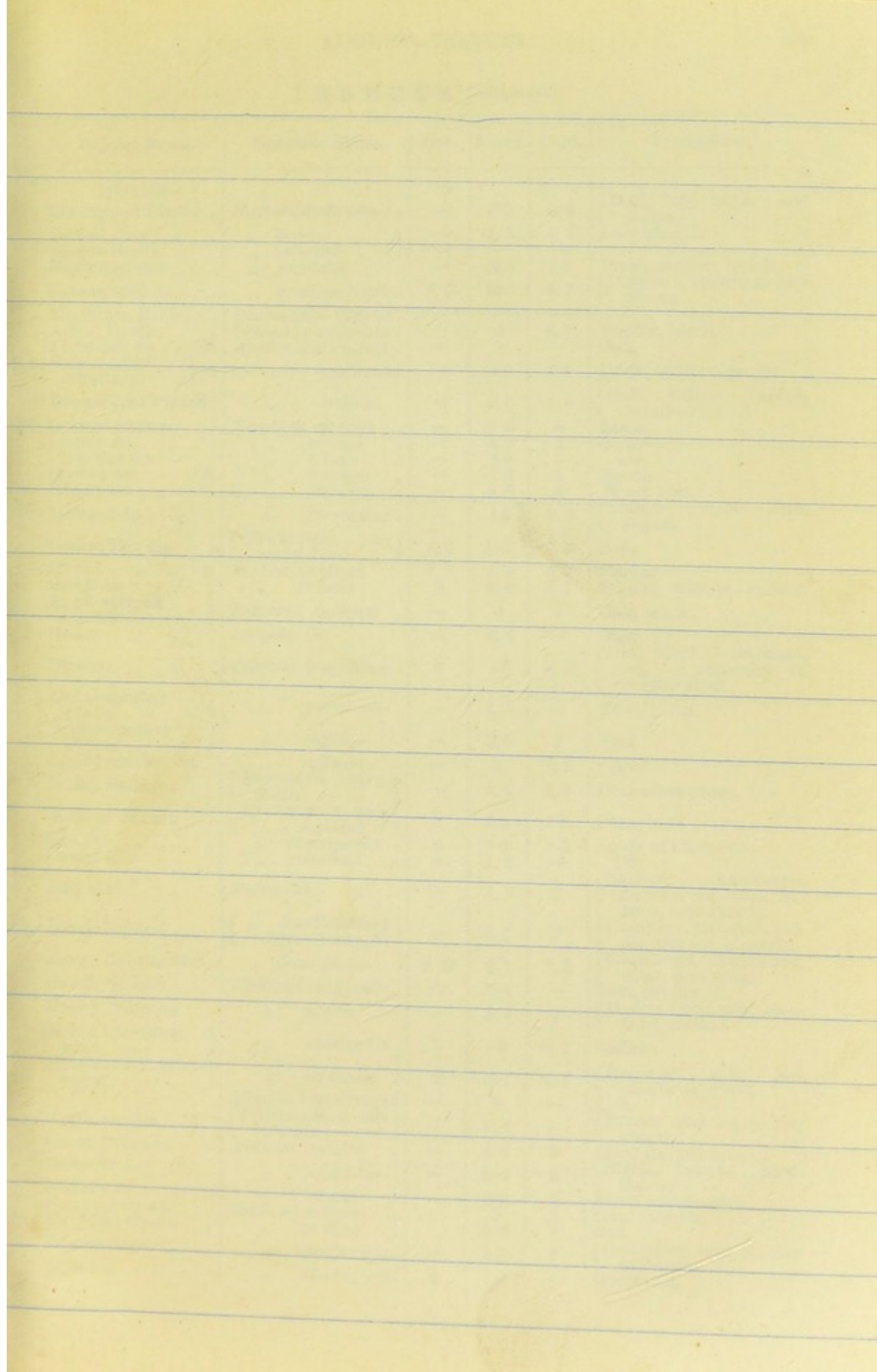
| Popular Name.                | Scientific Name.                                   | Ova. | Larva.      | Pupa.    | Food-plants.   |
|------------------------------|--|------|-------------|----------|--|
| <b>MOTHS.</b>                |  |      |             |          |  |
| Goose Egg . . .              | <i>Cilix spinula</i> . . .                         | —    | 5, 6, & 7   | 6 & 7    | { Hawthorn, sloe, mountain ash.                            |
| Scarce Chocolate Tip . . .   | <i>Clostera anachoreta</i>                         | —    | 7           | 7, 8     | Poplar, willow.  |
| Small do. . . .              |  | —    | 7 & 9       | —        | Poplar, willow, sallow.                                    |
| Coxcomb Prominent . . .      | <i>Notodonta camelina</i>                          | 6    | 7 & 9       | 7 & 10-5 | { Oak, beech, birch, alder, aspen, maple, sallow, nut, &c. |
| Maple do. . . . S            |  | —    | 8, 9        | 10 5     | Sycamore and maple.  |
| Swallow do. . . .            | <i>dictæa</i> . . .                                | —    | 6 & 9       | 7 & 10-5 | Poplar, willow, sallow.                                    |
| Iron do. . . . .             | <i>dromedarius</i>                                 | 6    | 7 & 8, 9    | 10-5     | Birch, alder, and nut.                                     |
| Dark do. . . . .             | <i>trilophus</i> . . .                             | —    | 7 & 9       | —        | Poplar and birch.  |
| Pebble do. . . . .           | <i>ziczac</i> . . . .                              | —    | 6 & 9       | 7 & 10-5 | { Poplar, willow, sallow, alder.                           |
| Lesser Lutestring . .        | <i>Cymatophora diluta</i>                          | —    | 5, 6        | 7        | Oak, birch.  |
| Marbled Green . . .          | { <i>Bryophila glan-</i><br><i>difera</i> . . . }  | 9    | 10-5        | 6        | Lichens.   |
| Marbled Beauty . . .         |  | —    | 10-6        | 6        | Do.  |
| Scarce Marbled Green . . .   | <i>algæ</i> . . . .                                | —    | —           | —        | Do.  |
| Alder . . . . .              | <i>Acronycta alni</i> . .                          | —    | 7-9         | 8-4      | { Alder, willow, oak, lime, elm, nut, beech, birch, &c.    |
| Scarce Dagger . . .          | <i>auricoma</i> . . . .                            | —    | 6, 7        | 7        | { Bramble, bilberry, birch, oak.                           |
| Mouselet . . . . .           | <i>Synia musculosa</i> . .                         | —    | —           | —        | —  |
| Ochreous Brown . .           | { <i>Leucania lithar-</i><br><i>gyria</i> . . . }  | —    | 1-5         | 5, 6     | { Plantain, chickweed, grasses, &c.                        |
| Lunar White Spot . .         |  | —    | —           | —        | —  |
| Southern Wainscot . . B      | <i>putrescens</i> . . .                            | —    | 10          | —        | Grasses.   |
| Streaked do. . . . B         | <i>straminea</i> . . .                             | —    | 2-4         | 5, 6     | Grasses and reed.  |
| Common do. . . . B           | <i>pallens</i> . . . .                             | 8, 9 | 10-4        | 5, 6     | Grasses.   |
| Lineated do. . . . .         | <i>Nonagria despecta</i>                           | —    | —           | —        | —  |
| Small do. . . . .            | <i>fulva</i> . . . . .                             | —    | 5, 6        | —        | { In stems of reed, meadow-grass, and sedge.               |
| Nerved do. . . . .           | <i>neurica</i> . . . .                             | —    | 4-6         | —        | In stems of reed.  |
| Scarce do. . . . .           | <i>brevilinea</i> . . .                            | —    | —           | —        | —  |
| Twin-spotted do. . .         | <i>geminipuncta</i> . .                            | —    | 5, 6        | 7        | In stems of reed.  |
| Reed do. . . . .             | <i>cannæ</i> . . . . .                             | —    | 5           | —        | Reed mace.   |
| Large do. . . . .            | <i>lutosa</i> . . . . .                            | 9    | 10 6        | 7        | { In stems of reed, below ground.                          |
| Golden Ear . . . . .         | <i>Hydræcia nictitans</i>                          | —    | 5, 6        | 7        | Roots of coltsfoot, rush.                                  |
| Butter-bur . . . . .         | <i>petasitis</i> . . . .                           | —    | 6, 7        | 7, 8     | { In stems and roots of butter-bur and burdock.            |
| Rosy Rustic . . . . .        | <i>micacea</i> . . . .                             | —    | 5-7         | 7, 8     | { Sedge, and roots of horsetail and dock.                  |
| Dark Arches . . . .          | { <i>Xylophasia poly-</i><br><i>odon</i> . . . }   | —    | 4, 5        | —        | Low plants.  |
| Slender Clouded Brindle . .  |  | —    | 5           | —        | Wood rushes, grasses.                                      |
| Feathered Brindle . .        | { <i>Aporophylla aus-</i><br><i>tralis</i> . . . } | 10   | 10-4        | —        | { Annual meadow-grass, succory.                            |
| Small Mottled Willow . .     |  | 7    | 8, 9        | —        | Plantain.  |
| Bordered Gothic . . .        | <i>Neuria saponariæ</i>                            | —    | 7, 8        | —        | Campions.  |
| Feathered do. . . .          | { <i>Heliophobus</i><br><i>popularis</i> . . }     | —    | 4, 5        | 6, 7     | Roots of grasses.  |
| Antler . . . . .             |  | —    | 6           | 7, 8     | Do.  |
| Straw Under-wing . .         | <i>Charæas graminis</i>                            | —    | 9-4         | —        | Grasses.   |
| Lesser Flounced Rustic . . . | <i>Luperina testacea</i>                           | —    | 3           | —        | Grass-stems.   |
| Tawny do. . . . .            | <i>Dumerilii</i> . . . .                           | —    | —           | —        | —  |
| Turf do. . . . .             | <i>cespitis</i> . . . .                            | —    | 4-6         | —        | Grasses.   |
| Dusky Brocade . . .          | <i>Mamestra furva</i> . .                          | —    | 6           | —        | Do.  |
| Cabbage . . . . .            | <i>brassicæ</i> . . . .                            | —    | 5, 6 & 8, 9 | 9-4      | { Cabbage, dock, goose foot, &c.                           |



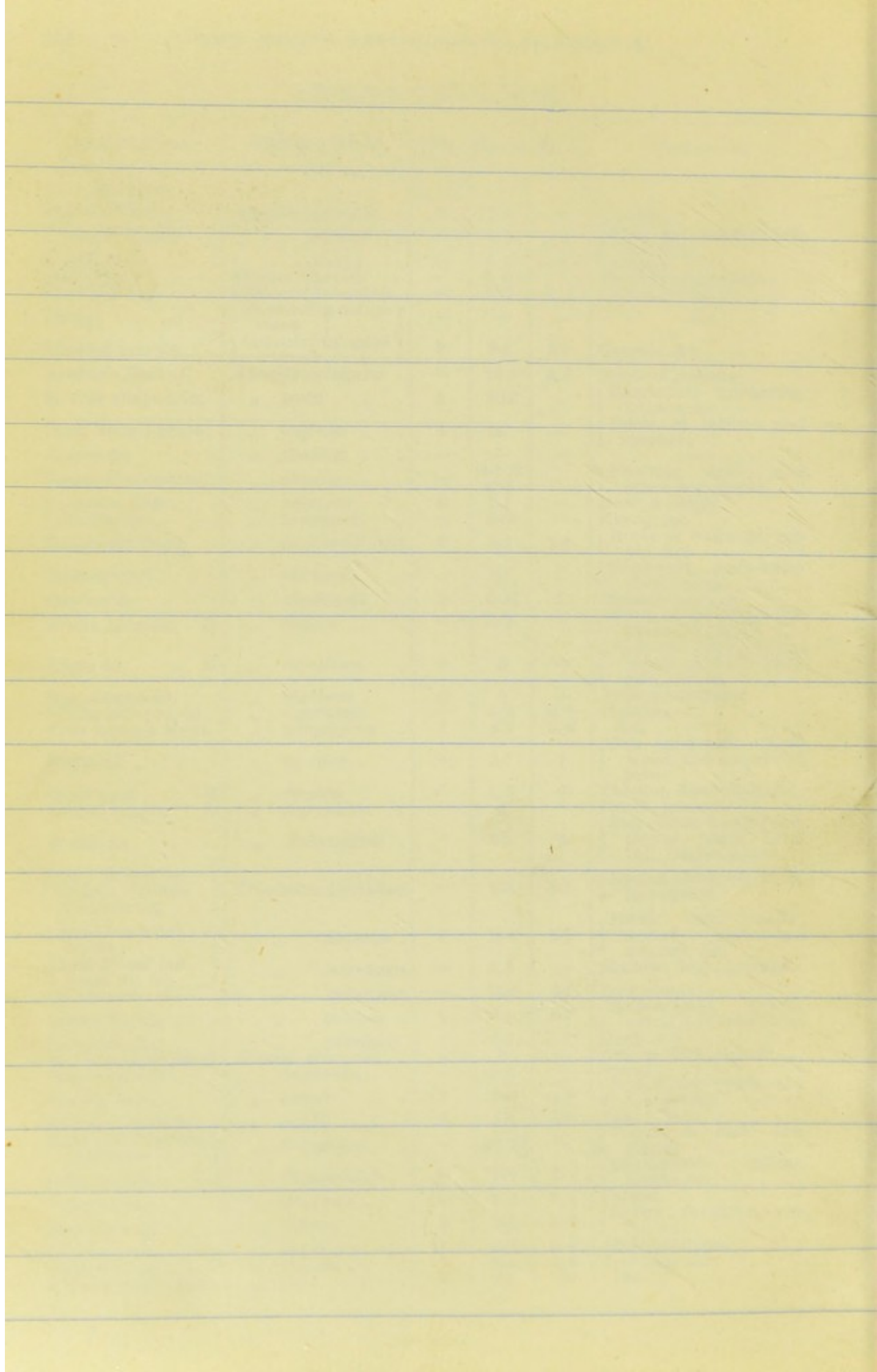
## INSECTS (continued).

| Popular Name.           | Scientific Name.             | Ova. | Larva.         | Pupa. | Food-plants.              |
|-------------------------|------------------------------|------|----------------|-------|---------------------------|
| <b>MOTHS.</b>           |                              |      |                |       |                           |
| Brown Pinion . . .      | <i>Apamea gemina</i> . .     | 7    | 8-5            | 5     | Grasses.                  |
| Crescent Rustic . . .   | „ <i>fibrosa</i> . .         | —    | 4, 5           | 5-7   | { In flower stems of yel- |
| ✓ Common do. . . .      | „ <i>oculea</i> . .          | —    | 4, 5           | 5-7   | { low flag.               |
| Rosy Minor . . . .      | <i>Miana literosa</i> . .    | —    | 5, 6           | —     | Grasses.                  |
| Haworth's do. . . .     | <i>Celæna Haworthii</i> .    | —    | 6, 7           | 7, 8  | Slender foxtail grass     |
| Dingy . . . . .         | { <i>Acosmetia caligi-</i>   | —    | —              | —     | Cotton grass.             |
|                         | { <i>nosa</i> . . . . }      |      |                |       | —                         |
| ✓ Mottled Beauty . . .  | { <i>Caradrina cubi-</i>     | 8    | 9-4            | 5-7   | Grasses, &c.              |
|                         | { <i>cularis</i> . . . }     |      |                |       |                           |
| Archer's Dart . . . .   | <i>Agrotis velligera</i> . . | —    | 10-5           | 5, 6  | Roots of grasses.         |
| Shuttle-shaped do. . .  | „ <i>puta</i> . . . .        | 8    | 9-12           | —     | { Dandelion, knotgrass,   |
|                         |                              |      |                |       | { lettuce, &c.            |
| Dark Sword-grass . . .  | „ <i>suffusa</i> . . . .     | 4    | 5-7            | —     | { Roots of lettuce and    |
|                         |                              |      |                |       | { spinach.                |
| Scarce do. . . . .      | „ <i>fennica</i> . . . .     | —    | —              | —     | —                         |
| Pearly Underwing . . .  | „ <i>saucia</i> . . . .      | —    | 11-1 &<br>7, 8 | —     | { Plantain, dock, and     |
| ✓ Common Dart . . . .   | „ <i>segetum</i> . . . .     | 6    | 7-1            | —     | { other low plants.       |
| Crescent do. . . . .    | „ <i>lunigera</i> . . . .    | —    | 8-10           | —     | Root of turnip.           |
| ✓ Heart and Dart . . .  | „ <i>exclamationis</i> .     | 6    | 9-5            | 5-6   | Knotgrass.                |
|                         |                              |      |                |       | { Roots of cabbage, tur-  |
|                         |                              |      |                |       | { nip, &c.                |
| Veined Dart . . . . .   | „ <i>cursoria</i> . . . .    | —    | 5-7            | 7     | { Sandwort, leafy-bran-   |
|                         |                              |      |                |       | { ched spurge.            |
| Garden do. . . . .      | „ <i>nigricans</i> . . . .   | 7    | 5, 6           | 7     | Plantain, clover.         |
| White Lire do. B . . .  | „ <i>tritici</i> . . . .     | —    | 6, 7           | 7     | { Roots of sandwort and   |
|                         |                              |      |                |       | { other low plants        |
| Eagle do. . . . . B     | „ <i>aquilina</i> . . . .    | —    | 5              | —     | { Bedstraw, poppy, chick- |
|                         |                              |      |                |       | { weed, cabbage, plan-    |
|                         |                              |      |                |       | { tain, clover.           |
| Square-spot do. . . .   | „ <i>obelisca</i> . . . .    | —    | 5              | —     | Yellow bedstraw.          |
| White-lettered do. . .  | „ <i>agathina</i> . . . .    | —    | 4, 5           | 6, 7  | Heather.                  |
| True Lover's Knot . . . | „ <i>porphyrea</i> . . . .   | 7    | 8-5            | 5, 6  | Do.                       |
| Portland . . . . .      | „ <i>præcox</i> . . . .      | —    | 5-7            | 7     | { Sea sandwort, chick-    |
|                         |                              |      |                |       | { weed, and dwarf wil-    |
|                         |                              |      |                |       | { lows.                   |
| Stout Dart . . . . . B  | „ <i>ravida</i> . . . .      | —    | 4, 5           | 6     | Thistles, dandelion, &c.  |
| Dotted Rustic . . . . B | „ <i>pyrophila</i> . . . .   | —    | 8              | —     | Heath, grasses.           |
| Welsh do. . . . .       | „ <i>Ashworthii</i> . . .    | —    | 9-5            | 6     | { Sun cistus, hawkweed,   |
|                         |                              |      |                |       | { thyme, heath, hare-     |
|                         |                              |      |                |       | { bell, fescue-grass.     |
| Small Broad-bor-        | <i>Triphaena janthina</i>    | —    | 8-5            | 5-7   | { Broom, chickweed, and   |
| dered Yellow            |                              |      |                |       |                           |
| Underwing . . . . }     |                              |      |                |       | { low plants.             |
| Broad-bordered          | „ <i>fimbria</i> . .         | 9    | 10-4           | 5-7   | { Birch, oak, willow,     |
| do. do. . . . }         |                              |      |                |       |                           |
| Least Broad-bor-        | „ <i>interjecta</i>          | —    | 3, 4           | —     | { broom, primrose,        |
| dered do. do. . }       |                              |      |                |       |                           |
| Crescent do. do. .      | „ <i>subsequa</i>            | —    | 10-4           | 5-7   | { grasses, &c.            |
|                         |                              |      |                |       | { Mallow, dock, grasses.  |
| Lesser do. do. . . .    | „ <i>orbona</i> . . . .      | 7    | 8-5            | 5-7   | Low plants.               |
| ✓ Large do. do. . . .   | „ <i>pronuba</i>             | 7    | 8-5            | 5-7   | { Sallow buds, broom,     |
| Autumnal Rustic E       | <i>Noctua glareosa</i> . .   | —    | 6              | —     | { nettle, and low plants. |
| Black-spotted . . .     | „ <i>depuncta</i> . . . .    | —    | 4, 5           | —     | Dock, &c.                 |
|                         |                              |      |                |       | Broom, dock, sorrel.      |
| Double Dart . . . .     | „ <i>augur</i> . . . .       | 7    | 8-5            | 5, 6  | Sorrel.                   |
|                         |                              |      |                |       | { Sallow, hawthorn, and   |
| Flame Shoulder . . .    | „ <i>plecta</i> . . . .      | 6    | 7-4            | 5-7   | { low plants.             |
| ✓ Setaceous Hebrew }    | „ <i>C-nigrum</i> . . . .    | —    | 4 & 10         | —     | { Low plants.             |
| Character . . . }       |                              |      |                |       |                           |
| Clay Rustic . . . .     | „ <i>rhomboidea</i> . . .    | —    | 9-5            | 6, 7  | { Pea-stems and low       |
|                         |                              |      |                |       | { plants.                 |
| Purple Clay . . . .     | „ <i>brunnea</i> . . . .     | —    | 4, 5           | 5, 6  | { Chickweed, willow,      |
|                         |                              |      |                |       | { hawthorn.               |
| Ingrailed do. . . .     | „ <i>festiva</i> . . . .     | 7    | 7-5            | 5, 6  | Sallow.                   |
|                         |                              |      |                |       | { Sallow, foxglove, vio-  |
| Confluent do . . . .    | „ <i>conflua</i> . . . .     | 7    | 8-5            | 5, 6  | { let, &c.                |
| Barred Chestnut . . .   | „ <i>Dahlia</i> . . . .      | —    | 9-5            | 5, 6  | Moss campion.             |
| ✓ Small Square-spot .   | „ <i>rubi</i> . . . .        | —    | 6-7            | —     | Low plants.               |
|                         |                              |      |                |       | Do.                       |











## INSECTS (continued).

| Popular Name.            | Scientific Name.   | Ova.  | Larva. | Pupa. | Food-plants.  |
|--------------------------|--|-------|--------|-------|---|
| <b>MOTHS.</b>            |  |       |        |       |   |
| Six-striped Rustic .     | <i>Noctua umbrosa</i> .                                    | —     | 8-5    | 5, 6  | { Dock and other low plants.                              |
| Dotted Clay . . .        | " <i>baja</i> . . .  | —     | 4, 5   | 5, 6  | { Low plants.   |
| Scotch Rustic . . .      | " <i>sobrina</i> . . .                                     | —     | —      | —     | —   |
| Neglected do. . .        | " <i>neglecta</i> . . .                                    | —     | 10-5   | 5-7   | { Birch, willow, heath.                                   |
| Square-spot do. . .      | " <i>xanthographa</i>                                      | 8, 9  | 10-5   | 6, 7  | { Plantain, and many low plants.                          |
| Mountain Drab . . .      | <i>Pachnobia alpina</i> .                                  | —     | —      | —     | —   |
| Allied Rustic . . .      | <i>Orthosia suspecta</i> .                                 | —     | 5      | 6, 7  | { Poplar, birch.  |
| Flounced do. . . E       | <i>Anchocelis rufina</i> .                                 | —     | 5      | —     | { Oak.  |
| Pale-headed Chestnut } E | " <i>pistacina</i>   | —     | 4-6    | 6-8   | { Dock, buttercups, &c.                                   |
| Brown-spot Pinion .      | " <i>litura</i> .  | —     | 5, 6   | 7, 8  | { Oak, willow, alder, meadow sweet.                       |
| Orange Sallow . . .      | <i>Xanthia citrigo</i> .                                   | —     | 5, 6   | 8     | { Lime.   |
| Lemon do. . . . .        | " <i>cerago</i> . . .                                      | —     | 4, 5   | 8     | { Sallow.   |
| Pink Bar do. . . .       | " <i>silago</i> . . .                                      | —     | 4-6    | 8     | { Do.   |
| Barred do. . . . E       | " <i>aurago</i> . . .                                      | —     | 5, 6   | 8     | { Beech.  |
| Ruddy do. . . . .        | " <i>gilvago</i> . . .                                     | —     | 5, 6   | 8     | { Wych elm.   |
| Mottled do. . . . .      | " <i>ferruginea</i>  | —     | 4-6    | 7, 8  | { Sallow, wych elm, aspen.                                |
| Centre Bar do. . .       | { <i>Cirrhoëdia xerampelina</i> }                          | 8, 9  | 10-7   | 7, 8  | { Ash.  |
| Olive . . . . . B        | <i>Tethea subtusa</i> .                                    | 7, 8  | 4, 5   | 6, 7  | { Poplar.   |
| Small do. . . . .        | " <i>retusa</i> . . .                                      | 9     | 5, 6   | 6, 7  | { Poplar, willow, sawow.                                  |
| Angle-striped Sallow }   | <i>Euperia fulvago</i> .                                   | —     | 6      | 7     | { Oak, birch.   |
| Heart . . . . .          | <i>Dicycla Oo</i> . . .                                    | —     | 5, 6   | —     | { Oak.  |
| Dunbar . . . . .         | <i>Cosmia trapezina</i> .                                  | 8     | 4-6    | 6, 7  | { Oak, birch, hornbeam, &c. A cannibal in confinement.    |
| Lunar-spotted Pinion }   | " <i>pyralina</i> . . .                                    | —     | 4, 5   | —     | { Pear, plum.   |
| White-spotted Pinion }   | " <i>diffinis</i> . . .                                    | —     | 5, 6   | 7     | { Elm.  |
| Lesser-spotted do. .     | " <i>affinis</i> . . .                                     | —     | 5      | 6, 7  | { Do.   |
| Dusky Sallow . . .       | { <i>Erémobia ochroleuca</i> }                             | —     | 5, 6   | 6, 7  | { Cocksfoot grass.  |
| Mottled Shears . .       | { <i>Dianthæcia capsophila</i> }                           | 6     | 6-9    | 8-5   | { Campions.   |
| Lychnis . . . . .        | " <i>capsincola</i> .                                      | 6     | 7-9    | 8-5   | { Seeds of Campions.                                      |
| Campion . . . . .        | " <i>cucubali</i> . . .                                    | 6     | 7, 8   | —     | { Do.   |
| July Chi . . . . .       | <i>Polia chi</i> . . . .                                   | —     | 4, 5   | 6     | { Sallow, hawthorn, hawkweed, dock, lettuce, sow-thistle. |
| Black-banded . . .       | { " <i>xanthomista</i> }<br>{ ( <i>nigro-cincta</i> , N) } | —     | 6, 7   | 7     | { Campion, harebell, violet, and sea plantain.            |
| Large Ranunculus .       | " <i>flavicincta</i> .                                     | 9, 10 | 6, 7   | 7, 8  | { Groundsel, chickweed, mint, and plum.                   |
| Smoky Rustic . . .       | <i>Epunda lutulenta</i> .                                  | 10    | 10-4   | —     | { Corn gromwell.  |
| Dusky Nutmeg . . .       | " <i>nigra</i> . . . . .                                   | —     | 5, 6   | 7     | { Hedge bedstraw, plantain, grasses.                      |
| Minor Shoulder-knot }    | " <i>viminalis</i> .                                       | 8     | 4-6    | 6, 7  | { Sallow.   |
| Feathered Ranunculus }   | " <i>lichenea</i> . . .                                    | 10    | 11-7   | 6, 7  | { Ragwort and low plants on coast.                        |
| Angle-shades . . .       | <i>Miselia bimaculosa</i>                                  | —     | 5      | —     | { Elm.  |
| Great Brocade . . .      | { <i>Phlogophora meticulosa</i> }                          | —     | 11-4   | —     | { Broom and many low plants.                              |
| Grey Arches . . . .      | <i>Aplecta occulta</i> .                                   | —     | 4, 5   | 6     | { Plantain, primrose.                                     |
| Silvery do. . . . .      | " <i>nebulosa</i> . . .                                    | —     | 10-5   | 6     | { Birch, sawow, hawthorn.                                 |
| Scarce Brocade . . .     | " <i>tincta</i> . . . . .                                  | —     | 9-5    | 6     | { Birch and grasses.                                      |
| Brindled Green . .       | <i>Hadena satura</i> . .                                   | —     | 5      | 7     | { Honeysuckle.  |
| Scarce Shears . . .      | " <i>protea</i> . . . .                                    | —     | 5, 6   | 7     | { Oak.  |
| Nutmeg . . . . .         | " <i>peregrina</i> . . .                                   | —     | 5-7    | 7     | { Goosefoot and prickly saltwort.                         |
|                          | " <i>chenopodii</i>  | 6     | 7-9    | —     | { Goosefoot.  |



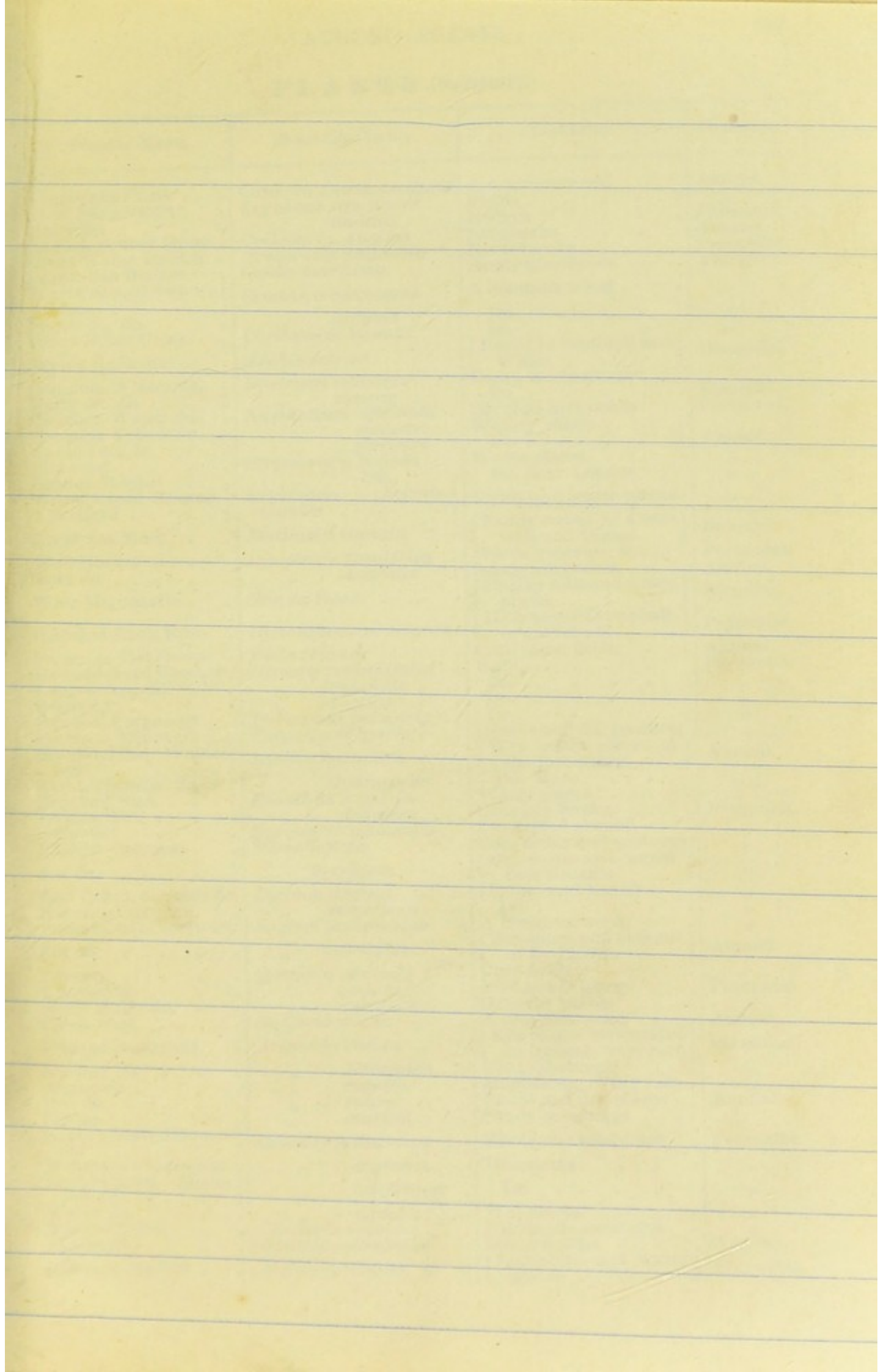
## INSECTS (continued).

| Popular Name.                       | Scientific Name.                                  | Ova. | Larva. | Pupa. | Food-plants.   |
|-------------------------------------|---|------|--------|-------|--|
| MOTHS.                              |   |      |        |       |  |
| Shepherd's Purse .                  | { <i>Cloantha solida-</i><br><i>ginis</i> . . . } | —    | 5, 6   | 7     | Bilberry, hawthorn.                                    |
| Red Sword-grass E                   | <i>Calocampa vetusta</i>                          | 3, 4 | 4-6    | 8     | { Poplar and various<br>plants.                        |
| Common do. . . E                    | „ <i>exoleta</i>                                  | 4    | 4-7    | 8     | { Scabious, rest-harrow,<br>campion, dock.             |
| Obscure Dagger .                    | <i>Xylina Zinckenii</i> .                         | —    | 5, 6   | —     | Sweet gale.  |
| Tawny Pinion . .                    | „ <i>conformis</i> .                              | 3    | 5, 6   | 7, 8  | Birch and alder.                                       |
| Bordered Straw .                    | <i>Heliothis peltigera</i>                        | —    | 7, 8   | —     | Rest-harrow, henbane.                                  |
| Scarce do. do. . .                  | „ <i>armigera</i>                                 | —    | 6, 7   | 7, 8  | Wild mignonette.                                       |
| Scarce Four-spot .                  | „ <i>scutosa</i>                                  | —    | 7      | —     | Field southernwood.                                    |
| Spotted Sulphur .                   | { <i>Agrophila sul-</i><br><i>phuralis</i> . . }  | —    | 6-8    | —     | Small convolvulus.                                     |
| Four-spot . . . .                   | <i>Acontia luctuosa</i> .                         | 6    | 6-8    | —     | Do.  |
| Spectacle . . . .                   | <i>Abrostola urticae</i> .                        | —    | 8, 9   | 10-5  | Nettle.  |
| Dark do. . . . .                    | „ <i>triphasia</i>                                | —    | 8, 9   | 10-5  | Nettle, hop.   |
| Scarce Burnished<br>Brass . . . . . | { <i>Plusia orichalcea</i> .                      | —    | 6, 7   | —     | Hemp agrimony.   |
| ✓ Burnished Brass .                 | „ <i>chrysitis</i> . .                            | 6, 7 | 7-4    | 5     | { Thistle, nettle, dead<br>nettle, burdock.            |
| Gold Spangle . . .                  | „ <i>bractea</i> . . .                            | —    | 5, 6   | 6     | Hemp agrimony.   |
| Gold Spot . . . .                   | „ <i>festucae</i> . . .                           | —    | 5-8    | 7, 8  | Reeds, sedges, grasses.                                |
| Golden Y . . . . .                  | „ <i>iota</i> . . . . .                           | —    | 4-6    | 6     | { Honeysuckle, nettle,<br>dead nettle, ground-<br>sel. |
| ✓ Silver do. . . . .                | „ <i>gamma</i> . . . .                            | —    | 4-9    | —     | { Nettle, hop, and low<br>plants.                      |
| Scarce do. . . . .                  | „ <i>ni</i>                                       | —    | —      | —     | —  |
| Northern do. . . .                  | „ <i>interrogationis</i>                          | —    | 5, 6   | —     | Nettle.  |
| Herald . . . . . E                  | <i>Gonoptera libatrix</i>                         | —    | 6, 7   | 7     | Poplar, willow, sallow.                                |
| Copper Under-wing                   | { <i>Amphipyra py-</i><br><i>ramidea</i> }        | —    | 5, 6   | 7, 8  | Oak, elm, willow, birch.                               |
| Mouse . . . . .                     | „ <i>tragopogonis</i>                             | —    | 5, 6   | 7, 8  | { Hawthorn and low<br>plants.                          |
| ✓ Old Lady . . . .                  | <i>Mania maura</i> . .                            | 7, 8 | 9-5    | 6     | Dock, chickweed, ivy.                                  |
| Anomalous . . . .                   | <i>Stilbia anomala</i> .                          | —    | 1, 2   | —     | Grasses.   |
| Clifden Nonpareil .                 | <i>Calocala fraxini</i> .                         | —    | 7      | 8     | Ash, poplar.   |
| Red Under-wing .                    | „ <i>nupta</i> . . . .                            | —    | 5-7    | 7, 8  | Willow, poplar.  |
| Light Crimson do. .                 | „ <i>promissa</i> . . .                           | —    | 5, 6   | 6, 7  | Oak.   |
| Dark Crimson do. .                  | „ <i>sponsa</i> . . . .                           | 8    | 4-6    | 6, 7  | Do.  |

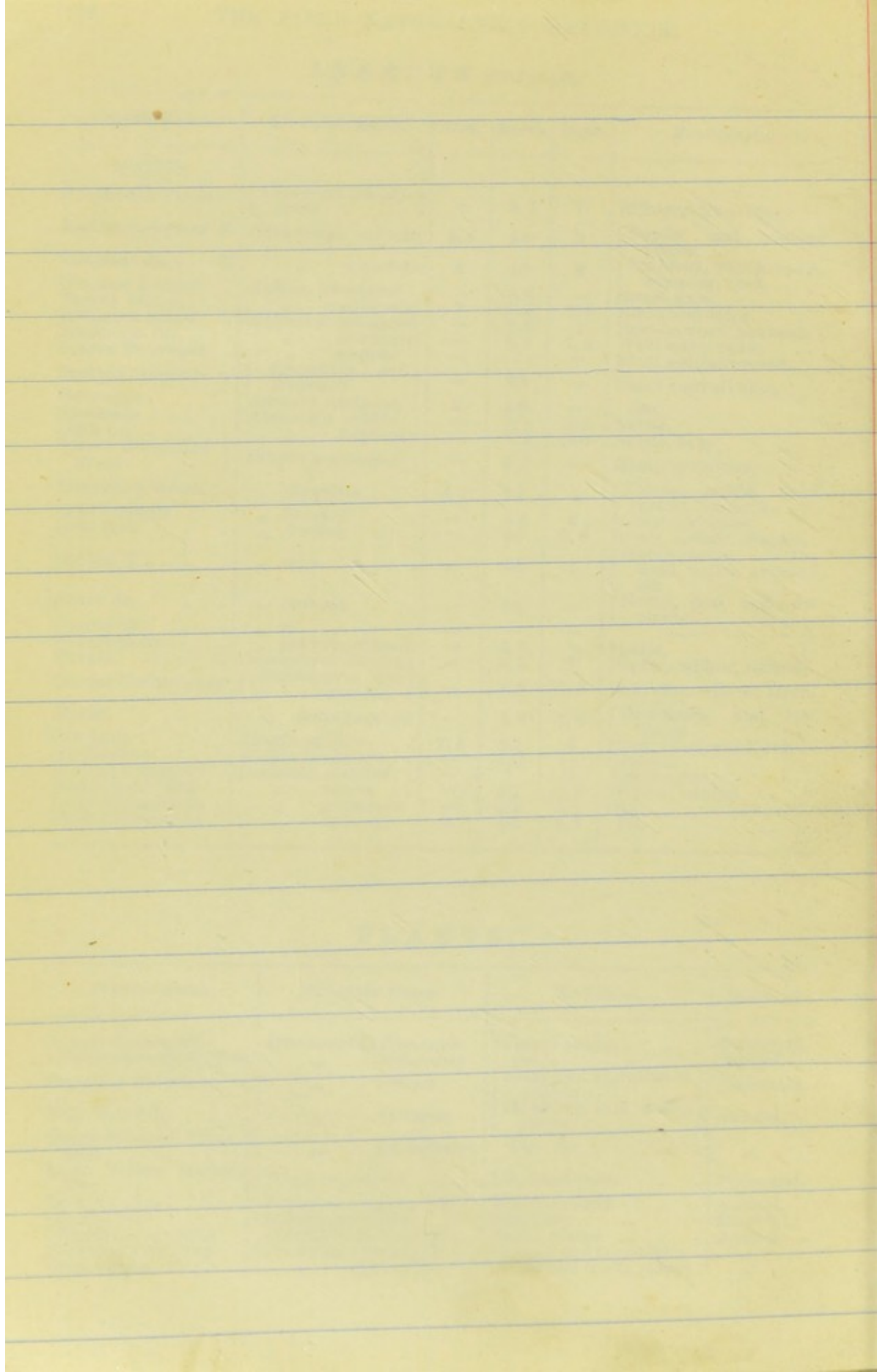
## PLANTS.

| Popular Name.                         | Scientific Name.             | Localities.                                 | Duration.  |
|---------------------------------------|------------------------------|---|------------|
| Lesser Spearwort . .                  | <i>Ranunculus flammula</i> . | Watery places . . . .                       | Perennial. |
| Celery-leaved Crowfoot                | „ <i>sceleratus</i> . .      | Do. . . . .                                 | Annual.    |
| Creeping Buttercup .                  | „ <i>repens</i> . . . .      | { Meadows and sides of<br>ditches . . . . } | Perennial  |
| Pale Hairy do. . . .                  | „ <i>hirsutus</i> . . . .    | { Meadows and waste<br>places . . . . }     | Annual.    |
| Small-flowered Crow-<br>foot          | „ <i>parviflorus</i>         | Do. do. . . . .                             | „          |
| Least Yellow Water-<br>lily . . . . . | <i>Nuphar pumila</i> . .     | Highland lakes . . . .                      | Perennial. |
| Opium Poppy . . . .                   | <i>Papaver somniferum</i> .  | Waste ground . . . .                        | Annual.    |
| Horned do. . . . .                    | <i>Glaucium luteum</i> . .   | Sea-shore . . . . .                         | Biennial.  |
| Climbing Corydalis .                  | <i>Corydalis claviculata</i> | Bushy places . . . .                        | Annual.    |
| Ramping Fumitory .                    | <i>Fumaria capreolata</i>    | Hedges and corn-fields .                    | „          |
| Common do. . . . .                    | „ <i>officinalis</i> . . .   | Fields and waste places .                   | „          |











## P L A N T S (continued).

| Popular Name.                          | Scientific Name.               | Localities.                                       | Duration.  |
|--|--------------------------------|---|------------|
| Shepherd's Purse . . .                 | <i>Capsella Bursa-pastoris</i> | A common weed . . .                               | Annual.    |
| Field Pepperwort . . .                 | <i>Lepidium campestre</i>      | Fields . . . . .                                  | Perennial. |
| Hairy do. . . . .                      | <i>Smithii</i>                 | Hedges . . . . .                                  | Annual.    |
| English Scurvy Grass . . .             | <i>Cochlearia Anglica</i>      | Sea-shores . . . . .                              | Perennial. |
| Great Water Radish . . .               | <i>Armoracia amphibia</i>      | River-banks . . . . .                             | Annual.    |
| Purple Sea Rocket . . .                | <i>Cakile maritima</i>         | Sandy sea-shores . . .                            | "          |
| Wart Cress, or Swine's Cress . . .     | <i>Senebiera coronopus</i>     | A common weed . . .                               | "          |
| Lesser do. do. . . . .                 | <i>didyma</i>                  | Do. . . . .                                       | "          |
| Hairy Bitter Cress . . .               | <i>Cardamine hirsuta</i>       | Do. . . . .                                       | "          |
| Alpine Rock do. . . . .                | <i>Arabis petraea</i>          | { Rocks in Scotland and<br>Wales . . . . . }      | Perennial. |
| Common Winter do. . . .                | <i>Barbarea vulgaris</i>       | Damp waste ground . .                             | Biennial.  |
| Early do. do. . . . .                  | <i>præcox</i>                  | Do. . . . .                                       | Perennial. |
| Common Water do. . . .                 | <i>Nasturtium officinale</i>   | Rivulets and ponds . .                            | Annual.    |
| Creeping Yellow do. . . .              | <i>sylvestre</i>               | Watery places . . . .                             | "          |
| Annual do. do. . . . .                 | <i>terrestre</i>               | Do. . . . .                                       | "          |
| Flixweed . . . . .                     | <i>Sisymbrium Sophia</i>       | Waste places . . . . .                            | "          |
| London Rocket . . . . .                | <i>Iris</i>                    | Do. near London . . .                             | "          |
| Worm - seed Treacle Mustard . . .      | <i>Erysimum cheiranthoides</i> | Fields and waste places .                         | "          |
| Great Sea Stock . . . . .              | <i>Matthiola sinuata</i>       | { Sandy coasts of Corn-<br>wall and Wales . . }   | Biennial.  |
| Wall Rocket . . . . .                  | <i>Diploxaxis tenuifolia</i>   | Walls, quarries, &c. . .                          | Perennial. |
| Sand do. . . . .                       | <i>muralis</i>                 | Sandy sea-shores . . .                            | Annual.    |
| Wild Mignonette . . . . .              | <i>Reseda lutea</i>            | { Chalky hills and waste<br>places . . . . . }    | Biennial.  |
| Common Rock Rose . . . .               | <i>Helianthemum vulgare</i>    | { Hilly pastures on chalk<br>or gravel soil . . } | Perennial. |
| Pansy, or Heartsease . . .             | <i>Viola tricolor</i>          | Cultivated fields . . .                           | Annual.    |
| Round-leaved Sundew . . .              | <i>Drosera rotundifolia</i>    | Bogs . . . . .                                    | Perennial. |
| Long-leaved do. . . . .                | <i>longifolia</i>              | Do. . . . .                                       | "          |
| Great do. . . . .                      | <i>Anglica</i>                 | Do. . . . .                                       | "          |
| Grass of Parnassus . . . .             | <i>Parnassia palustris</i>     | Do. . . . .                                       | "          |
| Common Milkwort . . . . .              | <i>Polygala vulgaris</i>       | Heaths and dry pastures .                         | "          |
| Six-stamened Water-<br>wort . . . . .  | <i>Elatine hexandra</i>        | { Wet sandy places or<br>shallow water . . }      | Annual.    |
| Eight-stamened do. . . . .             | <i>Hydropiper</i>              | Do. Rare . . . . .                                | "          |
| Deptford Pink . . . . .                | <i>Dianthus Armeria</i>        | Waste places . . . . .                            | "          |
| Maiden do. . . . .                     | <i>deltoides</i>               | Gravelly banks . . . .                            | Perennial. |
| Soapwort . . . . .                     | <i>Saponaria officinalis</i>   | Cultivated ground . . .                           | "          |
| Bladder Campion . . . . .              | <i>Silene inflata</i>          | Corn-fields and pastures .                        | "          |
| Sea do. . . . .                        | <i>maritima</i>                | { Sea-shore and moun-<br>tain streams . . }       | "          |
| Red Robin, or Campion . .              | <i>Lychnis diurna</i>          | Hedges and banks . . .                            | "          |
| Evening Campion . . . . .              | <i>vespertina</i>              | Do. . . . .                                       | "          |
| Procumbent Pearlwort . . .             | <i>Sagina procumbens</i>       | A common weed . . . .                             | "          |
| Sea do. . . . .                        | <i>maritima</i>                | { Sea-shore and summit<br>of Ben Nevis . . }      | Annual.    |
| Spurrey . . . . .                      | <i>Spergula arvensis</i>       | Corn-fields . . . . .                             | "          |
| Knotted do. . . . .                    | <i>nodosa</i>                  | Wet sandy places . . .                            | Perennial. |
| Small Hairy do. . . . .                | <i>subulata</i>                | Gravelly places . . . .                           | "          |
| Chickweed . . . . .                    | <i>Stellaria media</i>         | A common weed . . . .                             | Annual.    |
| Fringed Sandwort . . . . .             | <i>Arenaria ciliata</i>        | { Limestone mountains<br>in Ireland. Very rare }  | Perennial. |
| Norway do. . . . .                     | <i>Norvegica</i>               | Unst, Shetland . . . .                            | "          |
| Alpine do. . . . .                     | <i>rubella</i>                 | Mountains. Very rare .                            | "          |
| Red do. . . . .                        | <i>rubra</i>                   | Fields and dry places . .                         | Annual.    |
| Sea do. . . . .                        | <i>marina</i>                  | Sandy sea-shores . . .                            | "          |
| Narrow-leaved Mouse-<br>ear . . . . .  | <i>Cerastium viscosum</i>      | Fields and road-sides . .                         | Perennial. |
| Mountain Chickweed . . . .             | <i>alpinum</i>                 | Mountains . . . . .                               | "          |
| Broad-leaved Moun-<br>tain do. . . . . | <i>latifolium</i>              | Do. . . . .                                       | "          |
| Water do. . . . .                      | <i>aquatica</i>                | Wet places . . . . .                              | "          |
| Mossy Cyphel . . . . .                 | <i>Cherleria sedoides</i>      | Highland mountains . .                            | "          |
| Flax-seed . . . . .                    | <i>Radiola millegrana</i>      | Damp heaths . . . . .                             | Annual.    |
| Common Mallow . . . . .                | <i>Malva sylvestris</i>        | { Roadsides and waste<br>places . . . . . }       | Perennial. |



## P L A N T S (continued).

| Popular Name.                              | Scientific Name.                         | Localities.                                      | Duration.  |
|--|--|--|------------|
| Dwarf Mallow . . .                         | <i>Malva rotundifolia</i> . . .          | { Roadsides and waste places . . .               | Annual.    |
| Musk do. . . . .                           | „ <i>moschata</i> . . .                  | { Hedges and borders of fields . . .             | Perennial. |
| Tree do. . . . .                           | <i>Lavatera arborea</i> . . .            | { Rocks and cliffs on sea-shore. Rare . . .      | Biennial.  |
| Marsh do. . . . .                          | <i>Althæa officinalis</i> . . .          | Marshes near sea . . .                           | Perennial. |
| Large-flowered St. John's wort             | <i>Hypericum calycinum</i> . . .         | Bushy places . . .                               | „          |
| Square-stalked do. . .                     | „ <i>quadrangulum</i> . . .              | Wet places . . .                                 | „          |
| Perforated do. . . .                       | „ <i>perforatum</i> . . .                | Woods and hedges . . .                           | „          |
| Imperforate do. . . .                      | „ <i>dubium</i> . . .                    | { Mountainous places. Scarce . . .               | „          |
| Trailing do. . . . .                       | „ <i>humifusum</i> . . .                 | { Walls and gravelly banks . . .                 | „          |
| Narrow-leaved do. . .                      | „ <i>linarifolium</i> . . .              | { Sea-coast of Devon and Cornwall . . .          | „          |
| Small do. . . . .                          | „ <i>pulchrum</i> . . .                  | Heaths and woods . . .                           | „          |
| Water do. . . . .                          | „ <i>elodes</i> . . .                    | Bogs and peaty pools . . .                       | „          |
| Meadow do. . . . .                         | „ <i>pratense</i> . . .                  | Damp pastures . . .                              | „          |
| Herb Robert . . . .                        | <i>Geranium Robertianum</i> . . .        | Roadsides and hedges . . .                       | Annual.    |
| Shining Crane's-bill . .                   | „ <i>lucidum</i> . . .                   | Walls and stony places . . .                     | „          |
| Dove's-foot do. . . .                      | „ <i>molle</i> . . .                     | Fields and waste places . . .                    | „          |
| Round-leaved do. . . .                     | „ <i>rotundifolium</i> . . .             | Do. . . . .                                      | „          |
| Small-flowered do. . .                     | „ <i>pusillum</i> . . .                  | Do. . . . .                                      | „          |
| Long-stalked do. . . .                     | „ <i>columbinum</i> . . .                | Do. Scarce . . . . .                             | „          |
| Stork's-bill . . . . .                     | <i>Erodium cicutarium</i> . . .          | Waste ground . . . . .                           | „          |
| Sea do. . . . .                            | „ <i>maritimum</i> . . .                 | { Sandy sea-shores and at Dartmoor. Scarce . . . | Perennial. |
| Balsam . . . . .                           | { <i>Impatiens Noli-me-tangere</i> . . . | { Damp shady woods and stony river-banks . . .   | Annual.    |
| Yellow Wood Sorrel . .                     | <i>Oxalis corniculata</i> . . .          | { Damp places in west of England. Rare . . .     | „          |
| Dwarf Furze . . . . .                      | <i>Ulex nanus</i> . . . . .              | Heaths . . . . .                                 | Shrub.     |
| Greenweed, or Petty Whin                   | <i>Genista Anglica</i> . . .             | Heaths and moors . . .                           | „          |
| Dyer's do., or Woad-waxen . . . . .        | „ <i>tinctoria</i> . . .                 | Heathy places and fields . . .                   | „          |
| Rest-harrow . . . . .                      | <i>Ononis spinosa</i> . . .              | Heaths and dry commons . . .                     | Perennial. |
| Black Medick, or Non-such . . . . .        | <i>Medicago lupulina</i> . . .           | Pastures . . . . .                               | Annual.    |
| Yellow Melilot . . . .                     | <i>Melilotus officinalis</i> . . .       | Waste places . . . . .                           | „          |
| White or Dutch Clover, or Trefoil . . . .  | <i>Trifolium repens</i> . . .            | Meadows . . . . .                                | Perennial. |
| Purple do. . . . .                         | „ <i>pratense</i> . . .                  | Do. . . . .                                      | „          |
| Zigzag do. . . . .                         | „ <i>medium</i> . . .                    | { Dry pastures and bushy places . . .            | „          |
| Sulphur do. . . . .                        | „ <i>ochroleucum</i> . . .               | Pastures . . . . .                               | „          |
| Hare's-foot Trefoil . .                    | „ <i>arvense</i> . . .                   | { Sandy places and dry fields . . .              | Annual.    |
| Starry-headed do. . . .                    | „ <i>stellatum</i> . . .                 | Shoreham, Sussex . . .                           | „          |
| Strawberry do. . . . .                     | „ <i>fragiferum</i> . . .                | Damp pastures . . . . .                          | Perennial. |
| Greater Bird's-foot do.                    | <i>Lotus major</i> . . . . .             | Bushy places . . . . .                           | „          |
| Common do. do. . . .                       | „ <i>corniculatus</i> . . .              | Dry pastures . . . . .                           | „          |
| Lady's Fingers, Kidney Vetch, or Woundwort | <i>Anthyllis Vulneraria</i> . . .        | Do. . . . .                                      | „          |
| Wood Vetch . . . . .                       | <i>Vicia sylvatica</i> . . .             | Mountainous woods . . .                          | „          |
| Tufted do. . . . .                         | „ <i>cracca</i> . . .                    | Bushy places . . . . .                           | „          |
| Yellow Vetchling . . .                     | <i>Lathyrus Aphaca</i> . . .             | { Sandy and gravelly fields. Rare . . .          | Annual.    |
| Meadow do. . . . .                         | „ <i>pratensis</i> . . .                 | Grassy places . . . . .                          | Perennial. |
| Narrow-leaved Everlasting Pea . . . . .    | „ <i>sylvestris</i> . . .                | Woods and thickets . . .                         | „          |
| Blue Marsh Vetchling .                     | „ <i>palustris</i> . . .                 | Boggy meadows . . . . .                          | „          |
| Sea-side Everlasting Pea . . . . .         | „ <i>maritimus</i> . . .                 | Pebbly sea-shores . . .                          | „          |
| Bird's-foot . . . . .                      | <i>Ornithopus pappusillus</i> . . .      | Sandy heaths . . . . .                           | „          |
| Joint Vetch . . . . .                      | „ <i>ebracteatus</i> . . .               | Scilly Islands . . . . .                         | Annual.    |
| Horse-shoe do. . . . .                     | <i>Hippocrepis comosa</i> . . .          | Chalky banks . . . . .                           | Perennial. |



## P L A N T S (continued).

| Popular Name.                            | Scientific Name.                             | Localities.                          | Duration.  |
|--|--|--------------------------------------|------------|
| Meadow Sweet, or<br>Queen of the Meadows | <i>Spiræa Ulmaria</i>                        | Damp meadows                         | Perennial. |
| Dropwort                                 | " <i>Filipendula</i>                         | Dry pastures                         | "          |
| Common Avens, or<br>Herb Bennet          | <i>Geum urbanum</i>                          | Hedges and thickets                  | "          |
| Creeping Cinquefoil                      | <i>Potentilla reptans</i>                    | Meadows and waysides                 | "          |
| Hoary do.                                | " <i>argentea</i>                            | Pastures. Local                      | "          |
| White Rock do.                           | " <i>alba</i>                                | Mountains.                           | "          |
| Bramble, or Blackberry                   | <i>Rubus fruticosus</i>                      | Common everywhere                    | Shrub.     |
| Dewberry                                 | " <i>cæsius</i>                              | { Thickets and borders<br>of fields. | "          |
| Agrimony                                 | <i>Agrimonia Eupatoria</i>                   | Waste ground                         | Perennial. |
| Common Lady's Mantle                     | <i>Alchemilla vulgaris</i>                   | Hilly pastures                       | "          |
| Alpine do.                               | " <i>alpina</i>                              | Mountains                            | "          |
| Field do.                                | " <i>arvensis</i>                            | A common weed                        | Annual.    |
| Burnet                                   | <i>Sanguisorba officinalis</i>               | Damp meadows                         | Perennial. |
| Salad do.                                | <i>Poterium sanguisorba</i>                  | Dry do.                              | "          |
| Trailing Dog Rose                        | <i>Rosa arvensis</i>                         | Woods and hedges                     | Shrub.     |
| Great Hairy Willow<br>Herb               | { <i>Epilobium angustifolium</i>             | Wet places.                          | Perennial. |
| Small-flowered do.                       | " <i>parviflorum</i>                         | Do.                                  | "          |
| Broad-leaved do.                         | " <i>montanum</i>                            | { Dry banks and hilly<br>places      | "          |
| Square-stalked do.                       | " <i>tetragonum</i>                          | Wet places.                          | "          |
| Narrow-leaved do.                        | " <i>palustre</i>                            | Do.                                  | "          |
| Evening Primrose                         | <i>Oenothera biennis</i>                     | { Waste ground and<br>sandy coasts   | Biennial.  |
| Enchanter's Nightshade                   | <i>Circæa Lutetiana</i>                      | Damp shady places                    | Perennial. |
| Alpine do. do.                           | " <i>alpina</i>                              | Mountainous woods                    | "          |
| Spiked Water Milfoil                     | <i>Myriophyllum spicatum</i>                 | Stagnant water                       | "          |
| Purple Loosestrife, or<br>Willowstrife   | <i>Lythrum Salicaria</i>                     | Watery places                        | "          |
| Hyssop-leaved Purple<br>Loosestrife      | " <i>hyssopifolia</i>                        | Do. Rare                             | Annual.    |
| Water Purslane                           | <i>Peplis Portula</i>                        | Watery places                        | "          |
| White Bryony                             | <i>Bryonia dioica</i>                        | Hedges                               | Perennial. |
| Water Blinks.                            | <i>Montia fontana</i>                        | Wet places                           | Annual.    |
| Strapwort                                | <i>Corrigiola littoralis</i>                 | Sandy wastes. Rare                   | "          |
| Rupturewort                              | <i>Herniaria glabra</i>                      | Sandy places                         | Perennial. |
| Four-leaved All-seed                     | { <i>Polycarpon tetra-</i><br><i>phyllum</i> | South coast                          | Annual.    |
| Wall Pennywort                           | <i>Cotyledon Umbilicus</i>                   | Damp rocks and walls                 | Perennial. |
| Glaucous Stonecrop                       | <i>Sedum glaucum</i>                         | Walls and dry places                 | "          |
| Starry Saxifrage                         | <i>Saxifraga stellaris</i>                   | Mountains.                           | "          |
| Alpine do.                               | " <i>nivalis</i>                             | Do.                                  | "          |
| Yellow Marsh do.                         | " <i>Hirculus</i>                            | Bogs                                 | "          |
| Yellow Mountain do.                      | " <i>aizoides</i>                            | { Boggy places on moun-<br>tains     | "          |
| Drooping do.                             | " <i>cernua</i>                              | Mountain rocks                       | "          |
| Alpine Brook do.                         | " <i>rivularis</i>                           | Damp rocks                           | "          |
| Field Eryngo                             | <i>Eryngium campestre</i>                    | Waste ground. Rare                   | "          |
| Water Hemlock, or<br>Cowbane             | <i>Cicuta virosa</i>                         | Ditches                              | "          |
| Wild Celery, or<br>Smallage              | <i>Apium graveolens</i>                      | Marshes                              | Biennial.  |
| Corn Parsley                             | <i>Petroselinum segetum</i>                  | Chalky fields                        | "          |
| Marshwort                                | <i>Helosciadium nodiflorum</i>               | Ditches                              | Perennial. |
| Creeping do.                             | " <i>repens</i>                              | Watery places                        | "          |
| Fool's Parsley.                          | <i>Æthusa Cynapium</i>                       | A common weed                        | Annual.    |
| Fennel                                   | <i>Foeniculum vulgare</i>                    | { Chalky fields and way-<br>sides    | Perennial. |
| Mountain Stone Parsley                   | <i>Seseli Libanotis</i>                      | Chalky hills                         | "          |
| Pepper Saxifrage                         | <i>Silauus pratensis</i>                     | Damp meadows                         | "          |
| Samphire                                 | <i>Crithmum maritimum</i>                    | Rocky sea-shores                     | "          |
| Sea Hog's Fennel                         | <i>Peucedanum officinale</i>                 | Salt marshes. Rare                   | "          |
| Sea-side Carrot                          | <i>Daucus maritima</i>                       | South coast                          | Biennial.  |
| Venus's Comb, or<br>Shepherd's Needle    | <i>Scandix Pecten-Veneris</i>                | A common weed                        | Annual.    |



## PLANTS (continued).

| Popular Name.              | Scientific Name.                                   | Localities.                                      | Duration.  |
|----------------------------|--|--|------------|
| Yellow Bed-straw . . .     | <i>Galium verum</i> . . .                          | Dry fields . . .                                 | Perennial. |
| White Water do . . .       | " <i>palustre</i> . . .                            | Ditches . . .                                    | "          |
| Smooth Heath do. . .       | " <i>saxatile</i> . . .                            | Heaths . . .                                     | "          |
| Rough Marsh do. . .        | " <i>uliginosum</i> . . .                          | Wet places . . .                                 | "          |
| Rough-fruited do. . .      | " <i>saccharatum</i> . . .                         | Corn-fields. Rare . . .                          | Annual.    |
| Little Mountain do. . .    | " <i>pusillum</i> . . .                            | Limestone hills . . .                            | Perennial. |
| Great Hedge do. . .        | " <i>Mollugo</i> . . .                             | Hedges . . .                                     | "          |
| Goose-grass, or Cleavers   | " <i>Aparine</i> . . .                             | Hedge-banks . . .                                | Annual.    |
| Field Madder . . .         | <i>Sherardia arvensis</i> . . .                    | Fields . . .                                     | "          |
| Red Valerian . . .         | <i>Valeriana rubra</i> . . .                       | { Chalky banks and old<br>walls . . . }          | Perennial. |
| Small Teazle . . .         | <i>Dipsacus pilosus</i> . . .                      | Damp shady places . . .                          | Biennial.  |
| Devil's-bit Scabious . . . | <i>Scabiosa succisa</i> . . .                      | Heaths and pastures . . .                        | Perennial. |
| Small do. . .              | " <i>columbaria</i> . . .                          | Pastures . . .                                   | "          |
| Yellow Succory . . .       | <i>Picris Hieracioides</i> . . .                   | Road-sides . . .                                 | Biennial.  |
| Blue Sow-thistle . . .     | <i>Sonchus alpinus</i> . . .                       | Scottish mountains . . .                         | Perennial. |
| Corn do. . .               | " <i>arvensis</i> . . .                            | Corn-fields . . .                                | "          |
| Common do. . .             | " <i>oleraceus</i> . . .                           | A common weed . . .                              | Annual.    |
| Wild Lettuce . . .         | <i>Lactuca virosa</i> . . .                        | Hedge-banks . . .                                | Biennial.  |
| Prickly do. . .            | " <i>Scariola</i> . . .                            | Waste places . . .                               | "          |
| Small do. . .              | " <i>saligna</i> . . .                             | Near the sea . . .                               | "          |
| Ivy-leaved Wall Lettuce    | <i>Prenanthes muralis</i> . . .                    | Walls and cliffs . . .                           | Perennial. |
| Hawk-weed do. . .          | " <i>hieracifolia</i> . . .                        | Near Forfar . . .                                | Annual.    |
| Dandelion . . .            | <i>Leontodon Taraxacum</i> . . .                   | A common weed . . .                              | Perennial. |
| " Hawk-bit . . .           | <i>Apargia Taraxaci</i> . . .                      | Mountains . . .                                  | "          |
| Autumnal do. . .           | " <i>autumnalis</i> . . .                          | Meadows . . .                                    | "          |
| Hairy do. . .              | <i>Thrinicia hirta</i> . . .                       | Gravelly commons . . .                           | "          |
| Alpine Hawk-weed . . .     | <i>Hieracium alpinum</i> . . .                     | Mountains . . .                                  | "          |
| Mouse-ear do. . .          | " <i>Pilosella</i> . . .                           | Dry places . . .                                 | "          |
| Orange do. . .             | " <i>aurantiacum</i> . . .                         | Northern woods . . .                             | "          |
| Glaucous do. . .           | " <i>Lawsoni</i> . . .                             | Mountains . . .                                  | "          |
| Wall do. . .               | " <i>murorum</i> . . .                             | Dry woods and walls . . .                        | "          |
| Wood do. . .               | " <i>sylvaticum</i> . . .                          | Dry woods . . .                                  | "          |
| Succory-leaved do. . .     | " <i>paludosum</i> . . .                           | Shady places . . .                               | "          |
| Soft do. . .               | " <i>molle</i> . . .                               | Northern woods . . .                             | "          |
| Shrubby Hawk-weed . . .    | " <i>sabaudum</i> . . .                            | Woods . . .                                      | "          |
| Narrow-leaved do. . .      | " <i>umbellatum</i> . . .                          | Dry woods . . .                                  | "          |
| Smooth Hawk's-beard . . .  | <i>Crepis tectorum</i> . . .                       | Walls and dry places . . .                       | Annual.    |
| Spotted Cat's-ear . . .    | <i>Hypochaeris maculata</i> . . .                  | Dry pastures . . .                               | Perennial. |
| Smooth do. . .             | " <i>glabra</i> . . .                              | Do. . .  | Annual.    |
| Long-rooted do. . .        | " <i>radicata</i> . . .                            | Meadows . . .                                    | Perennial. |
| Nipple-wort . . .          | <i>Lapsana communis</i> . . .                      | A common weed . . .                              | Annual.    |
| Chicory, or Succory . . .  | <i>Cichorium Intybus</i> . . .                     | { Chalky or dry fields<br>and way-sides . . . }  | Perennial. |
| Burdock . . .              | <i>Arctium Lappa</i> . . .                         | { Waste places and<br>road-sides . . . }         | Biennial.  |
| Saw-wort . . .             | <i>Serratula tinctoria</i> . . .                   | Woods . . .                                      | Perennial. |
| Alpine Saussurea . . .     | <i>Saussurea alpina</i> . . .                      | Damp mountain rocks . . .                        | "          |
| Musk Thistle . . .         | <i>Carduus nutans</i> . . .                        | Waste ground . . .                               | Annual.    |
| Spear do. . .              | <i>Oniscus lanceolatus</i> . . .                   | Do. . .  | Biennial.  |
| Marsh do. . .              | " <i>palustris</i> . . .                           | Marshes . . .                                    | "          |
| Woolly-headed do. . .      | " <i>eriophorus</i> . . .                          | { Limestone pastures<br>and waste places . . . } | Perennial. |
| Tuberous Plume do. . .     | " <i>tuberosus</i> . . .                           | Woods . . .                                      | "          |
| Dark do. do. . .           | " <i>heterophyllus</i> . . .                       | Northern pastures . . .                          | "          |
| Cotton Thistle . . .       | <i>Onopordum Acanthum</i> . . .                    | Waste places . . .                               | Biennial.  |
| Nodding Bur Marigold . . . | <i>Bidens cernua</i> . . .                         | Ditches . . .                                    | Annual.    |
| Common do. . .             | " <i>tripartita</i> . . .                          | Do. . .  | "          |
| Hemp Agrimony . . .        | { <i>Eupatorium canna-</i><br><i>binum</i> . . . } | Do. . .  | Perennial. |
| Goldilocks . . .           | <i>Chrysocoma Linosyris</i> . . .                  | Cliffs on south coast . . .                      | "          |
| Cotton Weed . . .          | <i>Diotis maritima</i> . . .                       | Sandy shores . . .                               | "          |
| Tansy . . .                | <i>Tanacetum vulgare</i> . . .                     | Fields . . .                                     | "          |
| Field Southernwood . . .   | <i>Artemisia campestris</i> . . .                  | Dry heaths . . .                                 | "          |
| Wormwood . . .             | " <i>Absinthium</i> . . .                          | Waste places . . .                               | "          |
| Mugwort . . .              | " <i>vulgaris</i> . . .                            | Hedge-banks . . .                                | "          |
| Lavender do. . .           | " <i>cærulescens</i> . . .                         | { Sea-coast. Doubtful<br>native . . . }          | "          |



## PLANTS (continued).

| Popular Name.                                   | Scientific Name.                                       | Localities.                                  | Duration.  |
|---|--|--|------------|
| Pearly Everlasting                              | { <i>Antennaria marga-</i><br><i>ritacea</i> }         | { Damp meadows. Not<br>native . . . }        | Perennial. |
| Jersey Cudweed                                  | <i>Gnaphalium luteo-album</i>                          | Dry fields . . .                             | Annual.    |
| Highland do. . . . .                            | " <i>sylvaticum</i> .                                  | Mountains . . .                              | Perennial. |
| Dwarf do. . . . .                               | " <i>supinum</i> . . .                                 | Highland mountains                           | "          |
| Marsh do. . . . .                               | " <i>uliginosum</i> . .                                | Watery places . .                            | Annual.    |
| Narrow-leaved do. . .                           | " <i>Gallicum</i> . . .                                | Dry fields. Rare . .                         | "          |
| Least Cudweed . . . .                           | " <i>minimum</i> . . .                                 | Dry ground . . . .                           | "          |
| Canada Flea-bane . . .                          | <i>Erigeron Canadense</i>                              | Waste ground . . .                           | "          |
| Blue do. . . . .                                | " <i>acre</i> . . . . .                                | Dry pastures . . .                           | Biennial.  |
| Groundsel . . . . .                             | <i>Senecio vulgaris</i> .                              | A common weed . .                            | Annual.    |
| Stinking do. . . . .                            | " <i>viscosus</i> . . .                                | Waste ground . . .                           | "          |
| Inelegant Ragwort . .                           | " <i>squalidus</i> . . .                               | Walls and waste places                       | "          |
| Hoary do. . . . .                               | " <i>tenuifolius</i> . .                               | Banks and waysides                           | Perennial  |
| Common do. . . . .                              | " <i>Jacobaea</i> . . .                                | Dry places . . . .                           | "          |
| Marsh do. . . . .                               | " <i>aquaticus</i> . . .                               | Wet places . . . .                           | "          |
| Broad-leaved do. . . .                          | " <i>Saracenicus</i> . .                               | Damp meadows. Rare                           | "          |
| Sea Starwort, or Sea<br>Aster . . . . .         | <i>Aster tripolium</i> . .                             | { Muddy sea-shores and<br>salt marshes . . } | "          |
| Golden Rod . . . . .                            | <i>Solidago virgaurea</i>                              | Woods and heaths . .                         | "          |
| Elecampane . . . . .                            | <i>Inula Helenium</i> . .                              | Damp pastures . . .                          | "          |
| Flea-bane . . . . .                             | <i>Pulicaria dysenterica</i>                           | Ditches . . . . .                            | "          |
| Small do. . . . .                               | " <i>vulgaris</i> . . . .                              | Sandy heaths . . . .                         | Annual.    |
| Golden Samphire . . .                           | <i>Limbarda Crithmoides</i>                            | Salt marshes . . . .                         | Perennial  |
| Common Leopard's-bane                           | { <i>Doronicum pardali-</i><br><i>anches</i> . . . . } | Damp woods . . . .                           | "          |
| Daisy . . . . .                                 | <i>Bellis perennis</i> . .                             | Pastures . . . . .                           | "          |
| Corn Marigold . . . .                           | { <i>Chrysanthemum Leu-</i><br><i>canthemum</i> . . }  | Corn-fields . . . . .                        | Annual.    |
| Corn Feverfew . . . .                           | <i>Pyrethrum inodorum</i>                              | Fields . . . . .                             | "          |
| Wild Chamomile . . .                            | <i>Matricaria Chamomilla</i>                           | Corn-fields . . . . .                        | "          |
| Common do. . . . .                              | <i>Anthemis nobilis</i> . .                            | Dry pastures . . . .                         | Perennial. |
| Stinking do. . . . .                            | " <i>Cotula</i> . . . .                                | A common weed . .                            | Annual.    |
| Ox-eye do. . . . .                              | " <i>tinctoria</i> . . .                               | Dry fields. Rare . .                         | Biennial.  |
| Sneeze-wort, or Goose-<br>wort . . . . .        | <i>Achillea Ptarmica</i> .                             | Damp pastures . . .                          | Perennial. |
| Serrated Milfoil . . .                          | " <i>serrata</i> . . . .                               | Near Matlock, Derby                          | "          |
| Yarrow, or Milfoil . .                          | " <i>millefolium</i> . .                               | Pastures and way-sides                       | "          |
| Golden Milfoil . . . .                          | " <i>tomentosa</i> . . .                               | Dry hill-pastures. Scarce                    | "          |
| Brown Knapweed . . .                            | <i>Centaurea Jacea</i> . .                             | Pastures . . . . .                           | "          |
| Black do. . . . .                               | " <i>nigra</i> . . . . .                               | Pastures and way-sides                       | "          |
| Corn-flower, or Blue-<br>bottle . . . . .       | " <i>Cyanus</i> . . . .                                | Corn-fields . . . . .                        | Annual.    |
| Great Knapweed . . .                            | " <i>Scabiosa</i> . . . .                              | Corn-fields and pastures                     | Perennial. |
| Common Star Thistle .                           | " <i>calceitrapa</i> . .                               | Waste places. Local                          | Annual.    |
| Yellow do. . . . .                              | " <i>solstitialis</i> . .                              | Waste places . . .                           | "          |
| Bur-weed . . . . .                              | <i>Xanthium strumarium</i>                             | Do. . . . .                                  | "          |
| Blue-bell, or Hare-bell                         | <i>Campanula rotundifolia</i>                          | Heaths . . . . .                             | Perennial. |
| Rampion Bell-flower .                           | " <i>Rapunculus</i> . .                                | Banks and fields . .                         | Biennial.  |
| Giant do. . . . .                               | " <i>latifolia</i> . . . .                             | Shady places . . . .                         | Perennial. |
| Creeping do. . . . .                            | " <i>rapunculoides</i> .                               | Northern corn-fields                         | "          |
| Nettle-leaved do. . . .                         | " <i>Trachelium</i> . . .                              | Woods and hedges . .                         | "          |
| Clustered do. . . . .                           | " <i>glomerata</i> . . .                               | Chalky pastures . .                          | "          |
| Ivy-leaved do. . . . .                          | " <i>hederacea</i> . . .                               | Bogs . . . . .                               | "          |
| Corn do. . . . .                                | " <i>hybrida</i> . . . .                               | Corn-fields . . . . .                        | Annual.    |
| Rampion . . . . .                               | <i>Phyteuma orbiculare</i>                             | Chalk hills. Local                           | Perennial. |
| Spiked do. . . . .                              | " <i>spicatum</i> . . .                                | Hedges. Rare . . . .                         | "          |
| Cross-leaved Heath . .                          | <i>Erica Tetralix</i> . . .                            | Heaths . . . . .                             | Shrub.     |
| Common do. . . . .                              | " <i>cinerea</i> . . . .                               | Do. . . . .                                  | "          |
| Cornish do. . . . .                             | " <i>vagans</i> . . . . .                              | Cornwall heaths . .                          | "          |
| Fringe-leaved do. . . .                         | " <i>ciliaris</i> . . . .                              | Do. . . . .                                  | "          |
| Ling, or Heather . . .                          | <i>Calluna vulgaris</i> . .                            | Heaths and moors . .                         | "          |
| St. Dabeoc's Heath . .                          | <i>Menziesia polifolia</i>                             | West of Ireland . .                          | "          |
| Round-leaved Winter-<br>Green . . . . .         | <i>Pyrola rotundifolia</i>                             | Damp woods. Rare . .                         | Perennial. |
| Centaury . . . . .                              | <i>Erythraea Centaurium</i>                            | Dry pastures . . . .                         | Annual.    |
| Marsh Gentian, or Ca-<br>lathian Violet . . . . | <i>Gentiana Pneumonanthe</i>                           | Wet heaths. Local . .                        | Perennial. |
| Small Alpine do. . . .                          | " <i>nivalis</i> . . . .                               | Mountain summits, Rare                       | Annual.    |



## PLANTS (continued).

| Popular Name.                              | Scientific Name.                                     | Localities.                                   | Duration.  |
|--|--|---|------------|
| Autumn Gentian, or }<br>Calathian Violet } | <i>Gentiana Amarella</i>                             | Limestone pastures.                           | Annual.    |
| Field do. . . . .                          | " <i>campestris</i>                                  | { Hill pastures, espe-<br>cially on chalk }   | "          |
| Yellow-wort . . . . .                      | <i>Chlora perfoliata</i>                             | Chalky hills                                  | "          |
| Fringed Water Lily . . . . .               | <i>Villarsia nymphaeoides</i>                        | Pools and slow rivers                         | Perennial. |
| Marsh Felwort . . . . .                    | <i>Swertia perennis</i>                              | { Mountain bogs. Doubt-<br>ful native }       | "          |
| Great Bind-weed . . . . .                  | <i>Convolvulus Sepium</i>                            | Hedges and ditch-banks.                       | "          |
| Greater Dodder . . . . .                   | <i>Cuscuta Europæa</i>                               | { Parasitic on thistles<br>and other plants } | Annual.    |
| Common do. . . . .                         | " <i>Epithymum</i>                                   | { Parasitic on heath and<br>thyme }           | Perennial. |
| Viper-grass . . . . .                      | <i>Echium vulgare</i>                                | Dry fields . . . . .                          | Biennial.  |
| Creeping Gromwell . . . . .                | { <i>Lithospermum pur-</i><br><i>puro-cæruleum</i> } | Fields and waste places.                      | Perennial. |
| Forget-me-not . . . . .                    | <i>Myosotis palustris</i>                            | Ditches . . . . .                             | "          |
| Alpine do. . . . .                         | " <i>alpestris</i>                                   | Mountains . . . . .                           | "          |
| Field do. . . . .                          | " <i>arvensis</i>                                    | Dry places . . . . .                          | Annual.    |
| Early do. . . . .                          | " <i>collina</i>                                     | Dry fields and walls                          | "          |
| Comfrey . . . . .                          | <i>Symphytum officinale</i>                          | Watery places . . . . .                       | Perennial. |
| Tuberous do. . . . .                       | " <i>tuberosum</i>                                   | Do. Rare . . . . .                            | "          |
| Borage . . . . .                           | <i>Borago officinalis</i>                            | Waste ground . . . . .                        | Biennial.  |
| Thorn Apple . . . . .                      | <i>Datura Stramonium</i>                             | Do. Not native . . . . .                      | Annual.    |
| Woody Nightshade, or }<br>Bittersweet }    | <i>Solanum Dulcamara</i>                             | Hedges . . . . .                              | Perennial. |
| Garden do. . . . .                         | " <i>nigrum</i>                                      | A common weed . . . . .                       | Annual.    |
| Clove-scented Broom-<br>rape. . . . .      | { <i>Orobanche caryophyl-</i><br><i>lacea</i> }      | On roots of bedstraw                          | Perennial. |
| Tall do. . . . .                           | " <i>clatior</i>                                     | { On knapweeds and<br>other plants }          | "          |
| Ivy do. . . . .                            | " <i>Hederæ</i>                                      | Ivy roots . . . . .                           | "          |
| Branched do. . . . .                       | " <i>ramosa</i>                                      | On Hemp . . . . .                             | Annual.    |
| Spiked Speedwell . . . . .                 | <i>Veronica spicata</i>                              | Dry meadows . . . . .                         | Perennial. |
| Alpine do. . . . .                         | " <i>alpina</i>                                      | Mountains . . . . .                           | "          |
| Marsh do. . . . .                          | " <i>scutellata</i>                                  | Bogs . . . . .                                | "          |
| Common do. . . . .                         | " <i>officinalis</i>                                 | Dry places . . . . .                          | "          |
| Ivy-leaved do. . . . .                     | " <i>hederifolia</i>                                 | A common weed . . . . .                       | Annual.    |
| Germander Chickweed . . . . .              | " <i>agrestis</i>                                    | Do. . . . .                                   | "          |
| Grey Speedwell . . . . .                   | " <i>polita</i>                                      | Do. . . . .                                   | "          |
|  | " <i>Buxbaumii</i>                                   | Fields . . . . .                              | "          |
| Marsh Painted-cup . . . . .                | <i>Barbisia viscosa</i>                              | Damp meadows . . . . .                        | "          |
| Red Eye-bright . . . . .                   | " <i>Odontites</i>                                   | A common weed . . . . .                       | "          |
| Common do. . . . .                         | <i>Euphrasia officinalis</i>                         | Dry pastures . . . . .                        | "          |
| Large Yellow Rattle . . . . .              | <i>Rhinanthus major</i>                              | Corn-fields . . . . .                         | "          |
| Yellow Cow-wheat . . . . .                 | <i>Melampyrum pratense</i>                           | Woods . . . . .                               | "          |
| Snapdragon . . . . .                       | <i>Antirrhinum majus</i>                             | Old walls. Not native                         | Perennial. |
| Calf's-snout . . . . .                     | " <i>Orontium</i>                                    | Corn-fields. Scarce                           | Annual.    |
| Ivy-leaved Snap-<br>dragon, or Toad-flax } | <i>Linaria Cymbalaria</i>                            | Walls. Not native . . . . .                   | Perennial. |
| Fluellen, or Toad-flax . . . . .           | " <i>spuria</i>                                      | Dry fields . . . . .                          | Annual.    |
| Sharp-leaved do. . . . .                   | " <i>Elatine</i>                                     | Do. . . . .                                   | "          |
| Creeping Toad-flax . . . . .               | " <i>repens</i>                                      | Rocks near the sea . . . . .                  | Perennial. |
| Mudwort . . . . .                          | <i>Limosella aquatica</i>                            | Muddy places . . . . .                        | Annual.    |
| Cornish Money-wort . . . . .               | <i>Sibthorpia Europæa</i>                            | Damp places. Local                            | Perennial. |
| Great Mullein . . . . .                    | <i>Verbascum Thapsus</i>                             | Hedge-banks . . . . .                         | Biennial.  |
| Dark do. . . . .                           | " <i>nigrum</i>                                      | Do. . . . .                                   | "          |
| Large-flowered do. . . . .                 | " <i>virgatum</i>                                    | Do. Rare . . . . .                            | Biennial.  |
| Moth do. . . . .                           | " <i>Blattaria</i>                                   | Do. Do. . . . .                               | Annual.    |
| Gipsy-wort . . . . .                       | <i>Lycopus Europæus</i>                              | Ditches and pool-sides                        | Perennial. |
| Wild Clary . . . . .                       | <i>Salvia verbenaca</i>                              | { Dry fields and hedge-<br>banks }            | "          |
| Horse Mint . . . . .                       | <i>Mentha sylvestris</i>                             | Damp ground . . . . .                         | "          |
| Round-leaved do. . . . .                   | " <i>rotundifolia</i>                                | Do. . . . .                                   | "          |
| Spear do. . . . .                          | " <i>viridis</i>                                     | Do. . . . .                                   | "          |
| Pepper do. . . . .                         | " <i>piperita</i>                                    | Do. . . . .                                   | "          |
| Bergamot do. . . . .                       | " <i>citrata</i>                                     | Wet places. Rare . . . . .                    | "          |
| Water, or Hairy do. . . . .                | " <i>hirsuta</i>                                     | Wet places . . . . .                          | "          |
| Sharp-leaved do. . . . .                   | " <i>acutifolia</i>                                  | Do. Rare . . . . .                            | "          |
| Bushy Red do. . . . .                      | " <i>gentilis</i>                                    | Pools . . . . .                               | "          |



## P L A N T S (continued).

| Popular Name.                                  | Scientific Name.                          | Localities.                                       | Duration.  |
|--|---|---|------------|
| Corn Mint . . . . .                            | <i>Mentha arvensis</i> . . . . .          | Corn-fields . . . . .                             | Perennial. |
| Penny Royal . . . . .                          | " <i>Pulegium</i> . . . . .               | Wet places. Naturalised . . . . .                 | "          |
| Wild Thyme . . . . .                           | <i>Thymus Serpyllum</i> . . . . .         | Heaths and hedge-banks . . . . .                  | "          |
| Marjoram . . . . .                             | <i>Origanum vulgare</i> . . . . .         | { Hedge-banks and }<br>{ bushy places . . . . . } | "          |
| Germander, or Wood }<br>Sage . . . . .         | <i>Teucrium Scorodonia</i> . . . . .      | Woods and commons . . . . .                       | "          |
| Wall do. . . . .                               | " <i>Chamaedrys</i> . . . . .             | Old walls. Naturalised . . . . .                  | "          |
| Black Horehound . . . . .                      | <i>Ballota nigra</i> . . . . .            | Hedges and waste ground . . . . .                 | "          |
| Motherwort . . . . .                           | <i>Leonurus Cardiac</i> . . . . .         | Hedge-banks . . . . .                             | "          |
| Red Hemp Nettle . . . . .                      | <i>Galeopsis Ladanum</i> . . . . .        | Dry fields . . . . .                              | Annual.    |
| Dwarf do. . . . .                              | " <i>villosa</i> . . . . .                | Sandy fields . . . . .                            | "          |
| Common do. . . . .                             | " <i>tetrahit</i> . . . . .               | Fields . . . . .                                  | "          |
| Bee Nettle . . . . .                           | " <i>versicolor</i> . . . . .             | Corn-fields . . . . .                             | "          |
| White Dead Nettle . . . . .                    | <i>Lamium album</i> . . . . .             | Hedges and way-sides . . . . .                    | Perennial. |
| Spotted do. . . . .                            | " <i>maculatum</i> . . . . .              | Hedge-banks. Rare . . . . .                       | "          |
| Red do. . . . .                                | " <i>purpureum</i> . . . . .              | A common weed . . . . .                           | Annual.    |
| Betony . . . . .                               | <i>Betonica officinalis</i> . . . . .     | Woods . . . . .                                   | Perennial. |
| Hedge Woundwort . . . . .                      | <i>Stachys sylvatica</i> . . . . .        | Hedge-banks . . . . .                             | "          |
| Marsh do. . . . .                              | " <i>palustris</i> . . . . .              | Wet places . . . . .                              | "          |
| Downy do. . . . .                              | " <i>germanica</i> . . . . .              | Fields . . . . .                                  | "          |
| Corn do. . . . .                               | " <i>arvensis</i> . . . . .               | Corn-fields . . . . .                             | Annual.    |
| Pale do. . . . .                               | " <i>annua</i> . . . . .                  | Fields. Rare . . . . .                            | "          |
| Cat Mint . . . . .                             | <i>Nepeta Cataria</i> . . . . .           | Hedge-banks . . . . .                             | Perennial. |
| Horehound . . . . .                            | <i>Marrubium vulgare</i> . . . . .        | Waste places . . . . .                            | "          |
| Basil Thyme . . . . .                          | <i>Calamintha acinos</i> . . . . .        | Dry fields . . . . .                              | Annual.    |
| Calamint . . . . .                             | " <i>officinalis</i> . . . . .            | Way-sides . . . . .                               | Perennial. |
| Wild Basil . . . . .                           | <i>Clinopodium vulgare</i> . . . . .      | Limestone hills . . . . .                         | "          |
| Skull Cap . . . . .                            | <i>Scutellaria galericulata</i> . . . . . | Wet places . . . . .                              | "          |
| Lesser do. . . . .                             | " <i>minor</i> . . . . .                  | Do. . . . .                                       | "          |
| Bladderwort . . . . .                          | <i>Utricularia vulgaris</i> . . . . .     | Stagnant water . . . . .                          | "          |
| Intermediate do. . . . .                       | " <i>intermedia</i> . . . . .             | Water. Rare . . . . .                             | "          |
| Small do. . . . .                              | " <i>minor</i> . . . . .                  | Pools on moors . . . . .                          | "          |
| Sow Bread . . . . .                            | <i>Cyclamen hederifolium</i> . . . . .    | Woods. Local . . . . .                            | "          |
| Sea Milkwort . . . . .                         | <i>Glaux maritima</i> . . . . .           | { Sea-shores and salt- }<br>{ marshes . . . . . } | "          |
| Wood Pimpernel . . . . .                       | <i>Lysimachia nemorum</i> . . . . .       | Woods . . . . .                                   | "          |
| Scarlet do. . . . .                            | <i>Anagallis arvensis</i> . . . . .       | A common weed . . . . .                           | Annual.    |
| Bog do. . . . .                                | " <i>tenella</i> . . . . .                | Bogs . . . . .                                    | Perennial. |
| Brook Weed . . . . .                           | <i>Samolus Valerandi</i> . . . . .        | Watery places . . . . .                           | "          |
| Sea Thrift . . . . .                           | <i>Armeria maritima</i> . . . . .         | Sea-cliffs . . . . .                              | "          |
| Sea Lavender . . . . .                         | <i>Statice Limonium</i> . . . . .         | Sea-coast . . . . .                               | "          |
| Narrow-leaved do. do. . . . .                  | " <i>spatulata</i> . . . . .              | Do. . . . .                                       | "          |
| Matted do. do. . . . .                         | " <i>reticulata</i> . . . . .             | Coast of Norfolk . . . . .                        | "          |
| Greater Plantain . . . . .                     | <i>Plantago major</i> . . . . .           | A common weed . . . . .                           | "          |
| Hoary do. . . . .                              | " <i>media</i> . . . . .                  | Chalk hills . . . . .                             | "          |
| Sea do. . . . .                                | " <i>maritima</i> . . . . .               | Muddy sea-coasts . . . . .                        | "          |
| Buck's Horn do. . . . .                        | " <i>Coronopus</i> . . . . .              | Dry places . . . . .                              | Annual.    |
| Wild Amaranth . . . . .                        | <i>Amaranthus Blitum</i> . . . . .        | Waste places . . . . .                            | "          |
| Beet . . . . .                                 | <i>Beta maritima</i> . . . . .            | Muddy sea-shores . . . . .                        | Perennial. |
| Shrubby Goosefoot . . . . .                    | <i>Chenopodium fruticosum</i> . . . . .   | South coast . . . . .                             | "          |
| Stinking do. . . . .                           | " <i>olidum</i> . . . . .                 | { Waste places and sea- }<br>{ coast . . . . . }  | Annual.    |
| Round-leaved do. . . . .                       | " <i>polyspermum</i> . . . . .            | Waste ground . . . . .                            | "          |
| Sharp-leaved do. . . . .                       | " <i>acutifolium</i> . . . . .            | Do. . . . .                                       | "          |
| Wild Spinach . . . . .                         | " <i>Bonus Henricus</i> . . . . .         | Do. . . . .                                       | Perennial. |
| Upright Goosefoot . . . . .                    | " <i>urbicum</i> . . . . .                | { Dunghills and waste }<br>{ ground . . . . . }   | Annual.    |
| Nettle-leaved do. . . . .                      | " <i>murale</i> . . . . .                 | Waste ground . . . . .                            | "          |
| Maple-leaved do. . . . .                       | " <i>hybridum</i> . . . . .               | Damp places. Local . . . . .                      | "          |
| White do. . . . .                              | " <i>album</i> . . . . .                  | A common weed . . . . .                           | "          |
| Fig-leaved do. . . . .                         | " <i>ficifolium</i> . . . . .             | Waste ground and fields . . . . .                 | "          |
| Oak-leaved do. . . . .                         | " <i>glaucum</i> . . . . .                | Sandy places . . . . .                            | "          |
| Shrubby Orache, or }<br>Sea Purslane . . . . . | <i>Atriplex portulacoides</i> . . . . .   | Sea-shores . . . . .                              | Perennial. |
| Spear-leaved do. . . . .                       | " <i>erecta</i> . . . . .                 | Waste ground. Rare . . . . .                      | Annual.    |
| Grass-leaved do. . . . .                       | " <i>littoralis</i> . . . . .             | Salt marshes . . . . .                            | "          |
| Marsh do. . . . .                              | " <i>pedunculata</i> . . . . .            | Marshes . . . . .                                 | "          |
| Triangular-leaved do . . . . .                 | " <i>deltoidea</i> . . . . .              | Waste ground . . . . .                            | "          |



## PLANTS (continued).

| Popular Name.                                     | Scientific Name.                                      | Localities.                                     | Duration.  |
|---|---|---|------------|
| Glasswort . . . .                                 | <i>Salicornia herbacea</i>                            | { Salt marshes and }<br>muddy shores . . . .    | Annual.    |
| Creeping do. . . .                                | " <i>radicans</i>                                     | Muddy sea-shores . . . .                        | Perennial  |
| Perennial Knawel . . . .                          | <i>Scleranthus perennis</i>                           | Sandy fields . . . .                            | "          |
| Bistort, or Snakeweed . . . .                     | <i>Polygonum Bistorta</i>                             | Damp meadows . . . .                            | "          |
| Knot-grass . . . .                                | " <i>aviculare</i>                                    | A common weed . . . .                           | Annual.    |
| Sea do. . . .                                     | " <i>maritimum</i>                                    | Sandy shores . . . .                            | Perennial. |
| Buckwheat . . . .                                 | " <i>Fagopyrum</i>                                    | Fields. Naturalised . . . .                     | Annual.    |
| Black Bindweed, or }<br>Climbing Buckwheat }      | " <i>Convolvulus</i>                                  | A common weed . . . .                           | "          |
| Copse do. . . .                                   | " <i>dumetorum</i>                                    | Woods . . . .                                   | "          |
| Water Persicaria, or }<br>Water Bistort . . . . } | " <i>amphibium</i>                                    | Ponds and wet places . . . .                    | Perennial. |
| Spotted do. . . .                                 | " <i>Persicaria</i>                                   | Damp ground . . . .                             | Annual.    |
| Pale Flowered do. . . .                           | " <i>lapathifolium</i>                                | { Dunghills and waste }<br>ground . . . . }     | "          |
| Lax Flowered do. . . .                            | " <i>mite</i>   | Waste ground . . . .                            | "          |
| Small Creeping do. . . .                          | " <i>minus</i>  | Wet places . . . .                              | "          |
| Biting do. . . .                                  | " <i>Hydropiper</i>                                   | Do. . . .                                       | "          |
| Great Water Dock . . . .                          | <i>Rumex Hydrolapathum</i>                            | Ditches . . . .                                 | Perennial  |
| Curled Dock . . . .                               | " <i>crispus</i>                                      | A common weed . . . .                           | "          |
| Fiddle do. . . .                                  | " <i>pulcher</i>                                      | Waste ground . . . .                            | "          |
| Golden do. . . .                                  | " <i>maritimus</i>                                    | Marshes . . . .                                 | "          |
| Sheep's Sorrel . . . .                            | " <i>acetosella</i>                                   | Heaths . . . .                                  | "          |
| Birthwort . . . .                                 | <i>Aristolochia Clematitis</i>                        | { Ruins and thickets }<br>Naturalised . . . . } | "          |
| Annual Mercury . . . .                            | <i>Mercurialis annua</i>                              | Waste ground . . . .                            | Annual.    |
| Purple Spurge . . . .                             | <i>Euphorbia Peplis</i>                               | Sandy shores . . . .                            | "          |
| Sun do., or Wart-weed . . . .                     | " <i>Helioscopia</i>                                  | A common weed . . . .                           | "          |
| Broad-leaved do. . . .                            | " <i>platyphylla</i>                                  | Fields . . . .                                  | "          |
| Sea do. . . .                                     | " <i>Paralias</i>                                     | Sandy shores . . . .                            | Perennial. |
| Portland do. . . .                                | " <i>Portlandica</i>                                  | South coast . . . .                             | "          |
| Petty do. . . .                                   | " <i>Peplus</i>                                       | A common weed . . . .                           | Annual.    |
| Spring Water Starwort . . . .                     | <i>Callitriche verna</i>                              | Pools . . . .                                   | "          |
| Stalked do. do. . . .                             | " <i>pedunculata</i>                                  | Do. . . .                                       | "          |
| Autumnal do. . . .                                | " <i>autumnalis</i>                                   | Do. . . .                                       | "          |
| Spiny-fruited Hornwort . . . .                    | { <i>Ceratophyllum de-</i><br><i>mersum</i> . . . . } | Do. . . .                                       | Perennial  |
| Small Nettle . . . .                              | <i>Urtica urens</i>                                   | Waste ground . . . .                            | Annual     |
| Common do. . . .                                  | " <i>dioica</i>                                       | Way-sides and fields . . . .                    | Perennial  |
| Pellitory . . . .                                 | <i>Parietaria officinalis</i>                         | Old walls . . . .                               | "          |
| Water Thyme . . . .                               | <i>Eudorea Canadensis</i>                             | Canals . . . .                                  | "          |
| Frog-bit . . . .                                  | { <i>Hydrocharis Morsus-</i><br><i>Ranæ</i> . . . . } | Ponds and streams . . . .                       | "          |
| Lizard Orchis . . . .                             | <i>Orchis hircina</i>                                 | Chalky thickets . . . .                         | "          |
| Fragrant do. . . .                                | <i>Gymnadenia conopsea</i>                            | Chalk hills . . . .                             | "          |
| Creeping Goodyera . . . .                         | <i>Goodyera repens</i>                                | Highland forests . . . .                        | "          |
| Lady's Tresses . . . .                            | <i>Neottia spiralis</i>                               | { Chalk hills and pas- }<br>tures . . . . }     | "          |
| Mountain Tway-blade . . . .                       | <i>Listera cordata</i>                                | Mountains . . . .                               | "          |
| Helleborine . . . .                               | <i>Epipactis latifolia</i>                            | Woods . . . .                                   | "          |
| Purple-leaved do. . . .                           | " <i>purpurata</i>                                    | Do. . . .                                       | "          |
| Bog Orchis . . . .                                | <i>Malaxis paludosa</i>                               | Peat bogs . . . .                               | "          |
| Stinking Iris . . . .                             | <i>Iris foetidissima</i>                              | Pastures and thickets . . . .                   | "          |
| Asparagus . . . .                                 | <i>Asparagus officinalis</i>                          | Sea-shores . . . .                              | "          |
| Great Round-headed }<br>Garlic . . . . }          | <i>Allium Ampeloprasum</i>                            | { Flat Holmes on the }<br>Severn . . . . }      | "          |
| Scottish Asphodel . . . .                         | <i>Tofieldia palustris</i>                            | { Boggy places on }<br>mountains . . . . }      | "          |
| Pipewort . . . .                                  | <i>Eriocaulon septangulare</i>                        | Mountain lakes. Rare . . . .                    | "          |
| Bog Asphodel . . . .                              | <i>Narthecium ossifragum</i>                          | Bogs . . . .                                    | "          |
| Small Sea-Rush . . . .                            | <i>Juncus maritimus</i>                               | Salt marshes . . . .                            | "          |
| Black-headed Jointed }<br>Rush . . . . }          | " <i>nigritellus</i>                                  | Wet places in Scotland . . . .                  | "          |
| Blunt-flowered do. do. . . .                      | " <i>obtusiflorus</i>                                 | Marshes . . . .                                 | "          |
| Round-fruited Rush . . . .                        | " <i>compressus</i>                                   | Do. . . .                                       | "          |
| Toad do. . . .                                    | " <i>bufonius</i>                                     | Damp heaths . . . .                             | Annual.    |
| Two-flowered do. . . .                            | " <i>biglumis</i>                                     | Mountain rills . . . .                          | Perennial  |
| Three-flowered do. . . .                          | " <i>triglumis</i>                                    | Do. . . .                                       | "          |



## PLANTS (continued).

| Popular Name.                         | Scientific Name.                   | Localities.                              | Duration.  |
|---------------------------------------|------------------------------------|--|------------|
| Floating Water-Plantain               | <i>Alisma natans</i>               | Lakes. Local . . .                       | Perennial  |
| Lesser do.                            | " <i>ranunculoides</i>             | Bogs and pools . . .                     | "          |
| Creeping do.                          | " <i>repens</i>                    | Pools in Wales . . .                     | "          |
| Arrow-head                            | <i>Sagittaria sagittifolia</i>     | Ditches and pools . . .                  | "          |
| Arrow-grass                           | <i>Triglochin palustre</i>         | Boggy meadows . . .                      | "          |
| Sea-side do.                          | " <i>maritimum</i>                 | { Salt marshes and }<br>muddy shores     | "          |
| Bull-rush, or Cat's-tail              | <i>Typha latifolia</i>             | Pools . . . . .                          | "          |
| Floating Bur-reed                     | <i>Sparganium natans</i>           | Lakes . . . . .                          | "          |
| Red Pond-weed                         | <i>Potamogeton rufescens</i>       | Pools . . . . .                          | "          |
| Shining do.                           | " <i>lucens</i>                    | Do. . . . .                              | "          |
| Lanceolate do.                        | " <i>lanceolatus</i>               | Lakes . . . . .                          | "          |
| Perfoliate do.                        | " <i>perfoliatus</i>               | Ponds . . . . .                          | "          |
| Long-leaved Pond-weed                 | " <i>longifolius</i>               | Lakes . . . . .                          | "          |
| Horned do.                            | <i>Zanichellia palustris</i>       | Ditches . . . . .                        | Annual.    |
| Grass-wrack                           | <i>Zostera marina</i>              | { Shallow bays and salt }<br>ditches     | Perennial  |
| Sweet Cyperus                         | <i>Cyperus longus</i>              | Bogs . . . . .                           | "          |
| Twig-rush                             | <i>Cladium mariscus</i>            | Do. . . . .                              | "          |
| Chocolate Spike-rush                  | <i>Eleocharis pauciflora</i>       | Moors . . . . .                          | "          |
| Least do.                             | " <i>acicularis</i>                | Wet places . . . . .                     | "          |
| Bull-rush, or Great Club-rush         | <i>Scirpus lacustris</i>           | Ditches and pools . . .                  | "          |
| Least Club-rush                       | " <i>setaceus</i>                  | Watery places . . . . .                  | "          |
| Triangular do.                        | " <i>triquetor</i>                 | River-banks . . . . .                    | "          |
| Blunt do.                             | " <i>carinatus</i>                 | Do. . . . .                              | "          |
| Sea do.                               | " <i>maritimus</i>                 | Sea-shores . . . . .                     | "          |
|                                       | <i>Elyna caricina</i>              | Moors . . . . .                          | "          |
| Straight-leaved Mountain Sedge        | <i>Carex aquatilis</i>             | Scotch marshes . . . . .                 | "          |
| Rock Sedge                            | " <i>rupestris</i>                 | Rocks in Scotland . . .                  | "          |
| Close-headed Mountain do.             | " <i>Vahlia</i>                    | Rocks . . . . .                          | "          |
| Short-spiked do. do.                  | " <i>speirostachya</i>             | Bogs . . . . .                           | "          |
| Slender Fox-tail Grass, or Black Bent | <i>Alopecurus agrestis</i>         | Waste ground . . . . .                   | Annual.    |
| Floating do. do.                      | " <i>geniculatus</i>               | Wet places . . . . .                     | Perennial  |
| Canary-grass                          | <i>Phalaris Canariensis</i>        | { Uncultivated places. }<br>Naturalised. | Annual.    |
| Nit-grass                             | <i>Gastrium lendigerum</i>         | Fields near the sea . . .                | "          |
| Annual Beard-grass                    | { <i>Polypogon monspeliensis</i> } | Way-sides . . . . .                      | "          |
| Bristle-leaved Bent-grass             | <i>Agrostis setacea</i>            | Turfy heaths . . . . .                   | Perennial  |
| Fine do.                              | " <i>vulgaris</i>                  | Pastures . . . . .                       | "          |
| Grey Hair-grass                       | <i>Aria Canescens</i>              | Sandy fields near sea . .                | "          |
| Purple Melic-grass                    | <i>Melica cærulea</i>              | Heaths . . . . .                         | "          |
| Crested Hair-grass                    | <i>Kœhleria cristata</i>           | Dry pastures . . . . .                   | "          |
| Reed Meadow-grass                     | <i>Poa aquatica</i>                | Ditches . . . . .                        | "          |
| Reflexed do.                          | " <i>distans</i>                   | Pastures . . . . .                       | "          |
| Sea do.                               | " <i>maritima</i>                  | Salt marshes . . . . .                   | "          |
| Procumbent do.                        | " <i>procumbens</i>                | Do. . . . .                              | Annual.    |
| Flat-stalked do.                      | " <i>compressa</i>                 | Dry places . . . . .                     | Perennial. |
| Alpine do.                            | " <i>alpina</i>                    | Mountains . . . . .                      | "          |
| Annual do.                            | " <i>annua</i>                     | Waste ground . . . . .                   | Annual.    |
| Wood do.                              | " <i>nemoralis</i>                 | Woods . . . . .                          | Perennial. |
| Sweet-grass                           | " <i>fluitans</i>                  | Ditches and pool margins .               | "          |
| Cock's-foot-grass                     | <i>Dactylis glomerata</i>          | Fields . . . . .                         | "          |
| Giant Fescue-grass                    | <i>Festuca gigantea</i>            | Shady places . . . . .                   | "          |
| Hairy Brome-grass                     | <i>Bromus asper</i>                | Woods . . . . .                          | Annual.    |
| Rye do.                               | " <i>secalinus</i>                 | Fields . . . . .                         | "          |
| Field do.                             | " <i>arvensis</i>                  | Sea-coast . . . . .                      | "          |
| Wood Barley                           | <i>Hordeum sylvaticum</i>          | Woods . . . . .                          | Perennial. |
| Rushy Wheat-grass                     | <i>Triticum junceum</i>            | Sand-dunes . . . . .                     | "          |
| Couch-grass, or Dog-grass             | " <i>repens</i>                    | A common weed . . . . .                  | "          |
| Hard-grass                            | <i>Lepturus incurvatus</i>         | Sea-coast . . . . .                      | Annual.    |
| Cord-grass                            | <i>Spartina stricta</i>            | Salt marshes . . . . .                   | Perennial. |



## PLANTS (continued).

| Popular Name.                                       | Scientific Name.   | Localities.  | Duration.  |
|---|--|--|------------|
| Many-spiked Cord-grass . . . . .                    | <i>Spartina alterniflora</i> . .                           | Salt marshes . . . .   | Perennial. |
| Dog's-tooth-grass . . . . .                         | <i>Cynodon dactylon</i> . .                                | Sandy shores . . . .   | "          |
| Hairy Finger-grass . . . . .                        | <i>Digitaria sanguinalis</i> . .                           | Fields. Rare . . . .   | Annual.    |
| Finger-grass . . . . .                              | " <i>humifusa</i> . .                                      | Do. . . . .  | "          |
| FERNS.  |  |  |            |
| Common Polypody . . . . .                           | <i>Polypodium vulgare</i> . .                              | { Mossy banks, damp<br>rocks, &c. . . . }                          | Perennial. |
| Welsh do. . . . .                                   | " <i>cambricum</i> . .                                     | Shady banks . . . .  | "          |
| Smooth Three-branched<br>do., or Oak-Fern . . . . . | " <i>Dryopteris</i> . .                                    | Damp places. Local. .  | "          |
| Alpine do. . . . .                                  | " <i>alpestre</i> . .                                      | Scotch mountains . .   | "          |
| Rock Brakes, or<br>Mountain Parsley . . . . .       | <i>Allosorus crispus</i> . .                               | { Stony hills. Rare and<br>local . . . . }                         | "          |
| Alpine Shield Fern,<br>or Holly Fern . . . . .      | <i>Polystichum Lonchitis</i> . .                           | { Mountain rocks, espe-<br>cially in Scotland<br>and Ireland . . } | "          |
| Prickly do. do. . . . .                             | " <i>aculeatum</i> . .                                     | Shady places . . . .   | "          |
| Marsh Buckler Fern . . . . .                        | <i>Lastrea palustris</i> . .                               | Marshes . . . . .  | "          |
| Male-fern. . . . .                                  | " <i>Filix-mas</i> . .                                     | Shady places . . . .   | "          |
| Crested Buckler Fern . . . . .                      | " <i>cristata</i> . .                                      | { Boggy heaths. Rare<br>and local . . }                            | "          |
| Broad do. do. . . . .                               | " <i>dilatata</i> . .                                      | Wet shady places . .   | "          |
| Triangular do. do.. . . .                           | " <i>æmula</i> . .   | { Damp woods and<br>shady banks. . }                               | "          |
| Lady-Fern . . . . .                                 | { <i>Asplenium</i> <i>Filix-</i><br><i>fœmina</i> . . }    | Wet shady places . .   | "          |
| Forked Spleenwort . . . . .                         | " <i>septentrionale</i> . .                                | Rocks. Rare . . . .  | "          |
| Alternate do. . . . .                               | " <i>alternifolium</i> . .                                 | { Shady rocks in Scot-<br>land and Lake Dis-<br>trict. Rare . . }  | "          |
| Rue-leaved do. . . . .                              | " <i>Ruta-muraria</i> . .                                  | Shady rocks . . . .  | "          |
| Green do. . . . .                                   | " <i>viride</i> . .  | { Damp mountain rocks<br>in Scotland and<br>Wales . . }            | "          |
| Maidenhair do. . . . .                              | " <i>Trichomanes</i> . .                                   | Shady rocks . . . .  | "          |
| Sea do. . . . .                                     | " <i>marinum</i> . .                                       | Rocks . . . . .  | "          |
| Smooth Rock do. . . . .                             | " <i>fontanum</i> . .                                      | { Mountain rocks. Very<br>scarce . . . . }                         | "          |
| Lanceolate do. . . . .                              | " <i>lanceolatum</i> . .                                   | Rocks. Local . . . .   | "          |
| Black Maidenhair do. . . . .                        | " <i>Adiantum-nigrum</i> . .                               | Shady places . . . .   | "          |
| Hart's-tongue. . . . .                              | { <i>Scolopendrium offi-</i><br><i>narum</i> . . }         | Damp do. do. and walls .   | "          |
| Scale Fern . . . . .                                | <i>Ceterach officinarum</i> . .                            | Limestone rocks . .  | "          |
| Bracken, or Brakes . . . . .                        | <i>Pteris aquilina</i> . .                                 | Heaths and woods . .   | "          |
| Maidenhair Fern . . . . .                           | { <i>Adiantum</i> <i>Capillus-</i><br><i>Veneris</i> . . } | Rocks. Local . . . .   | "          |
| Brittle Bladder Fern . . . . .                      | <i>Cystopteris fragilis</i> . .                            | Walls . . . . .  | "          |
| Alpine Woodsia . . . . .                            | <i>Woodsia hyperborea</i> . .                              | { Scotch mountain<br>rocks. Rare . . }                             | "          |
| Flowering Fern . . . . .                            | <i>Osmunda regalis</i> . .                                 | Shady bogs . . . .   | "          |
| Bristle Fern . . . . .                              | <i>Trichomanes brevisetum</i> . .                          | Damp rocks. Rare . .   | "          |
| Tunbridge Film Fern . . . . .                       | { <i>Hymenophyllum Tun-</i><br><i>bridgense</i> . . }      | Damp rocks . . . .   | "          |
| Wilson's do. . . . .                                | " <i>Wilsoni</i> . .                                       | Do. . . . .  | "          |
| Moonwort . . . . .                                  | <i>Botrychium lunaria</i> . .                              | Hill pastures. Local .   | "          |
| Adder's tongue . . . . .                            | <i>Ophioglossum vulgatum</i> . .                           | { Damp meadows and<br>pastures . . }                               | "          |



# SEPTEMBER.

## GENERAL HINTS.

PALINGS and tree-trunks as before.

On dull days, butterflies may be seen on the tree-trunks. As they press their wings together over the back they are not easily detected by an unpractised eye, inasmuch as they look very much like dead leaves, or scraps of thin bark.

However, by looking at the edge of the tree against the light their outline becomes clearly defined, and they may, as a rule, be pill-boxed as they sit.

This is a very good month for sweeping and caterpillar hunting at night. A lantern will, of course, be necessary in both cases; but in sweeping, or even shaking by night, it is better not to allow the light of the lantern to fall upon the leaves. Many caterpillars detest light, so that they hide themselves throughout the day, and if the hated light falls on them they go back to their concealment.

Caterpillars which are taken during this month, especially towards the end of it, will give very little trouble, as they are almost entirely full fed, and will change into the pupal state almost as soon as they are placed in the box.

Pupa-digging can be conducted with some success, but it is almost a pity to waste time in it when so much is to be done in other ways. I should recommend that it be abandoned for the present, and not be taken up again until the end of the month, unless the weather should be inclement and preclude other modes of search. The pupæ will not run away.

Clover and lucerne fields will still be productive in insects, and the collector must bear in mind the cautions of last month. Look out for the butterflies on the blossoms, which will now be in their prime.

As to ivy one caution is needed. It should never be shaken or beaten, as the blossoms fall off very easily, and they are far too valuable to be wasted.

Treacling will still be useful, but not if ivy be in the neighbourhood. Even the potent odour of coarse rum and coarser treacle cannot prevail against the ivy blossoms which have an almost unaccountable attraction for the lepidoptera, whether by day or night. Near my former house, in Kent, there was a paling nearly half a mile in length completely covered with ivy. It was a wonderful sight after dark, every bunch of blossom having three or four moths upon it, their eyes glowing like globes of fire in the light of the lantern.

Indeed, few people, except practical entomologists, ever see these marvellous eyes, which shine like those of a cat, except that the colour is golden instead of green. Sometimes, as a large moth is coming towards the night-hunter, the first intimation of its presence is given by the two fiery globes shining on him out of the darkness.

The ivy blossoms being so valuable, do not disturb them, but trust to the pill-box, and take the moths neatly without hurting the flowers.

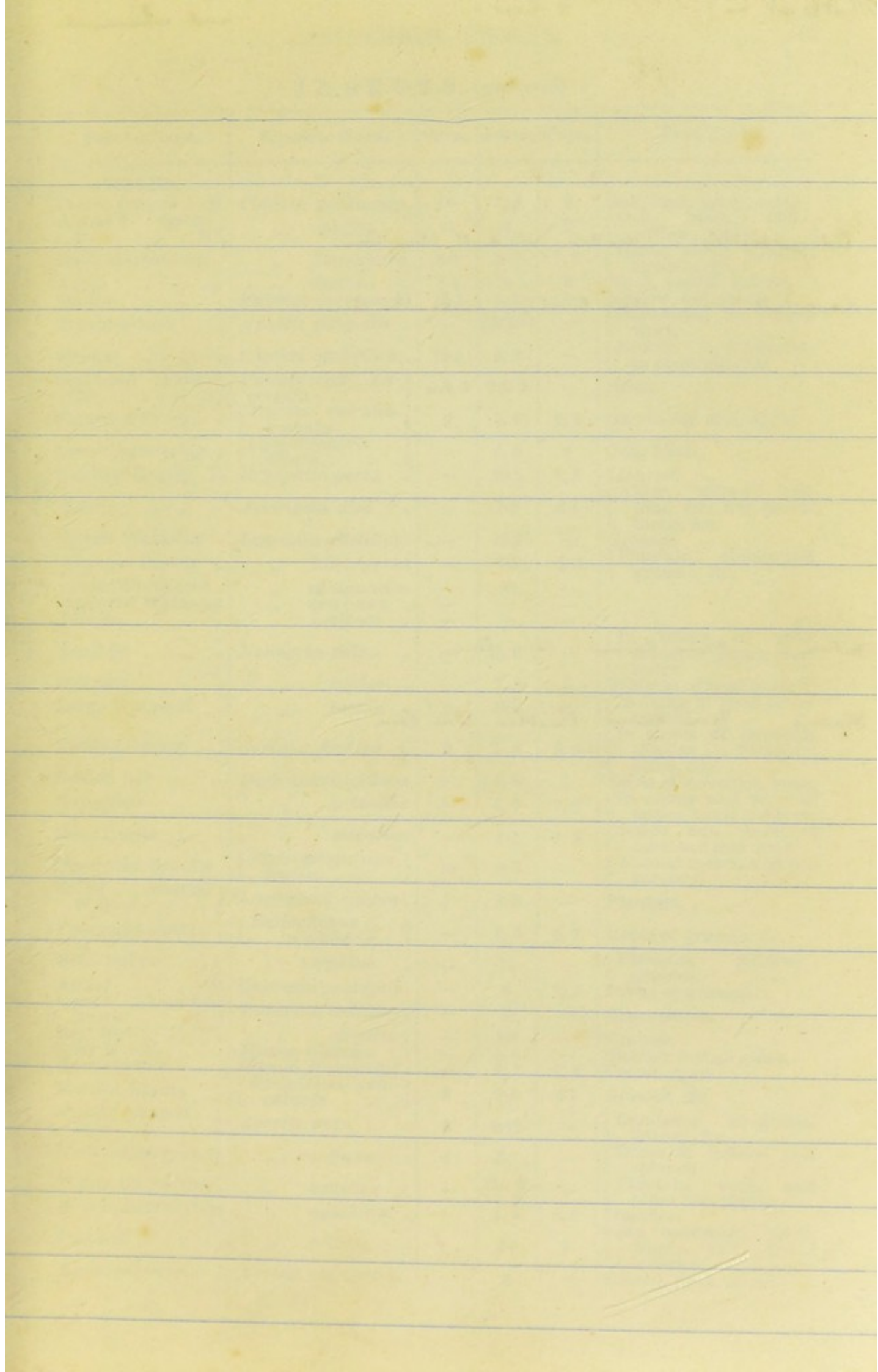
As the generality of moths which come to ivy at night are given to dropping when the light is turned on them, it will be as well to spread a sheet under the ivy before beginning to search the flowers, and always begin at the lowest blossoms.



## INSECTS.

| Popular Name.                          | Scientific Name.                                      | Ova.     | Larva.        | Pupa.   | Food-plants.  |
|--|---|----------|---------------|---------|---|
| <b>BUTTERFLIES.</b>                    |   |          |               |         |   |
| Small White . . .                      | <i>Pieris rapæ</i> . . .                              | 5 & 8    | 6 & 9         | 7 & 9-4 | { Turnip, cabbage, &c.,<br>and nasturtium.                          |
| Brimstone, or Sulphur . . . H }        | <i>Gonepteryx rhamni</i>                              | 4        | 6, 7          | 7       | Buckthorn.  |
| Clouded Yellow . . . H                 | <i>Colias Edusa</i> . . .                             | 9-5      | 6, 7          | 8       | { Lucerne, Dutch clover,<br>trefoils, &c.                           |
| Pale do. do. . . H                     | „ <i>Hyale</i> . . .                                  | 5        | 7             | 8       | Melilot, clover, lucerne.   |
| Queen of Spain }<br>Fritillary . . . } | <i>Argynnis Latona</i> . . .                          | 8, 9     | 8-5           | 6, 7    | { Dog and sweet violets,<br>wild heartsease, sain-<br>foin, borage. |
| Comma . . . H                          | <i>Vanessa C-album</i> . . .                          | 5 & 7    | 5 & 8         | 6 & 9   | { Nettle, elm, willow,<br>hop, sloe, & currant.                     |
| Small Tortoise-shell . . . H }         | „ <i>urticæ</i> . . .                                 | 4, 5 & 7 | 5, 6 & 8      | 6 & 8   | Nettle.   |
| Large do. . . H                        | „ <i>polychloros</i>                                  | 5 s 10   | s 10-5, 6     | 7       | { Elm, aspen, osier, wil-<br>low and fruit trees.                   |
| Camberwell Beauty . . . H }            | „ <i>Antiopa</i> . . .                                | 5        | 6, 7          | 7       | { Birch, poplar, willow,<br>and nettle.                             |
| Peacock . . . H                        | „ <i>Io</i> . . .                                     | 4-5      | 6, 7          | 7       | Nettle.   |
| Red Admiral . . . H                    | „ <i>Atalanta</i> . . .                               | 5        | 6, 7          | 7       | Do.   |
| Painted Lady . . . H                   | „ <i>cardui</i> . . .                                 | 6        | 6-9           | 7-9     | { Thistles, nettle, mal-<br>low, and scarlet bean.                  |
| Small Heath . . .                      | { <i>Cœnonympha</i><br><i>Pamphilus</i> . . . }       | 5        | 5, 6 & 8      | 4 & 7   | Grasses.  |
| Small Copper . . .                     | { <i>Polyommatus</i><br><i>Phlœas</i> . . . }         | 6 & 10   | 5-8 &<br>10-4 | 4 & 10  | Ragwort, dock, sorrel.  |
| Long-tailed Blue . . .                 | <i>Lycæna bætica</i> . . .                            | —        | 7-9           | —       | Bladder senna.  |
| Common do. . .                         | „ <i>Alexis</i> . . .                                 | 5 & 9    | 4 & 8         | 5 & 8   | Birdsfoot trefoil.  |
| <b>MOTHS.</b>                          |   |          |               |         |   |
| Convolvulus Hawk                       | <i>Sphinx convolvuli</i> . . .                        | —        | 7             | —       | { Small convolvulus and<br>balsam.                                  |
| Spotted Elephant }<br>do. . . . }      | <i>Deilephila Eu-<br/>phorbiæ</i> . . . }             | —        | 8, 9          | —       | { Cypress spurge and sea-<br>spurge.                                |
| Silver-striped do. . .                 | „ <i>lineata</i> . . .                                | —        | 6, 7          | —       | Bedstraws.  |
| Sharp-winged do. . .                   | <i>Chærocampa celerio</i>                             | —        | 8, 9          | —       | Do.   |
| Oleander do. . .                       | „ <i>nerii</i> . . .                                  | —        | 9             | —       | Oleander.   |
| Humming-bird }<br>do. . . . H }        | <i>Macroglossa stel-<br/>latarum</i> . . . }          | 5        | 8, 9          | —       | Hedge bedstraw.   |
| Crimson-speckled }<br>Footman . . . }  | <i>Deiopeia pulchella</i> . . .                       | —        | 7             | —       | { Field forget-me-not, or<br>scorpion-grass.                        |
| Vapourer . . .                         | <i>Orgyia antiqua</i> . . .                           | 9-7      | 7-9           | 8, 9    | { Willow, oak, rose, fruit<br>trees, &c.                            |
| Grey Eggar . . .                       | <i>Trichiura cratægi</i> . . .                        | 9-3      | 5, 6          | 7       | { Hawthorn, sloe, saw-<br>oak, birch, plum.                         |
| Brimstone . . .                        | <i>Rumia cratægata</i> . . .                          | 4 & 9    | 6 & 9-3       | —       | Hawthorn, sloe.   |
| Large Thorn . . .                      | <i>Ennomos alniaria</i> . . .                         | 9-5      | 7, 8          | 8       | { Alder, birch, beech,<br>sallow.                                   |
| Canary-shoul-<br>dered do. . . }       | „ <i>tiliaria</i> . . .                               | 9-5      | 6, 7          | 8       | Oak, birch, saw-<br>oak, alder.                                     |
| Dusky do. . .                          | „ <i>fuscantaria</i>                                  | 9-5      | 6, 7          | 8       | Ash, privet.  |
| September do. . .                      | „ <i>erosaria</i> . . .                               | 9-5      | 6             | 7       | Oak, birch, &c.   |
| Common do. . .                         | „ <i>angularia</i> . . .                              | 9-4      | 6-8           | 6, 7    | Oak, ash, birch, beech.   |
| Belted Beauty . . .                    | <i>Nyssia zonaria</i> . . .                           | —        | 5, 6          | 6-9     | Sea reed.   |
| Mullein Wave . . .                     | <i>Acidalia promutata</i>                             | —        | 7-5           | 5       | { Yarrow, mugwort,<br>creeping cinquefoil.                          |
| Lesser Cream do. . .                   | „ <i>immutata</i> . . .                               | —        | 8-5           | 5       | Knotgrass.  |
| Belle . . .                            | <i>Sterrhæa sacraria</i> . . .                        | 8        | 6 & 9         | —       | Dock, chamomile.  |
| Autumnal . . .                         | { <i>Oporabia fili-<br/>grammaria</i> . . . }         | 9-2      | 2-4           | —       | Sallow, bilberry.   |
| Pine Carpet . . .                      | <i>Thera firmata</i> . . .                            | —        | 4, 5          | —       | Larch and Scotch fir.   |
| Bedstraw Chalk do.                     | <i>Melanippe galiata</i>                              | —        | 7 & 9         | 8 & 9-4 | Smooth heath bedstraw.  |
| Gem . . . H                            | { <i>Campptogramma</i><br><i>fluviala</i> . . . }     | 7        | 8             | 9       | { Spotted persicaria,<br>groundsel.                                 |
| Many-lined . . .                       | { <i>Phibalapteryx</i><br><i>polygrammata</i> . . . } | —        | —             | —       |   |
| Silky Tissue . . . H                   | <i>Scotosia dubitata</i> . . .                        | 4        | 6             | 7       | Buckthorn.  |







What to get —

— how —

and where —

*Cidaria testata* — Heather. Windmill Wm. Corn.

*Lacertula* — Bear birches hunk Wm. Corn.

*Fulva* — Farm Ravine — Wm. Corn.

*Flavago* — Farm Ravine thistles — Wm. Corn.



## INSECTS (continued).

| Popular Name.                       | Scientific Name.                               | Ova.  | Larva.         | Pupa. | Food-plants.  |
|-------------------------------------|--|-------|----------------|-------|---|
| <b>MOTHS.</b>                       |  |       |                |       |   |
| Parrot Carpet . H                   | <i>Cidaria psittacata</i> .                    | —     | 7, 8           | 9     | Oak, lime, apple, rose.                                       |
| Autumn Green }<br>do. . . . H }     | " <i>miata</i> .                               | —     | 8              | 9     | { Oak, birch, alder,<br>willow, poplar.                       |
| Dark Marbled do. .                  | " <i>immanata</i>                              | 8-3   | 5-7            | 7, 8  | { Birch, alder, bilberry,<br>strawberry.                      |
| Agate . . . .                       | " <i>testata</i>                               | 8-4   | 5              | 6     | Birch, poplar, willow.  |
| Mallow . . . .                      | <i>Eubolia cervinaria</i>                      | 10-4  | 6, 7           | 8     | Mallow, hollyhock.  |
| Treble-barred . .                   | <i>Anaitis plagiata</i> .                      | —     | 7 & 10-4       | —     | { Perforated St. John's-<br>wort.                             |
| Streak . . . .                      | <i>Chesias spartiata</i> .                     | 10-4  | 5, 6           | —     | { Broom. S. a cannibal<br>in confinement.                     |
| Scalloped Hook-<br>tip . . . . S }  | <i>Platypteryx La-</i><br><i>certula</i> .     | 6 & 9 | 6 & 9          | —     | Birch.  |
| Figure of 8 . . .                   | { <i>Diloba cæruleo-</i><br><i>cephala</i> . } | 9     | 5, 6           | 7, 8  | Hawthorn, sloe, apple.  |
| Lesser Lutestring .                 | { <i>Cymatophora</i><br><i>diluta</i> . }      | —     | 5, 6           | 7     | Oak, birch.   |
| Marbled Beauty B                    | <i>Bryophila perla</i> .                       | —     | 10-5           | 5, 6  | Lichens.  |
| Alder . . . .                       | <i>Acronycta alni</i> .                        | —     | 7-9            | 8-4   | { Alder, willow, oak,<br>lime, elm, nut, beech,<br>birch, &c. |
| Yellow Wainscot .                   | <i>Leucania vitellina</i> .                    | —     | 10-2           | —     | Grasses.  |
| Ochreous Brown .                    | " <i>lithargyria</i>                           | —     | 1-5            | 5, 6  | { Plantain, chickweed,<br>grasses, &c.                        |
| Lunar White-spot .                  | " <i>albipuncta</i> .                          | —     | —              | —     |   |
| Peppered Wainscot                   | " <i>extranea</i> .                            | —     | —              | —     |   |
| Pure do. . . .                      | " <i>L-album</i> .                             | —     | —              | —     |   |
| Small do. . . .                     | <i>Nonagria fulva</i> .                        | —     | 5, 6           | —     | { In stems of reed,<br>meadow-grass, and<br>sedge.            |
| Bullrush . . . .                    | " <i>typhæ</i> .                               | —     | 7, 8           | 8     | In stems of reed mace.  |
| Large Wainscot .                    | " <i>lutosa</i> .                              | 9     | 10-6           | 7     | { In stems of reed below<br>ground.                           |
| Frosted Orange .                    | <i>Gortyna flavago</i> .                       | 9     | 7, 8           | 8, 9  | { In stems of burdock,<br>thistles, foxglove,<br>alder, &c.   |
| Golden Ear . . .                    | <i>Hydræcia nictitans</i>                      | —     | 5, 6           | 7     | Roots of coltsfoot, rush.                                     |
| Butter-bur . . .                    | " <i>petasitis</i>                             | —     | 6, 7           | 7, 8  | { In stems and roots of<br>butter-bur & burdock.              |
| Rosy Rustic . . .                   | " <i>micacea</i> .                             | —     | 5-7            | 7, 8  | { Sedge and roots of<br>horsetail and dock.                   |
| Feathered Brindle .                 | { <i>Aporophylla aus-</i><br><i>tralis</i> . } | 10    | 10-4           | —     | { Annual meadow-grass,<br>succory.                            |
| Small Mottled<br>Willow . . . . }   | <i>Laphygma exigua</i> .                       | 7     | 8-9            | —     | Plantain.   |
| Feathered Gothic .                  | { <i>Heliophobus</i><br><i>popularis</i> }     | —     | 4, 5           | 6, 7  | Roots of grasses.   |
| Beautiful do. . .                   | " <i>hispidus</i> .                            | —     | 11             | —     | { Plantain, lettuce,<br>grasses.                              |
| Antler . . . . B                    | <i>Charæas graminis</i> .                      | —     | 6              | 7, 8  | Roots of grasses.   |
| Lesser Flounced<br>Rustic . . . . } | <i>Luperina testacea</i> .                     | —     | 3              | —     | Grass-stems.  |
| Turf Rustic . . .                   | " <i>cespitis</i> .                            | —     | 4-6            | —     | Grasses.  |
| Rosy Minor . . .                    | <i>Miana literosa</i> .                        | —     | 5, 6           | —     | Slender foxtail grass.  |
| Haworth's do. . .                   | <i>Celæna Haworthii</i> .                      | —     | 6, 7           | 7, 8  | Cotton grass.   |
| Mottled Beauty .                    | { <i>Caradrina cubi-</i><br><i>cularis</i> . } | 8     | 9-4            | 5-7   | Grasses, &c.  |
| Shuttle-shaped<br>Dart . . . . }    | <i>Agrotis puta</i> .                          | 8     | 9-12           | —     | { Dandelion, knotgrass,<br>lettuce, &c.                       |
| Dark Sword-grass H                  | " <i>suffusa</i> .                             | 4     | 5-7            | —     | { Roots of lettuce and<br>spinach.                            |
| Pearly Underwing .                  | " <i>saucia</i> .                              | —     | 11-1 &<br>7, 8 | —     | { Plantain, dock, and<br>other low plants.                    |
| White-lettered Dart                 | " <i>agathina</i> .                            | —     | 4, 5           | 6, 7  | Heather.  |
| Portland . . . .                    | " <i>præcox</i> .                              | —     | 5-7            | 7     | { Sea sandwort, chick-<br>weed, and dwarf<br>willows.         |
| Autumnal Rustic .                   | <i>Noctua glaucosa</i> .                       | —     | 6              | —     | Broom, dock, sorrel.  |

Xanthia Aurago



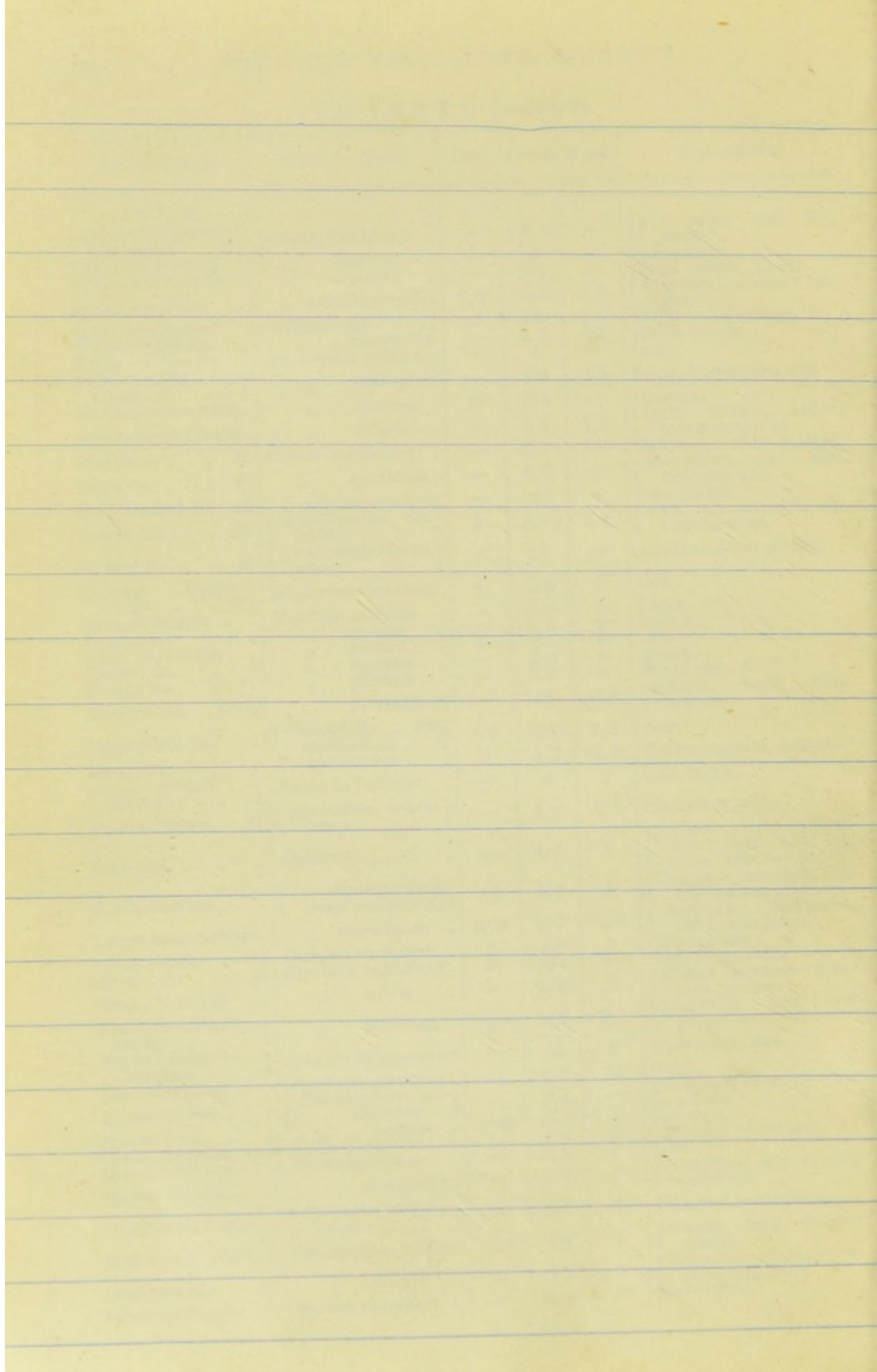
## INSECTS (continued).

| Popular Name.                             | Scientific Name.  | Ova.  | Larva. | Pupa. | Food-plants.  |
|---|---|-------|--------|-------|---|
| MOTHS.                                    |   |       |        |       |   |
| Setaceous Hebrew }<br>Character . . . B } | <i>Noctua C-nigrum</i> .                                  | —     | 4 & 10 | —     | { Pea-stems and low plants.                               |
| Barred Chestnut .                         | " <i>Dahlia</i> .   | —     | 9-5    | —     | Low plants.   |
| Neglected Rustic .                        | " <i>neglecta</i> .                                       | —     | 10-5   | —     | Birch, willow, heath.                                     |
| Square-spot do. .                         | " <i>xanthographa</i>                                     | 8, 9  | 10-5   | 6, 7  | { Plantain and many low plants.                           |
| Red-line Quaker .                         | <i>Orthosia lota</i> .                                    | 10    | 4-6    | 7, 8  | Willow and willow.  |
| Yellow Line do. .                         | " <i>macilenta</i> .                                      | —     | 4, 5   | 6-8   | Birch, beech.   |
| Flounced Rustic .                         | <i>Anchocelis rufina</i> .                                | —     | 5      | —     | Oak.  |
| Pale-headed }<br>Chestnut . }             | " <i>pistacina</i>  | —     | 4-6    | 6-8   | Dock, buttercups, &c.                                     |
| Lunar Under-wing.                         | " <i>lunosa</i> .   | 10    | 10-4   | —     | Grasses.  |
| Brown-spot Pinion.                        | " <i>litura</i> .   | —     | 5, 6   | 7, 8  | { Oak, willow, alder, meadow-sweet.                       |
| Chestnut . . . H                          | <i>Cerastis vaccinii</i> .                                | —     | 6, 7   | —     | Oak, elm, willow, willow.                                 |
| Dark do. . . . H                          | " <i>spadicea</i> .                                       | —     | 5, 6   | —     | { Hawthorn, sloe, and honeysuckle.                        |
| Red-headed do. H                          | " <i>erythrocephala</i>                                   | —     | 5      | —     | Low plants.   |
| Large do. . . . H                         | { <i>Scopelosoma sa-</i><br><i>tellitia</i> . }           | 3     | 5, 6   | 7, 8  | { Oak. A cannibal in confinement.                         |
| Dotted do. . . . H                        | { <i>Dasycampa rubi-</i><br><i>ginea</i> . }              | 3     | 5-7    | —     | Apple and low plants.                                     |
| Orange Upper- }<br>wing . . . . H }       | <i>Hoporina croceago</i>                                  | 4     | 5, 6   | 7     | Oak.  |
| Orange Sallow .                           | <i>Xanthia citrigo</i> .                                  | —     | 5, 6   | 8     | Lime.   |
| Lemon do. . . .                           | " <i>cerago</i> .   | —     | 4, 5   | 8     | Sallow.   |
| Pink Barred do. .                         | " <i>silago</i> .   | —     | 4-6    | 8     | Do.   |
| Barred do. . . .                          | " <i>aurago</i> .   | —     | 5, 6   | 8     | Beech.  |
| Ruddy do. . . .                           | " <i>gilvago</i> .  | —     | 5, 6   | 8     | Wych elm.   |
| Mottled do. . . .                         | " <i>ferruginea</i>                                       | —     | 4-6    | 7, 8  | { Sallow, wych elm, aspen.                                |
| Centre-bar do. .                          | { <i>Cirrhædia xe-</i><br><i>rampelina</i> . }            | 8, 9  | 10-7   | 7, 8  | Ash.  |
| Small Olive . .                           | <i>Tethea retusa</i> .                                    | 9     | 5, 6   | 6, 7  | Poplar, willow, willow.                                   |
| Angle-striped }<br>Sallow . . . }         | <i>Euperia fulvago</i> .                                  | —     | 6      | 7     | Oak, birch.   |
| Dusky Sallow . B                          | { <i>Eremobia ochro-</i><br><i>leuca</i> . }              | —     | 5, 6   | 6, 7  | Cocksfoot grass.  |
| July Chi . . . .                          | <i>Polia chi</i> . . . .                                  | —     | 4, 5   | 6     | { Sallow, hawthorn, hawkweed, dock, lettuce, sow-thistle. |
| Black-banded . .                          | { " <i>xanthomista</i> }<br>{ " <i>(nigro-cincta N)</i> } | —     | 6, 7   | 7     | { Campion, harebell, violet, and sea-plantain.            |
| Large Ranunculus .                        | " <i>flavicincta</i> .                                    | 9, 10 | 6, 7   | 7, 8  | { Groundsel, chickweed, mint, and plum.                   |
| Olive Rustic . . H                        | <i>Dasypolia templi</i> .                                 | 3     | 4-7    | 8     | Cow-parsley.  |
| Smoky do. . . . B                         | <i>Epunda lutulenta</i> .                                 | 10    | 10-4   | —     | Corn Gromwell.  |
| Dusky Nutmeg .                            | " <i>nigra</i> .  | —     | 5, 6   | 7     | { Hedge bedstraw, plantain, grasses.                      |
| Feathered Ranunculus }                    | " <i>lichenæa</i> .                                       | 10    | 11-7   | 6, 7  | { Ragwort, and low plants on coast.                       |
| Green - Brindled }<br>Crescent . . . }    | <i>Miselia oxyacanthæ</i>                                 | —     | 5-7    | 8     | Hawthorn, sloe.   |
| Marvel-de-jour .                          | <i>Agriopsis aprilina</i> .                               | —     | 6, 7   | 7-9   | Oak.  |
| Angle-shades . .                          | { <i>Phlogophora me-</i><br><i>ticulosa</i> }             | —     | 11-4   | —     | { Broom and many low plants.                              |
| Scarce do. . . .                          | " <i>empyrea</i> .  | 9, 10 | 11-5   | —     | Pilewort.   |
| Great Brocade .                           | <i>Aplecta occulta</i> .                                  | —     | 4, 5   | 6     | Plantain, primrose.                                       |
| Brindled Green .                          | <i>Hadena protea</i>                                      | —     | 5, 6   | 7     | Oak.  |
| Scarce Shears . .                         | " <i>peregrina</i> .                                      | —     | 5-7    | 7     | { Goosefoot and prickly saltwort.                         |
| Shepherd's Purse .                        | { <i>Cloantha solida-</i><br><i>ginis</i> . }             | —     | 5, 6   | 7     | Bilberry, hawthorn.                                       |
| Red Sword-grass H                         | <i>Calocampa vetusta</i>                                  | 3, 4  | 4-6    | 8     | { Poplar, and various plants.                             |
| Common do. . . H                          | " <i>exoleta</i> .  | 4     | 4-7    | 8     | { Scabious, rest-harrow campion, dock.                    |
| Obscure Dagger .                          | <i>Xylina zinckenii</i> .                                 | —     | 5, 6   | —     | Sweet gale.   |



PLANTS







## INSECTS (continued).

| Popular Name.            | Scientific Name.                             | Ova. | Larva. | Pupa. | Food-plants.                             |
|--------------------------|--|------|--------|-------|--|
| MOTHS.                   |  |      |        |       |  |
| Tawny Pinion H           | <i>Xylina conformis</i> .                    | 3    | 5, 6   | 7, 8  | Birch and alder.                         |
| Grey Shoulder-knot . . H | " <i>rhizolitha</i> .                        | —    | 5-7    | 7, 8  | Oak.                                     |
| Dark Pinion . . H        | " <i>semibrunnea</i> .                       | —    | 7      | 8, 9  | Ash and willow.                          |
| Pale do. . . H           | " <i>petrificata</i> .                       | 5    | 5-7    | 8, 9  | Oak, birch, and lime.                    |
| Bordered Sallow .        | { <i>Heliothis mar-</i><br><i>ginata</i> . } | —    | 7, 8   | 9-6   | { Rest-harrow, henbane,<br>sea sandwort. |
| Bordered Straw .         | " <i>peltigera</i> .                         | —    | 7, 8   | —     | Rest-harrow, henbane.                    |
| Scarce do. do. .         | " <i>armigera</i> .                          | —    | 6, 7   | 7, 8  | Wild mignonette.                         |
| Four Spot. . .           | <i>Acontia luctuosa</i> .                    | 6    | 6-8    | —     | Small convolvulus.                       |
| Silver Y . . .           | <i>Plusia gamma</i> .                        | —    | 4-9    | —     | { Nettle, hop, and low<br>plants.        |
| Herald . . . H           | <i>Gonoptera libatrix</i>                    | —    | 6, 7   | 7, 8  | Poplar, willow, willow.                  |
| Copper Underwing         | { <i>Amphipyra py-</i><br><i>ramidea</i> . } | —    | 5, 6   | 7, 8  | Oak, elm, willow, birch.                 |
| Mouse . . . .            | " <i>tragopogonis</i>                        | —    | 5, 6   | 7, 8  | { Hawthorn and low<br>plants.            |
| Anomalous . .            | <i>Stilbia anomala</i> .                     | —    | 1, 2   | —     | Grasses.                                 |
| Clifden Nonpareil .      | <i>Catocala fraxini</i> .                    | —    | 7      | 8     | Ash, poplar,                             |
| Red Underwing .          | " <i>nupta</i> .                             | —    | 5-7    | 7, 8  | Willow, poplar.                          |

## PLANTS.

| Popular Name.                           | Scientific Name.               | Localities.   | Duration.  |
|---|--------------------------------|---|------------|
| Pheasant's Eye . .                      | <i>Adonis autumnalis</i> .     | Cornfields .  | Annual.    |
| Pale Hairy Buttercup .                  | <i>Ranunculus hirsutus</i> .   | { Meadows and waste<br>ground .                     | "          |
| Shepherd's Purse . .                    | <i>Capsella Bursa-pastoris</i> | A common weed . .                                   | "          |
| Purple Sea Rocket                       | <i>Cakile maritima</i> .       | Sandy sea-shores . .                                | "          |
| Wart Cress, or Swine's<br>Cress . . . . | <i>Senebiera coronopus</i> .   | A common weed . .                                   | "          |
| Lesser do. do. . .                      | " <i>didyma</i> .              | Do. . . . .   | "          |
| Creeping Yellow Cress.                  | <i>Nasturtium sylvestre</i> .  | Watery places . . .                                 | Perennial. |
| Annual do. do. . .                      | " <i>terrestre</i> .           | Do. . . . .   | Annual.    |
| Wall Rocket . . . .                     | <i>Diploaxis tenuifolia</i> .  | Walls, quarries, &c. .                              | Perennial. |
| Pansy, or Heartsease .                  | <i>Viola tricolor</i> .        | Cultivated fields . .                               | Annual.    |
| Grass of Parnassus                      | <i>Parnassia palustris</i> .   | Bogs . . . . .                                      | Perennial. |
| Six-stamened Water-<br>wort . . . . .   | <i>Elatine hexandra</i> .      | { Wet sandy places and<br>shallow water . }         | Annual.    |
| Eight-stamened do. .                    | " <i>Hydropiper</i> .          | Do. Rare . . . . .                                  | "          |
| Soapwort . . . . .                      | <i>Saponaria officinalis</i>   | Cultivated ground . .                               | Perennial. |
| Sea Campion . . . .                     | <i>Silene maritima</i> .       | { Sea-shore and moun-<br>tain streams . }           | "          |
| Spurrey . . . . .                       | <i>Spergula arvensis</i> .     | Cornfields . . . . .                                | Annual.    |
| Chickweed . . . . .                     | <i>Stellaria media</i> .       | A common weed . . .                                 | "          |
| Fringed Sandwort.                       | <i>Arenaria ciliata</i> .      | { Limestone mountains<br>in Ireland. Very<br>rare . | Perennial. |
| Sea do. . . . .                         | " <i>marina</i> .              | Sandy sea-shores . .                                | Annual.    |
| Narrow-leaved Mouse-<br>ear . . . . .   | <i>Cerastium viscosum</i> .    | Fields and roadsides .                              | Perennial. |
| Broad-leaved Moun-<br>tain Chickweed .  | " <i>latifolium</i> .          | Mountains . . . . .                                 | "          |
| Dwarf Mallow . . . .                    | <i>Malva rotundifolia</i> .    | { Roadsides and waste<br>places . . . . . }         | Annual.    |
| Tree do. . . . .                        | <i>Lavatera arborea</i> .      | { Rocks and cliffs on<br>sea-coasts. Rare . }       | Biennial.  |
| Marsh do. . . . .                       | <i>Althæa officinalis</i> .    | Marshes near sea . .                                | Perennial  |
| Large-flowered St.<br>John's Wort . . . | <i>Hypericum calycinum</i> .   | Bushy places . . . .                                | "          |
| Bearded do. . . . .                     | " <i>barbatum</i> .            | { Perthshire. Doubtful<br>native . . . . . }        | "          |



## PLANTS (continued).

| Popular Name.                                  | Scientific Name.   | Localities.  | Duration.  |
|--|--|--|------------|
| Herb Robert . . . . .                          | <i>Geranium Robertianum</i>                              | Road-sides and hedges . . . . .                      | Annual.    |
| Shining Crane's-bill . . . . .                 | " <i>lucidum</i> . . . . .                               | Walls and stony places . . . . .                     | "          |
| Small-flowered do. . . . .                     | " <i>pusillum</i> . . . . .                              | Fields and waste places . . . . .                    | "          |
| Stork's-Bill . . . . .                         | <i>Erodium cicutarium</i> . . . . .                      | Do. . . . .  | "          |
| Sea do. . . . .                                | " <i>maritimum</i> . . . . .                             | { Sandy sea-shores, and<br>at Dartmoor. Scarce }     | Perennial. |
| Yellow Wood Sorrel . . . . .                   | <i>Oxalis corniculata</i> . . . . .                      | { Damp places in West<br>of England. Rare }          | Annual.    |
| Dwarf Furze . . . . .                          | <i>Ulex nanus</i> . . . . .                              | Heaths . . . . .                                     | Shrub.     |
| Hairy Greenweed . . . . .                      | <i>Genista pilosa</i> . . . . .                          | Heathy places . . . . .                              | "          |
| Rest Harrow . . . . .                          | <i>Ononis spinosa</i> . . . . .                          | { Heaths and dry com-<br>mons . . . . . }            | Perennial. |
| White or Dutch Clover,<br>or Trefoil . . . . . | <i>Trifolium repens</i> . . . . .                        | Meadows . . . . .                                    | "          |
| Purple do. . . . .                             | " <i>pratense</i> . . . . .                              | Do. . . . .  | "          |
| Hare's-foot Trefoil . . . . .                  | " <i>arvense</i> . . . . .                               | { Sandy places and dry<br>fields . . . . . }         | Annual.    |
| Dropwort . . . . .                             | <i>Spiraea Filipendula</i> . . . . .                     | Dry pastures . . . . .                               | Perennial. |
| White-rock Cinquefoil . . . . .                | <i>Potentilla alba</i> . . . . .                         | Mountains . . . . .                                  | "          |
| Burnet . . . . .                               | <i>Sanguisorba officinalis</i> . . . . .                 | Damp meadows . . . . .                               | "          |
| Evening Primrose . . . . .                     | <i>Oenothera biennis</i> . . . . .                       | Waste ground . . . . .                               | Biennial.  |
| Strapwort . . . . .                            | <i>Corrigiola littoralis</i> . . . . .                   | Sandy wastes. Rare . . . . .                         | Annual.    |
| Rupture-wort . . . . .                         | <i>Herniaria glabra</i> . . . . .                        | Sandy places . . . . .                               | Perennial. |
| Yellow Mountain<br>Saxifrage . . . . .         | <i>Saxifraga aizoides</i> . . . . .                      | { Boggy places on<br>mountains . . . . . }           | "          |
| Alpine Brook do. . . . .                       | " <i>rivularis</i> . . . . .                             | Damp rocks . . . . .                                 | "          |
| Sea Hog's Fennel . . . . .                     | <i>Peucedanum officinale</i> . . . . .                   | Salt marshes. Rare . . . . .                         | "          |
| Smooth Heath Bed-<br>straw . . . . .           | <i>Galium saxatile</i> . . . . .                         | Heaths . . . . .                                     | "          |
| Small Teazle . . . . .                         | <i>Dipsacus pilosus</i> . . . . .                        | Damp shady places . . . . .                          | Biennial.  |
| Devil's-bit Scabious . . . . .                 | <i>Scabiosa succisa</i> . . . . .                        | Heaths and pastures . . . . .                        | Perennial. |
| Sow Thistle . . . . .                          | <i>Sonchus oleraceus</i> . . . . .                       | A common weed . . . . .                              | Annual.    |
| Hawk-weed Wall Let-<br>tuce . . . . .          | <i>Prenanthes hieracifolia</i> . . . . .                 | Near Forfar . . . . .                                | "          |
| Dandelion . . . . .                            | <i>Leontodon Taraxacum</i> . . . . .                     | A common weed . . . . .                              | Perennial. |
| Autumnal Hawk-bit . . . . .                    | <i>Apargia autumnalis</i> . . . . .                      | Meadows . . . . .                                    | "          |
| Shrubby Hawkweed . . . . .                     | <i>Hieracium sabaudum</i> . . . . .                      | Woods . . . . .                                      | "          |
| Narrow-leaved do. . . . .                      | " <i>umbellatum</i> . . . . .                            | Dry woods . . . . .                                  | "          |
| Smooth Hawk's Beard . . . . .                  | <i>Crepis tectorum</i> . . . . .                         | Walls and dry places . . . . .                       | Annual.    |
| Long-rooted Cat's Ear . . . . .                | <i>Hypochaeris radicata</i> . . . . .                    | Meadows . . . . .                                    | Perennial. |
| Chicory, or Succory . . . . .                  | <i>Cichorium Intybus</i> . . . . .                       | { Chalky and dry fields<br>and way-sides . . . . . } | "          |
| Saw-wort . . . . .                             | <i>Serratula tinctoria</i> . . . . .                     | Woods . . . . .                                      | "          |
| Nodding Bur Marigold . . . . .                 | <i>Bidens cernua</i> . . . . .                           | Ditches . . . . .                                    | Annual.    |
| Common do. . . . .                             | " <i>tripartita</i> . . . . .                            | Do. . . . .  | "          |
| Goldilocks . . . . .                           | <i>Chrysocoma Linosyris</i> . . . . .                    | Cliffs on south coast . . . . .                      | Perennial. |
| Cotton-weed . . . . .                          | <i>Diots maritima</i> . . . . .                          | Sandy shores . . . . .                               | "          |
| Sea Wormwood . . . . .                         | <i>Artemisia maritima</i> . . . . .                      | Sea-shore . . . . .                                  | "          |
| Marsh Cudweed . . . . .                        | <i>Gnaphalium uliginosum</i> . . . . .                   | Watery places . . . . .                              | Annual.    |
| Spikenard . . . . .                            | <i>Conyza squarrosa</i> . . . . .                        | Chalky fields . . . . .                              | Biennial.  |
| Canada Flea-bane . . . . .                     | <i>Erigeron Canadense</i> . . . . .                      | Waste ground . . . . .                               | Annual.    |
| Groundsel . . . . .                            | <i>Senecio vulgaris</i> . . . . .                        | A common weed . . . . .                              | "          |
| Marsh Ragwort . . . . .                        | " <i>aquaticus</i> . . . . .                             | Wet places . . . . .                                 | Perennial. |
| Sea Starwort, or Sea<br>Aster . . . . .        | <i>Aster tripolium</i> . . . . .                         | { Muddy sea-shores and<br>salt-marshes . . . . . }   | "          |
| Golden-rod . . . . .                           | <i>Solidago virgaurea</i> . . . . .                      | Woods and heaths . . . . .                           | "          |
| Flea-bane . . . . .                            | <i>Pulicaria dysenterica</i> . . . . .                   | Ditches . . . . .                                    | "          |
| Small do. . . . .                              | " <i>vulgaris</i> . . . . .                              | Sandy heaths . . . . .                               | Annual.    |
| Common Leopard's-<br>bane . . . . .            | { <i>Doronicum Parda-</i><br><i>lianches</i> . . . . . } | Damp woods . . . . .                                 | Perennial. |
| Daisy . . . . .                                | <i>Bellis perennis</i> . . . . .                         | Pastures . . . . .                                   | "          |
| Corn Feverfew . . . . .                        | <i>Pyrethrum inodorum</i> . . . . .                      | Fields . . . . .                                     | Annual.    |
| Common Chamomile . . . . .                     | <i>Anthemis nobilis</i> . . . . .                        | Dry pastures . . . . .                               | Perennial. |
| Golden Milfoil . . . . .                       | <i>Achillea tomentosa</i> . . . . .                      | { Dry hill - pastures.<br>Scarce . . . . . }         | "          |
| Brown Knapweed . . . . .                       | <i>Centaurea Jacea</i> . . . . .                         | Pastures . . . . .                                   | "          |
| Black do. . . . .                              | " <i>nigra</i> . . . . .                                 | Pastures and way-sides . . . . .                     | "          |
| Star Thistle . . . . .                         | " <i>Calcitrapa</i> . . . . .                            | Waste places. Local . . . . .                        | Annual.    |
| Yellow do. . . . .                             | " <i>solstitialis</i> . . . . .                          | Waste places . . . . .                               | "          |



## PLANTS (continued).

| Popular Name.                       | Scientific Name.                  | Localities.  | Duration.  |
|-------------------------------------|-----------------------------------|--|------------|
| Burweed . . . . .                   | <i>Xanthium strumarium</i> .      | Waste places . . . . .                             | Annual.    |
| Blue-bell, or Hare-bell .           | <i>Campanula rotundifolia</i>     | Heaths . . . . .                                   | Perennial. |
| Acrid Lobelia . . . . .             | <i>Lobelia urens</i> . . . . .    | Devonshire heaths . . . . .                        |            |
| Cross-leaved Heath . . .            | <i>Erica Tetralix</i> . . . . .   | Heaths . . . . .                                   | Shrub.     |
| Common do. . . . .                  | " <i>cinerea</i> . . . . .        | Do. . . . .  | "          |
| Ling, or Heather . . . .            | <i>Calluna vulgaris</i> . . . .   | Heaths and moors . . . .                           | "          |
| St. Dabeoc's Heath . . .            | <i>Menziesia polifolia</i> . . .  | West of Ireland . . . . .                          | "          |
| Strawberry Tree . . . .             | <i>Arbutus unedo</i> . . . . .    | South of do. . . . .                               | Tree.      |
| Centaury . . . . .                  | <i>Erythraea centaurium</i> . .   | Dry pastures . . . . .                             | Annual.    |
| Autumn Gentian . . . .              | <i>Gentiana Amarella</i> . . . .  | Limestone pastures . . . .                         | "          |
| Field do. . . . .                   | " <i>campestris</i> . . . . .     | { Hill-pastures, espe- }<br>cially on chalk soil } | "          |
| Yellow-wort . . . . .               | <i>Chlora perfoliata</i> . . . .  | Chalky hills . . . . .                             | "          |
| Comfrey . . . . .                   | <i>Symphytum officinale</i> . .   | Watery places . . . . .                            | Perennial. |
| Thorn Apple . . . . .               | <i>Datura Stramonium</i> . . .    | { Waste ground. Not }<br>native . . . . . }        | Annual.    |
| Garden Nightshade . . .             | <i>Solanum nigrum</i> . . . . .   | A common weed . . . . .                            | "          |
| Branched Broom Rape . .             | <i>Orobanche ramosa</i> . . . .   | On hemp . . . . .                                  | Perennial. |
| Germander Chickweed . .             | <i>Veronica agrestis</i> . . . .  | A common weed . . . . .                            | Annual.    |
| Grey Speedwell . . . . .            | " <i>polita</i> . . . . .         | Do. . . . .  | "          |
|                                     | " <i>Buxbaumii</i> . . . . .      | Fields . . . . .                                   | "          |
| Red Eye-bright . . . . .            | <i>Bartsia Odontites</i> . . . .  | A common weed . . . . .                            | "          |
| Common do. . . . .                  | <i>Euphrasia officinalis</i> . .  | Dry pastures . . . . .                             | "          |
| Snapdragon . . . . .                | <i>Antirrhinum majus</i> . . . .  | Old walls. Not native . . .                        | Perennial. |
| Ivy-leaved do., or }<br>Toad-flax } | <i>Linaria Cymbalaria</i> . . .   | Do. do. . . . .                                    | "          |
| Fluellen, or Toad-flax . .          | " <i>spuria</i> . . . . .         | Dry fields . . . . .                               | Annual.    |
| Sharp-leaved do. . . . .            | " <i>elatine</i> . . . . .        | Do. . . . .  | "          |
| Creeping do. . . . .                | " <i>repens</i> . . . . .         | Rocks near sea . . . . .                           | Perennial. |
| Mudwort . . . . .                   | <i>Limosella aquatica</i> . . . . | Muddy places . . . . .                             | Annual.    |
| Cornish Moneywort . . .             | <i>Sibthorpia Europæa</i> . . . . | Damp places. Local . . . .                         | Perennial. |
| Dark Mullein . . . . .              | <i>Verbascum nigrum</i> . . . .   | Hedge banks . . . . .                              | "          |
| Moth do. . . . .                    | " <i>Blattaria</i> . . . . .      | Do. Rare . . . . .                                 | Annual.    |
| Gipsy-wort . . . . .                | <i>Lycopus Europæus</i> . . . .   | Ditches and pool-sides . . .                       | Perennial. |
| Wild Clary . . . . .                | <i>Salvia verbenaca</i> . . . .   | { Dry fields and hedge- }<br>banks . . . . . }     | "          |
| Horse Mint . . . . .                | <i>Mentha sylvestris</i> . . . .  | Damp ground . . . . .                              | "          |
| Round-leaved do. . . . .            | " <i>rotundifolia</i> . . . . .   | Do. . . . .  | "          |
| Spear do. . . . .                   | " <i>viridis</i> . . . . .        | Do. . . . .  | "          |
| Pepper do. . . . .                  | " <i>piperita</i> . . . . .       | Do. . . . .  | "          |
| Bergamot do. . . . .                | " <i>citrata</i> . . . . .        | Wet places. Rare . . . . .                         | "          |
| Water, or Hairy do. . . .           | " <i>hirsuta</i> . . . . .        | Wet places . . . . .                               | "          |
| Red do. . . . .                     | " <i>rubra</i> . . . . .          | Do. . . . .  | "          |
| Bushy Red do. . . . .               | " <i>gentilis</i> . . . . .       | Pools . . . . .                                    | "          |
| Corn do. . . . .                    | " <i>arvensis</i> . . . . .       | Cornfields . . . . .                               | "          |
| Penny-royal . . . . .               | " <i>Pulegium</i> . . . . .       | Wet places. Naturalised . .                        | "          |
| Wild Thyme . . . . .                | <i>Thymus Serpyllum</i> . . . .   | { Heaths and hedge- }<br>banks . . . . . }         | "          |
| Germander, or Wood }<br>Sage }      | <i>Teucrium Scorodonia</i> . . .  | Woods and commons . . . .                          | "          |
| Wall do. . . . .                    | " <i>Chamædryas</i> . . . . .     | Old walls. Naturalised . . .                       | "          |
| Red Hemp Nettle . . . .             | <i>Galeopsis Ladanum</i> . . . .  | Dry fields . . . . .                               | Annual.    |
| White Dead Nettle . . . .           | <i>Lamium album</i> . . . . .     | Hedges and waysides . . . .                        | Perennial. |
| Spotted do. . . . .                 | " <i>maculatum</i> . . . . .      | Hedge-banks. Rare . . . . .                        | "          |
| Red do. . . . .                     | " <i>purpureum</i> . . . . .      | A common weed . . . . .                            | Annual.    |
| Downy Woundwort . . . .             | <i>Stachys Germanica</i> . . . .  | Fields . . . . .                                   | Perennial. |
| Pale do. . . . .                    | " <i>annua</i> . . . . .          | Do. Rare . . . . .                                 | Annual.    |
| Cat Mint . . . . .                  | <i>Nepeta Cataria</i> . . . . .   | Hedge-banks . . . . .                              | Perennial. |
| Horehound . . . . .                 | <i>Marrubium vulgare</i> . . . .  | Waste places . . . . .                             | "          |
| Calamint . . . . .                  | <i>Calamintha officinalis</i> . . | Way-sides . . . . .                                | "          |
| Intermediate Bladder- }<br>wort }   | <i>Utricularia intermedia</i> . . | Water. Rare . . . . .                              | "          |
| Small do. . . . .                   | " <i>minor</i> . . . . .          | Pools on moors . . . . .                           | "          |
| Sow-bread . . . . .                 | <i>Cyclamen hederifolium</i> . .  | Woods. Local . . . . .                             | "          |
| Scarlet Pimpernel . . . .           | <i>Anagallis arvensis</i> . . . . | A common weed . . . . .                            | Annual.    |
| Beet . . . . .                      | <i>Beta maritima</i> . . . . .    | Muddy sea-coasts . . . . .                         | Perennial. |
| Upright Goosefoot . . . .           | <i>Chenopodium urbicum</i> . .    | { Dunghills and waste }<br>ground . . . . . }      | Annual.    |
| Clustered do. . . . .               | " <i>botryoides</i> . . . . .     | Sandy places. Rare . . . .                         | "          |



## PLANTS (continued).

| Popular Name,                                 | Scientific Name,                             | Localities,   | Duration.  |
|---|--|---|------------|
| Nettled-leaved do.                            | <i>Chenopodium murale</i>                    | Waste ground . . .  | Annual.    |
| White do.                                     | <i>album</i>                                 | A common weed . . .   | "          |
| Grass-leaved Orache                           | <i>Atriplex littoralis</i>                   | Salt marshes . . .  | "          |
| Marsh do.                                     | <i>pedunculata</i>                           | Marshes . . .   | "          |
| Triangular-leaved do.                         | <i>deltoidea</i>                             | Waste ground . . .  | "          |
| Perennial Knawel.                             | <i>Scleranthus perennis</i>                  | Sandy fields . . .  | Perennial. |
| Bistort, or Snakeweed                         | <i>Polygonum Bistorta</i>                    | Damp meadows . . .  | "          |
| Knot-grass . . .                              | <i>aviculare</i>                             | A common weed . . .   | Annual.    |
| Sea do. . . . .                               | <i>maritimum.</i>                            | Sandy shores . . .  | Perennial. |
| Buckwheat . . .                               | <i>Fagopyrum</i>                             | Fields. Naturalised   | Annual.    |
| Black Bindweed, or<br>Climbing Buck-<br>wheat | <i>Convolvulus</i>                           | A common weed . . .   | "          |
| Copse Buckwheat.                              | <i>dumetorum.</i>                            | Woods . . . . .   | "          |
| Spotted Persicaria                            | <i>Persicaria</i>                            | Damp ground . . .   | "          |
| Small Creeping do.                            | <i>minus</i>                                 | Wet places . . .  | "          |
| Biting do. . . .                              | <i>Hydropiper.</i>                           | Do. . . . .   | "          |
| Birthwort . . .                               | <i>Aristolochia Clematitis.</i>              | { Ruins and thickets.<br>Naturalised.                               | Perennial. |
| Purple Spurge . .                             | <i>Euphorbia Peplis</i>                      | Sandy shores . . .  | Annual.    |
| Broad-leaved do. .                            | <i>platyphylla.</i>                          | Fields . . . . .  | "          |
| Sea do. . . . .                               | <i>Paralias</i>                              | Sandy shores . . .  | Perennial. |
| Portland do. . .                              | <i>Portlandica</i>                           | South coast . . .   | "          |
| Petty do. . . . .                             | <i>Peplus</i>                                | A common weed . . .   | Annual.    |
| Spring Water Starwort                         | <i>Callitriche verna</i>                     | Pools . . . . .   | "          |
| Stalked do. do.                               | <i>pedunculata</i>                           | Do. . . . .   | "          |
| Autumnal do. do.                              | <i>autumnalis.</i>                           | Do. . . . .   | "          |
| Hornwort . . . .                              | { <i>Ceratophyllum sub-</i><br><i>mersum</i> | Do. . . . .   | Perennial. |
| Small Nettle . . .                            | <i>Urtica urens</i>                          | Waste ground . . .  | Annual.    |
| Pellitory . . . .                             | <i>Parietaria officinalis</i>                | Old walls . . . . .   | Perennial. |
| Water Thyme . . .                             | <i>Eudorea Canadensis</i>                    | Canals. . . . .   | "          |
| Lady's Tresses . .                            | <i>Neottia spiralis</i>                      | Chalk hills and pastures  | "          |
| Bog Orchis . . .                              | <i>Malaxis paludosa</i>                      | Peat-bogs . . . . .   | "          |
| Saffron Crocus . .                            | <i>Crocus sativus.</i>                       | { Saffron - Walden,<br>Essex. Naturalised }                         | "          |
| Naked-flowering do.                           | <i>nudiflorus</i>                            | Meadows . . . . .   | "          |
| Autumnal Squill . .                           | <i>Scilla autumnalis</i>                     | Dry pastures . . .  | "          |
| Meadow Saffron . .                            | <i>Colchicum autumnale</i>                   | Meadows . . . . .   | "          |
| Lesser Water-Plantain                         | <i>Alisma ranunculoides</i>                  | Bogs and pools . . .  | "          |
| Creeping do. . . .                            | <i>repens</i>                                | Pools in Wales. . .   | "          |
| Least Club-rush . .                           | <i>Scirpus setaceus</i>                      | Watery places . . .   | "          |
| Close-headed Moun-<br>tain Sedge . . .        | <i>Carex VahlII</i>                          | Rocks . . . . .   | "          |
| Slender Foxtail Grass,<br>or Black Bent . .   | <i>Alopecurus agrestis</i>                   | Waste ground . . .  | Annual.    |
| Reflexed Meadow-grass                         | <i>Poa distans</i>                           | Pastures . . . . .  | Perennial. |
| Sea do. . . . .                               | <i>maritima.</i>                             | Salt marshes . . .  | "          |
| Flat-stalked do. . .                          | <i>compressa</i>                             | Dry places . . . . .  | "          |
| Annual do. . . . .                            | <i>annua</i>                                 | Waste ground . . .  | Annual.    |
| Rye Brome-grass . .                           | <i>Bromus Secalinus</i>                      | Fields . . . . .  | "          |
| Couch-grass, or Dog-<br>grass . . . . .       | <i>Triticum repens</i>                       | A common weed . . .   | Perennial. |
| Hard-grass . . . .                            | <i>Lepturus incurvatus</i>                   | Sea-coast . . . . .   | Annual.    |
| Many-spiked Cord-grass                        | <i>Spartina alterniflora</i>                 | Salt marshes . . .  | Perennial. |
| FERNS.  |  |   |            |
| Common Polypody . .                           | <i>Polypodium vulgare</i>                    | { Mossy banks, damp<br>rocks, &c. . . . }                           | Perennial. |
| Welsh do. . . . .                             | <i>cambricum.</i>                            | Shady banks . . .   | "          |
| Smooth three-branched<br>do., or Oak-fern . . | <i>Dryopteris.</i>                           | Damp places . . .   | "          |
| Alpine do. . . . .                            | <i>alpestre</i>                              | Scotch mountains . .  | "          |
| Lady-fern . . . . .                           | <i>Asplenium Filix-femina</i>                | Wet shady places . .  | "          |
| Forked Spleenwort . .                         | <i>septentrionale</i>                        | Rocks. Rare . . .   | "          |
| Alternate do. . . .                           | <i>alternifolium</i>                         | { Shady rocks in Scot-<br>land and Lake Dis-<br>trict. Rare . . . } | "          |
| Rue-leaved do. . . .                          | <i>Ruta-muraria</i>                          | Shady rocks . . .   | "          |



## PLANTS (continued).

| Popular Name.          | Scientific Name.                                      | Localities.   | Duration.  |
|------------------------|---|---|------------|
| Green Spleenwort .     | <i>Asplenium viride</i> .                             | { Damp mountain rocks<br>in Scotland and<br>Wales . . . } | Perennial. |
| Maidenhair do. . .     | " <i>Trichomanes</i> .                                | Shady rocks . . .   | "          |
| Sea do. . . . .        | " <i>marinum</i> .                                    | Rocks . . . . .   | "          |
| Lanceolate do. . .     | " <i>lanceolatum</i> .                                | Do. Local . . . .   | "          |
| Black Maidenhair do. . | " <i>Adiantum-nigrum</i>                              | Shady places . . .  | "          |
| Scale Fern . . . .     | <i>Ceterach officinarum</i> .                         | Limestone rocks . .                                       | "          |
| Maidenhair Fern . .    | { <i>Adiantum Capillus-</i><br><i>Veneris</i> . . . } | Rocks. Local . . .  | "          |
| Alpine Woodsia . .     | <i>Woodsia hyperborea</i> .                           | { Scotch mountain<br>rocks. Rare . }                      | "          |



STATE OF NEW YORK

| No. | Name            | Residence |
|-----|-----------------|-----------|
| 1   | John Smith      | New York  |
| 2   | Jane Doe        | New York  |
| 3   | Robert Brown    | New York  |
| 4   | Mary White      | New York  |
| 5   | James Black     | New York  |
| 6   | Elizabeth Green | New York  |
| 7   | William Red     | New York  |
| 8   | Sarah Blue      | New York  |
| 9   | Thomas Yellow   | New York  |
| 10  | Anna Purple     | New York  |



# OCTOBER.

## GENERAL HINTS.

STILL keep on at palings and tree-trunks.

The former are always more-productive than the latter, and, indeed, I have often wondered how moths managed when there were no palings and they had nothing but rocks or tree-trunks for resting-places.

Caterpillars may yet be found at the beginning of the month, and can be taken either by sweeping or searching, as before. But their numbers will rapidly decrease, and, indeed, after the first week there is little use in spending time upon them. But, by way of recompense, the pupæ are now abundant, and this is by far the best month for pupa-digging.

It is true that the pupa might be left in the ground until the really cold weather, but then there are two reasons why we should dig every available spot without delay. In the first place we shall get the start of other pupa-diggers, who, by the way, increase in numbers yearly, and we shall also be able to leave our marks on the spot, which will be left to the discoverer by every pupa-digger with any sense of honour.

Again, the loose earth will be a great attraction for late-fed caterpillars, and it often happens that after a spot has been thoroughly ransacked in the autumn, it will be found to possess a new set of tenants by the winter.

Not only do we get the start of human pupa-diggers, but of smaller foes, the worst of which is the mole. If the track of a mole be seen near a tree, there is no chance of finding a pupa, for the mole is a keener pupa-hunter than the best entomologist can be, and not a single pupa will be found. The only plan is to dig up the whole of the ground afresh, and leave it for another time.

Ivy will still be in blossom, and as long as that is the case it is worth a visit, whether by day or night. Many of the Noctuæ will still be about, and may be attracted by treacle provided that no ivy be near.

## INSECTS.

| Popular Name.                 | Scientific Name.           | Ova.     | Larva.   | Pupa. | Food-plants.              |
|-------------------------------|----------------------------|----------|----------|-------|---------------------------|
| <b>BUTTERFLIES.</b>           |                            |          |          |       |                           |
| Brimstone, or Sulphur . . . H | <i>Gonepteryx rhamni</i>   | 4        | 6, 7     | 7     | Buckthorn.                |
| Clouded Yellow . . . H        | <i>Colias Edusa</i> . . .  | 9-5      | 6, 7     | 8     | { Lucerne, Dutch clover,  |
| Pale do. do. . . H            | „ <i>Hyale</i> . . .       | 5        | 7        | 8     | { trefoils, &c.           |
| Comma . . . H                 | <i>Vanessa C-album</i> . . | 5 & 7    | 5 & 8    | 6 & 9 | Melilot, clover, lucerne. |
| Small Tortoise-shell . . . H  | „ <i>urticae</i> . .       | 4, 5 & 7 | 5, 6 & 8 | 6 & 8 | { Nettle, elm, willow,    |
|                               |                            |          |          |       | { hop, sloe, and currant. |
|                               |                            |          |          |       | Nettle.                   |



## INSECTS (continued).

| Popular Name.                         | Scientific Name.                                 | Ova.    | Larva.      | Pupa.  | Food-plants.                                       |
|---------------------------------------|--|---------|-------------|--------|--|
| <b>BUTTERFLIES.</b>                   |  |         |             |        |  |
| Large Tortoise-shell . . . H          | <i>Vanessa polychloros</i>                       | 5, s 10 | s. 10-5 & 6 | 7      | { Elm, aspen, osier, wil-<br>low, and fruit trees. |
| Camberwell Beauty . . . H             | " <i>Antiopa</i> .                               | 5       | 6, 7        | 7      | { Birch, poplar, willow,<br>and nettle.            |
| Peacock . . . H                       | " <i>Io</i> .                                    | 4, 5    | 6, 7        | 7      | Nettle.  |
| Red Admiral . . . H                   | " <i>Atalanta</i> .                              | 5       | 6, 7        | 7      | Do.  |
| Painted Lady . . . H                  | " <i>cardui</i> .                                | 6       | 6-9         | 7-9    | { Thistles, nettle, mallow,<br>and scarlet bean.   |
| Small Copper . . . B                  | { <i>Polyommatus</i><br><i>Phlæas</i> . }        | 6 & 10  | 5-8 & 10-4  | 4 & 10 | Ragwort, dock, sorrel.                             |
| <b>MOTHS.</b>                         |  |         |             |        |  |
| Death's-head Hawk                     | <i>Acherontia Atropos</i>                        | —       | 9, 10       | 9-6    | Potato.  |
| Humming-bird do. . . . H              | { <i>Macroglossa stel-</i><br><i>latarum</i> . } | 5       | 8, 9        | —      | Hedge bedstraw.                                    |
| Vapourer . . . .                      | <i>Orgyia antiqua</i> .                          | 9-7     | 7-9         | 8, 9   | { Willow, oak, rose, fruit<br>trees, &c.           |
| Large Thorn . . . .                   | <i>Ennomos alniaria</i> .                        | 9-5     | 7, 8        | 8      | { Alder, birch, beech,<br>sallow.                  |
| Feathered do. . . .                   | <i>Himera pennaria</i> .                         | 10-4    | 5           | 8, 9   | Oak, hawthorn.                                     |
| Belted Beauty . . . H                 | <i>Nyssia zonaria</i> .                          | —       | 5, 6        | 6-9    | Sea-reed.  |
| Belle . . . .                         | <i>Sterrhia sacraria</i> .                       | 8       | 6 & 9       | —      | Dock, chamomile.                                   |
| Golden Umber . . .                    | { <i>Hibernia auran-</i><br><i>tiaria</i> . }    | 11-3    | 6, 7        | 7-9    | Oak, birch, hawthorn.                              |
| Mottled do. . . . E                   | " <i>defoliaria</i> .                            | 11-3    | 5           | 7-11   | { Oak, nut, sloe, haw-<br>thorn, elm, birch.       |
| Northern Winter }<br>Moth }           | <i>Cheimatobia boreata</i>                       | 11-3    | 6           | —      | Birch.   |
| November Moth . .                     | <i>Oporabia dilutata</i> .                       | 11-3    | 5, 6        | 7-10   | Oak.   |
| Juniper Carpet . .                    | <i>Thera juniperata</i> .                        | —       | 8, 9        | 9      | Juniper.   |
| Gem . . . .                           | { <i>Camptogramma</i><br><i>fluviata</i> }       | 7       | 8           | 9      | { Spotted persicaria,<br>groundsel.                |
| Silky Tissue . . . .                  | <i>Scotosia dubitata</i> .                       | 4       | 6           | 7      | Buckthorn.   |
| Parrot Carpet . . .                   | <i>Cidaria psittacata</i> .                      | —       | 7, 8        | 9      | Oak, lime, apple, rose.                            |
| Autumn Green do. .                    | " <i>miata</i> .                                 | —       | 8           | 9      | { Oak, birch, alder, wil-<br>low, poplar.          |
| Mallow . . . .                        | <i>Eubolia cervinaria</i>                        | 10-4    | 6, 7        | 8      | Mallow, hollyhock.                                 |
| Streak . . . .                        | <i>Chesias spartiata</i> .                       | 10-4    | 5, 6        | —      | { Broom. S. a cannibal<br>in confinement.          |
| Sprawler . . . .                      | <i>Petasia cassinea</i> .                        | 11-4    | 5, 6        | 7-10   | Oak.   |
| Plumed Prominent                      | { <i>Ptilophora plu-</i><br><i>migera</i> . }    | 11-4    | 5, 6        | —      | Maple, sycamore.                                   |
| Yellow Wainscot . .                   | <i>Leucania vitellina</i> .                      | —       | 10-2        | —      | Grasses.   |
| Ochreous Brown H                      | " <i>lithargyria</i>                             | —       | 1-5         | 5, 6   | { Plantain, chickweed,<br>grasses, &c.             |
| Pure Wainscot . . .                   | " <i>L-album</i> .                               | —       | —           | —      |  |
| Large do. . . .                       | <i>Nonagria lutosa</i> .                         | 9       | 10-6        | 7      | { In stems of reed below<br>ground.                |
| Rosy Rustic . . . .                   | <i>Hydræcia micacea</i> .                        | —       | 5-7         | 7, 8   | { Sedge, and roots of<br>horsetail and dock.       |
| Feathered Brindle .                   | { <i>Aporophyla aus-</i><br><i>tralis</i> . }    | 10      | 10-4        | —      | { Annual meadow-grass,<br>succory.                 |
| Small Mottled Wil- }<br>low . . . . } | <i>Laphygma exigua</i> .                         | 7       | 8, 9        | —      | Plantain.  |
| Mottled Beauty . .                    | { <i>Caradrina cubi-</i><br><i>cularis</i> . }   | 8       | 9-4         | 5-7    | Grasses, &c.                                       |
| Dark Sword-grass H                    | <i>Agrotis suffusa</i> .                         | 4       | 5-7         | —      | { Roots of lettuce and<br>spinach.                 |
| Pearly Under-wing                     | " <i>saucia</i> .                                | —       | 11-1 & 7, 8 | —      | { Plantain, dock, and<br>other low plants.         |
| Red Line Quaker . .                   | <i>Orthosia lota</i> .                           | 10      | 4-6         | 7, 8   | Willow and sawlow.                                 |
| Yellow Line do. . .                   | " <i>macilenta</i> .                             | —       | 4, 5        | 6-8    | Birch, beech.                                      |
| Flounced Rustic . .                   | <i>Anchocelis rufina</i> .                       | —       | 5           | —      | Oak.   |
| Pale-headed Chest- }<br>nut . . . . } | " <i>pistacina</i>                               | —       | 4-6         | 6-8    | Dock, buttercups, &c.                              |
| Lunar Underwing .                     | " <i>lunosa</i> .                                | 10      | 10-4        | —      | Grasses.   |



What to get -

- how -

- and where.

*Curatioria* - Wm. Com. twigs of trees.

*Pilutata* - Lamps - eq. Kenwick Rd.



- and where -

Vaccinii -

sugaring &c.  
faded after hibernation

Winn Com.



## INSECTS (continued).

| Popular Name.                      | Scientific Name.                                   | Ova.  | Larva. | Pupa. | Food-plants.                               |
|------------------------------------|--|-------|--------|-------|--|
| <b>MOTHS.</b>                      |  |       |        |       |  |
| Chestnut . . . H                   | <i>Cerastis vaccinii</i> .                         | —     | 6, 7   | —     | Oak, elm, willow, willow.                  |
| Dark do. . . . H                   | „ <i>spadicea</i> . .                              | —     | 5, 6   | —     | { Hawthorn, sloe, and<br>honeysuckle.      |
| Red-headed do. H                   | „ <i>erythrocephala</i>                            | —     | 5      | —     | Low plants.                                |
| Large do. . . . H                  | { <i>Scopelosoma sa-</i><br><i>tellitæ</i> . . . } | 3     | 5, 6   | 7, 8  | { Oak. A cannibal in<br>confinement.       |
| Dotted do. . . . H                 | { <i>Dasycampa rubi-</i><br><i>ginea</i> . . . }   | 3     | 5-7    | —     | Apple and low plants.                      |
| Orange Upper-<br>wing . . . . H    | <i>Hoporina croceago</i>                           | 4     | 5, 6   | 7     | Oak.                                       |
| Pink Barred Sallow                 | <i>Xanthia silago</i> .                            | —     | 4-6    | 8     | Sallow.                                    |
| Barred do. . . .                   | „ <i>aurago</i> . . .                              | —     | 5, 6   | 8     | Beech.                                     |
| Mottled do. . . .                  | „ <i>ferruginea</i>                                | —     | 4-6    | 7, 8  | Sallow, wych elm, aspen.                   |
| Olive Rustic . . H                 | <i>Dasypolia templi</i> .                          | 3     | 4-7    | 8     | Cow-parsley.                               |
| Dusky Nutmeg .                     | <i>Epunda nigra</i> .                              | —     | 5, 6   | 7     | { Hedge bedstraw, plan-<br>tain, grasses.  |
| Green-brindled<br>Crescent . . . } | { <i>Miselia oxya-</i><br><i>canthæ</i> . . }      | —     | 5-7    | 8     | Hawthorn, sloe.                            |
| Marvel-de-jour .                   | <i>Agriopsis aprilina</i> .                        | —     | 6, 7   | 7-9   | Oak.                                       |
| Angle-shades . .                   | { <i>Phlogophora me-</i><br><i>ticulosa</i> . . }  | —     | 11-4   | —     | { Broom, and many low<br>plants.           |
| Scarce do. . . .                   | „ <i>empyrea</i> . .                               | 9, 10 | 11-5   | —     | Pilewort.                                  |
| Red Sword-grass H                  | <i>Calocampa vetusta</i>                           | 3, 4  | 4-6    | 8     | { Poplar, and various<br>plants.           |
| Common do. . . H                   | „ <i>exoleta</i> . . .                             | 4     | 4-7    | 8     | { Scabious, rest-harrow,<br>campion, dock. |
| Tawny Pinion . H                   | <i>Xylina conformis</i> .                          | 3     | 5, 6   | 7, 8  | Birch and alder.                           |
| Grey Shoulder-<br>knot . . . . H   | „ <i>rhizolitha</i> .                              | —     | 5-7    | 7, 8  | Oak.                                       |
| Dark Pinion . . H                  | „ <i>semibrunnea</i>                               | —     | 7      | 8, 9  | Ash and willow.                            |
| Pale do. . . . . H                 | „ <i>petrificata</i> .                             | 5     | 5-7    | 8, 9  | Oak, birch, and lime.                      |
| Silver Y . . . .                   | <i>Plusia gamma</i> . .                            | —     | 4-9    | —     | { Nettle, hop, and low<br>plants.          |
| Herald . . . . . H                 | <i>Gonoptera libatrix</i> .                        | —     | 6, 7   | 7, 8  | Poplar, willow, willow.                    |

## PLANTS.

| Popular Name.                          | Scientific Name.                                     | Localities.                                 | Duration.  |
|--|--|---|------------|
| Pheasant's Eye . .                     | <i>Adonis autumnalis</i> .                           | Cornfields . . . .                          | Annual.    |
| Pale Hairy Buttercup                   | <i>Ranunculus hirsutus</i> .                         | { Meadows and waste<br>ground . . . . }     | „          |
| Shepherd's Purse . .                   | { <i>Capsella Bursa-pas-</i><br><i>toris</i> . . . } | A common weed . . .                         | „          |
| Grass of Parnassus .                   | <i>Parnassia palustris</i> .                         | Bogs . . . . .                              | Perennial. |
| Chickweed . . . .                      | <i>Stellaria media</i> . . .                         | A common weed . . .                         | Annual.    |
| Tree Mallow . . . .                    | <i>Lavatera arborea</i> . .                          | { Rocks and cliffs on<br>sea-coast. Rare. } | Biennial.  |
| Herb Robert . . . .                    | <i>Geranium Robertianum</i>                          | Roadsides and hedges                        | Annual.    |
| Sea Stork's-bill . .                   | <i>Erodium maritimum</i> .                           | { Sandy sea-shores, and<br>at Dartmoor }    | Perennial. |
| Yellow Wood Sorrel .                   | <i>Oxalis corniculata</i> . .                        | { Damp places in West<br>of England . . }   | Annual.    |
| Dwarf Furze . . . .                    | <i>Ulex nanus</i> . . . .                            | Heaths . . . . .                            | Shrub.     |
| Strapwort . . . .                      | <i>Corrigiola littoralis</i>                         | Sandy wastes. Rare                          | Annual.    |
| Yellow Mountain<br>Saxifrage . . . . } | { <i>Saxifraga aizoides</i><br>. . . }               | { Boggy places on moun-<br>tains . . . . }  | Perennial. |
| Ivy . . . . .                          | <i>Hedera Helix</i> . . . .                          | Common everywhere .                         | „          |
| Devil's-bit Scabious                   | <i>Scabiosa succisa</i> . . .                        | Heaths and pastures .                       | „          |
| Sow-thistle . . . .                    | <i>Sonchus oleraceus</i> . .                         | A common weed . . .                         | Annual.    |
| Dandelion . . . .                      | <i>Leontodon Taraxacum</i> .                         | Do. . . . .                                 | Perennial. |
| Spikenard . . . .                      | <i>Conyza squarrosa</i> . .                          | Chalky fields . . . .                       | Biennial.  |



## PLANTS (continued).

| Popular Name.                                    | Scientific Name.                                    | Localities.   | Duration.  |
|--|---|---|------------|
| Groundsel . . .                                  | <i>Senecio vulgaris</i> . . .                       | A common weed . . .   | Annual.    |
| Marsh Ragwort . . .                              | <i>aquaticus</i> . . .                              | Wet places. . . . .   | Perennial. |
| Daisy . . . . .                                  | <i>Bellis perennis</i> . . .                        | Pastures . . . . .  | "          |
| Golden Milfoil . . .                             | <i>Achillea tomentosa</i> . .                       | Dry hill pastures. Scarce   | "          |
| Yellow Star-thistle .                            | <i>Centaurea solstitialis</i> .                     | Waste places . . . . .  | Annual.    |
| Common Heath . . .                               | <i>Erica cinerea</i> . . . . .                      | Heaths . . . . .  | Shrub.     |
| Ling, or Heather . . .                           | <i>Calluna vulgaris</i> . . .                       | Heaths and moors . . .  | "          |
| Strawberry-tree . . .                            | <i>Arbutus Unedo</i> . . . .                        | South of Ireland . . .  | Tree.      |
| Ivy-leaved Snap-<br>dragon, or Toad-flax }       | <i>Linaria Cymbalaria</i> . .                       | Walls. Not native. . .  | Perennial  |
| Cornish Money-wort .                             | <i>Sibthorpia Europæa</i> . .                       | Damp places. Local . .  | "          |
| Dark Mullein . . . .                             | <i>Verbascum nigrum</i> . . .                       | Hedge-banks . . . . .   | "          |
| Moth do. . . . .                                 | " <i>Blattaria</i> . . . . .                        | Do. Rare . . . . .  | Annual.    |
| Wild Clary . . . . .                             | <i>Salvia Verbenaca</i> . . .                       | { Dry fields and hedge-<br>banks . . . . . }                            | Perennial  |
| Wall Germander . . .                             | <i>Teucrium Chamædrys</i> . .                       | Old walls. Naturalised.   | "          |
| Red Hemp-nettle . . .                            | <i>Galeopsis Ladanum</i> . .                        | Dry fields . . . . .  | Annual.    |
| White Dead-nettle . .                            | <i>Lamium album</i> . . . . .                       | Hedges and way-sides . .  | Perennial. |
| Spotted do. . . . .                              | " <i>maculatum</i> . . . . .                        | Hedge-banks. Rare . . .   | "          |
| Red do. . . . .                                  | " <i>purpureum</i> . . . . .                        | A common weed . . . .   | Annual.    |
| White Goose-foot . . .                           | <i>Chenopodium album</i> . .                        | Do. . . . .   | "          |
| Grass-leaved Orache .                            | <i>Atriplex littoralis</i> . . .                    | Salt-marshes . . . . .  | "          |
| Triangular-leaved do.                            | " <i>deltoidea</i> . . . . .                        | Waste ground . . . . .  | "          |
| Perennial Knawel . .                             | <i>Scleranthus perennis</i> . .                     | Sandy fields . . . . .  | Perennial. |
| Knot-grass . . . . .                             | <i>Polygonum aviculare</i> . .                      | A common weed . . . .   | Annual.    |
| Sea do. . . . .                                  | " <i>maritimum</i> . . . . .                        | Sandy shores . . . . .  | Perennial. |
| Copse Buckwheat . . .                            | " <i>dumetorum</i> . . . . .                        | Woods . . . . .   | Annual.    |
| Spotted Persicaria . .                           | " <i>Persicaria</i> . . . . .                       | Damp ground . . . . .   | "          |
| Broad-leaved Spurge .                            | <i>Euphorbia platyphylla</i> .                      | Fields . . . . .  | "          |
| Petty do. . . . .                                | " <i>Peplus</i> . . . . .                           | A common weed . . . .   | "          |
| Spring Water Starwort                            | <i>Callitriche verna</i> . . . .                    | Pools . . . . .   | "          |
| Stalked do. do. . . .                            | " <i>pedunculata</i> . . . .                        | Do. . . . .   | "          |
| Autumnal do. do. . .                             | " <i>autumnalis</i> . . . . .                       | Do. . . . .   | "          |
| Small Nettle . . . . .                           | <i>Urtica urens</i> . . . . .                       | Waste places . . . . .  | "          |
| Pellitory . . . . .                              | <i>Parietaria officinalis</i> . .                   | Old walls . . . . .   | Perennial. |
| Water Thyme . . . . .                            | <i>Eudorea Canadensis</i> . .                       | Canals. Naturalised . .   | "          |
| Proliferous Lady's<br>Tresses . . . . . }        | <i>Neottia gemmipara</i> . . .                      | Ireland . . . . .   | "          |
| Naked-floweringCrocus                            | <i>Crocus nudiflorus</i> . . . .                    | Meadows . . . . .   | "          |
| Meadow Saffron . . .                             | <i>Colchicum autumnale</i> . .                      | Do. . . . .   | "          |
| Round-headed Club-<br>Rush . . . . . }           | <i>Scirpus Holoschænus</i> . .                      | Sea-shores . . . . .  | "          |
| Slender Fox-tail Grass,<br>or Black Bent . . . } | <i>Alopecurus agrestis</i> . . .                    | Waste ground . . . . .  | Annual.    |
| Reflexed Meadow-grass                            | <i>Poa distans</i> . . . . .                        | Pastures . . . . .  | Perennial. |
| Sea do. . . . .                                  | " <i>maritima</i> . . . . .                         | Salt marshes . . . . .  | "          |
| Annual do. . . . .                               | " <i>annua</i> . . . . .                            | Waste ground . . . . .  | Annual.    |
| FERNS.   |   |   |            |
| Common Polypody . .                              | <i>Polypodium vulgare</i> . .                       | { Mossy banks, damp<br>rocks, &c. . . . . }                             | Perennial  |
| Welsh do. . . . .                                | " <i>cambricum</i> . . . . .                        | Shady banks . . . . .   | "          |
| Forked Spleenwort . .                            | { <i>Asplenium septen-<br/>trionale</i> . . . . . } | Rocks. Rare . . . . .   | "          |
| Alternate do. . . . .                            | " <i>alternifolium</i> . . . .                      | { Shady rocks in Scot-<br>land and Lake Dis-<br>trict. Rare . . . . . } | "          |
| Rue-leaved do. . . . .                           | " <i>Ruta-muraria</i> . . . . .                     | Shady rocks . . . . .   | "          |
| Maidenhair do. . . .                             | " <i>Trichomanes</i> . . . . .                      | Do. . . . .   | "          |
| Sea do. . . . .                                  | " <i>marinum</i> . . . . .                          | Rocks . . . . .   | "          |
| Black Maidenhair do. .                           | " <i>Adiantum-nigrum</i> . . .                      | Shady places . . . . .  | "          |
| Scale Fern . . . . .                             | <i>Ceterach officinarum</i> . .                     | Limestone rocks . . . .   | "          |



# NOVEMBER.

## GENERAL HINTS.

Do not entirely abandon palings, and, as I mentioned in an earlier part of the book, it is always well to keep up the habit of looking at palings, tree-trunks, and lamps, even though no insects are likely to be found there.

Eggs, of course, will be found in plenty, if sought in the right places. Some lepidopterists leave them, and only mark the spot, not wishing to trouble themselves about keeping them during the winter. This, however, is a plan which I cannot recommend for practice, however well it may sound in theory.

There are many creatures, especially the smaller birds, which are very fond of insects' eggs, and which, during a hard winter, will eat every egg which they can reach. And, as eggs occupy very little space, it is just as well to take care of them.

You must not hope to identify every egg which you find. Some of the butterflies have eggs which are so boldly marked and curiously shaped that they cannot be mistaken. Those of butterflies are, as a rule, much more recognisable than those of moths. For example, the egg of the Peacock butterfly is melon-shaped, with eight bold, longitudinal ridges; that of the Large White is skittle-shaped, with a multitude of similar ridges; that of the Large Tortoiseshell is shaped like a jargonelle pear, and quite as smooth; that of the Wood Argus looks as if a net had been stretched tightly over it; and that of the very common Meadow-brown is spherical, and has at one end a sort of cap or crown of shelly tiles.

But, although most of the moths' eggs are simply oval or spherical, some are very conspicuous. It is impossible, for example, to mistake those of the Lackey, as they are set gem-fashion round a twig, and are so firmly cemented to each other that they can be slipped off like a bracelet. Then there are the large, round, flattened eggs of the Vapourer moth, laid on the surface of the soft, silken cocoon, and bearing an almost ludicrous resemblance to Norfolk biffins; the thatched egg-piles of the Gold-tailed moth, and so on, many of which can be recognised without difficulty.

Even to the end of the month moths will come to light, and it will be as well, therefore, to keep the moth-trap in use until the frost actually sets in. After that time, it may as well be put away for the winter.

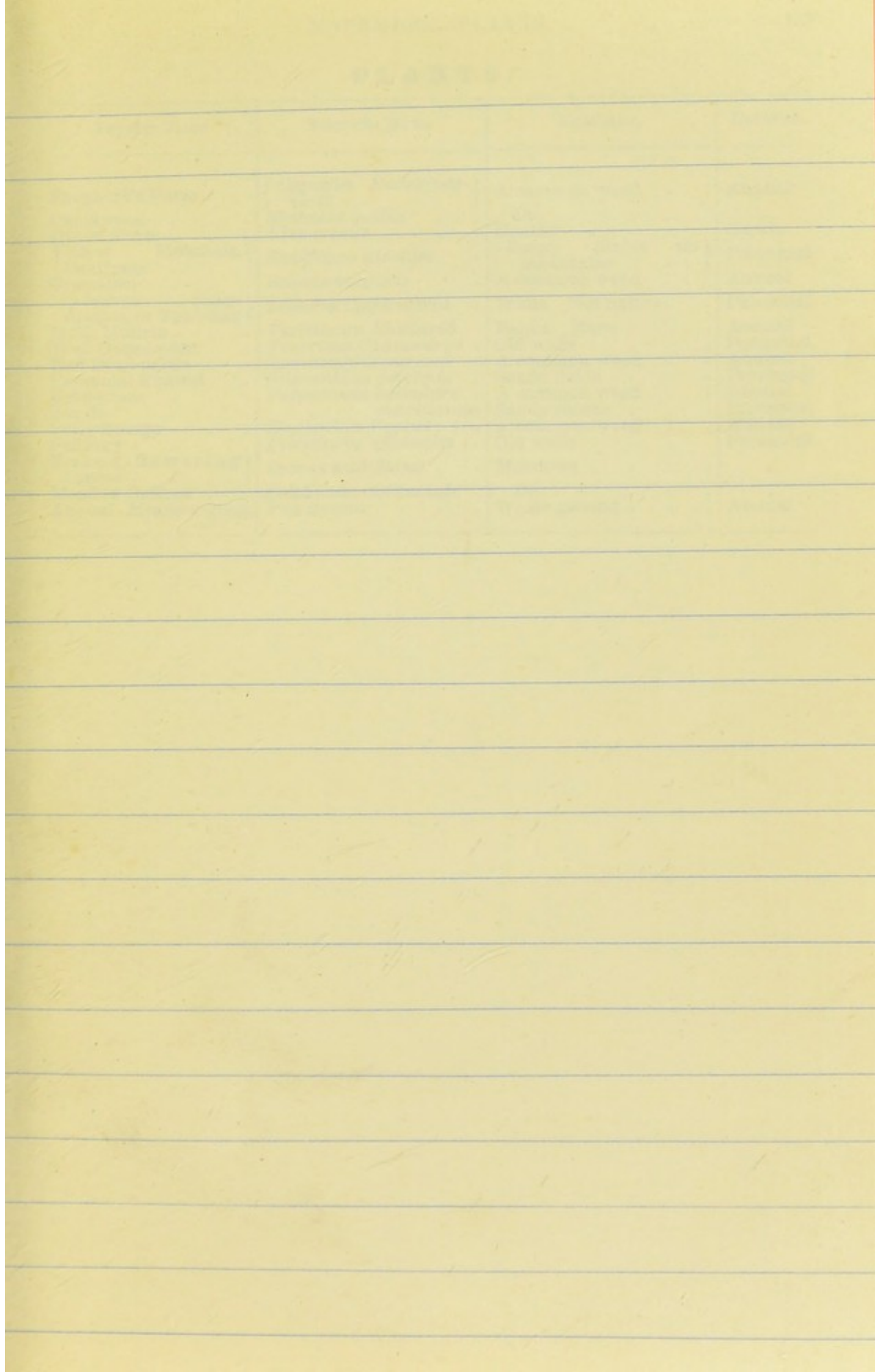
As to caterpillars, none will be found except those which have gone into hibernation, and these, as mentioned in the hints for October, should be left alone.



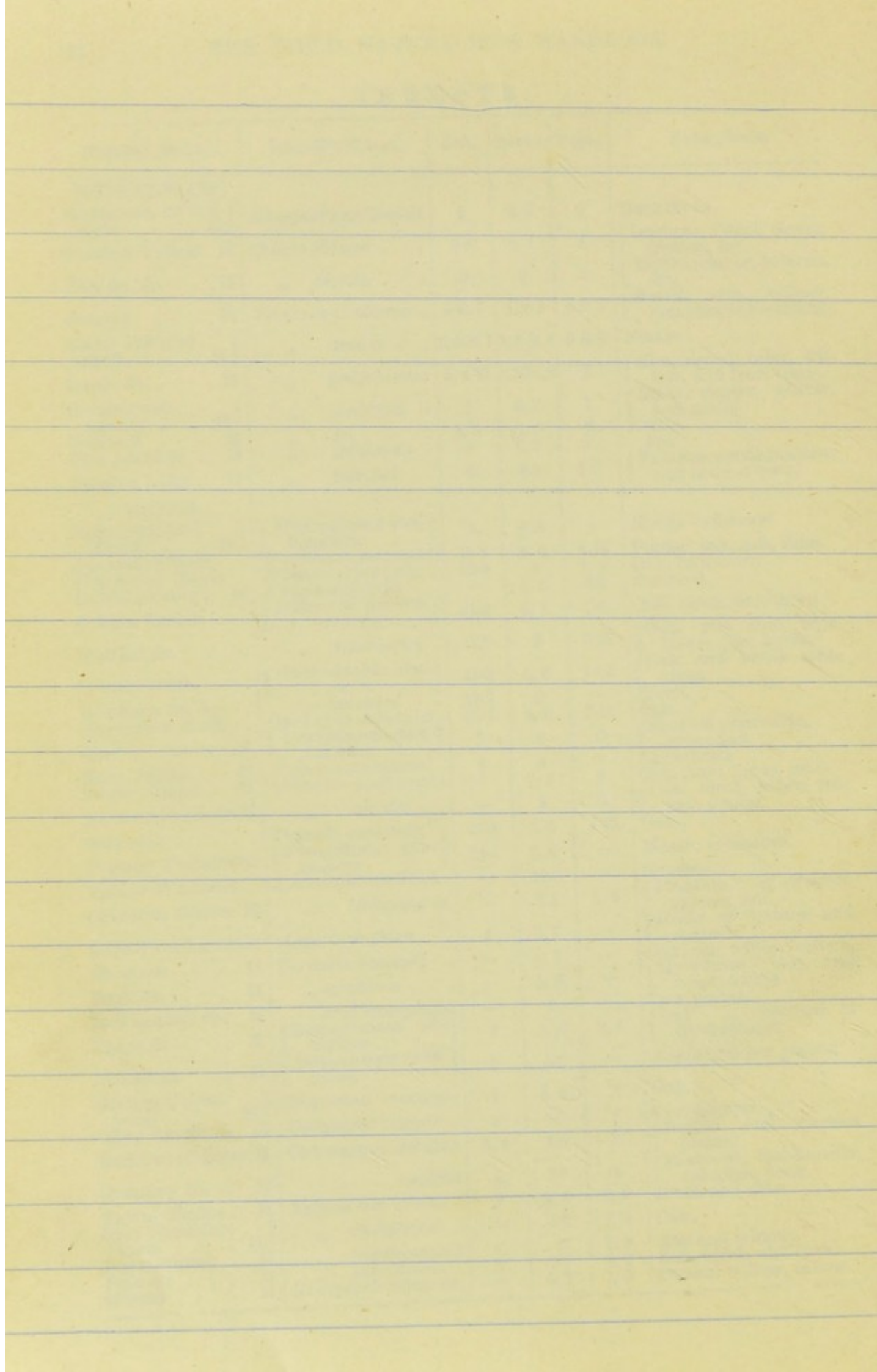
## INSECTS.

| Popular Name.               | Scientific Name.                    | Ova.     | Larva.     | Pupa. | Food-plants.                                   |
|-----------------------------|-------------------------------------|----------|------------|-------|--|
| <b>BUTTERFLIES.</b>         |                                     |          |            |       |  |
| Brimstone, or Sulphur . . H | <i>Gonepteryx rhamni</i>            | 4        | 6, 7       | 7     | Buckthorn.                                     |
| Clouded Yellow . H          | <i>Colias Edusa</i> . .             | 9-5      | 6, 7       | 8     | { Lucerne, Dutch clover, trefoils, &c.         |
| Pale do. do. . . H          | „ <i>Hyale</i> . .                  | 5        | 7          | 8     | { Melilot, clover, lucerne, &c.                |
| Comma . . . H               | <i>Vanessa C-album</i> .            | 5 & 7    | 5 & 8      | 6 & 9 | { Nettle, elm, willow, hop, sloe, and currant. |
| Small Tortoise-shell . . H  | „ <i>urtice</i> . .                 | 4, 5 & 7 | 5, 6 & 8   | 6 & 8 | Nettle.  |
| Large do. . . H             | „ <i>polychloros</i>                | 5, s 10  | s. 10-5, 6 | 7     | { Elm, aspen, osier, willow, and fruit trees.  |
| Camberwell Beauty . . H     | „ <i>Antiope</i> . .                | 5        | 6, 7       | 7     | { Birch, poplar, willow, and nettle.           |
| Peacock . . . H             | „ <i>Io</i> . . .                   | 4, 5     | 6, 7       | 7     | Nettle.  |
| Red Admiral . . H           | „ <i>Atalanta</i> .                 | 5        | 6, 7       | 7     | Do.  |
| Painted Lady . . H          | „ <i>Cardui</i> . .                 | 6        | 6-9        | 7-9   | { Thistles, nettle, mallow, and scarlet bean.  |
| <b>MOTHS.</b>               |                                     |          |            |       |  |
| Humming-bird Hawk . . H     | { <i>Macroglossa stel-latarum</i> } | 5        | 8, 9       | —     | Hedge bedstraw.                                |
| December Moth . .           | <i>Pæcilocampa populi</i>           | 11-3     | 5, 6       | 8-10  | Poplar, oak, ash, lime.                        |
| Feathered Thorn . .         | <i>Himera pennaria</i> .            | 10-4     | 5          | 8, 9  | Oak, hawthorn.                                 |
| Belted Beauty . . H         | <i>Nyssia zonaria</i> .             | —        | 5, 6       | 6-9   | Sea-reed.                                      |
| Golden Umber . .            | { <i>Hibernia auran-tiaria</i> }    | 11-3     | 6, 7       | 7-9   | Oak, birch, hawthorn.                          |
| Mottled do. . . .           | „ <i>defoliaria</i> .               | 11-3     | 5          | 7-11  | { Oak, nut, sloe, hawthorn, elm, birch.        |
| Winter Moth . . .           | { <i>Cheimatobia bru-mata</i> }     | 11-3     | 5, 6       | 7-12  | { Oak and many other trees.                    |
| Northern do. do. .          | „ <i>boreata</i> . .                | 11-3     | 6          | —     | Birch.   |
| November Moth . .           | <i>Oporabia dilutata</i> .          | 11-3     | 5, 6       | 7-10  | Oak.   |
| Gem . . . . . H             | { <i>Campptogramma fluviala</i> }   | 7        | 8          | 9     | { Spotted persicaria, groundsel.               |
| Silky Tissue . . . H        | <i>Scotosia dubitata</i> .          | 4        | 6          | 7     | Buckthorn.                                     |
| Parrot Carpet . . H         | <i>Cidaria psittacata</i>           | —        | 7, 8       | 9     | Oak, lime, apple, rose.                        |
| Autumn Green do. H          | „ <i>miata</i> . .                  | —        | 8          | 9     | { Oak, birch, alder, willow, poplar.           |
| Sprawler . . . .            | <i>Petasia cassinea</i> .           | 11-4     | 5, 6       | 7-10  | Oak.   |
| Plumed Prominent            | { <i>Ptilophora plu-migera</i> }    | 11-4     | 5, 6       | —     | Maple, sycamore.                               |
| Yellow Wainscot .           | <i>Leucania vitellina</i> .         | —        | 10-2       | —     | Grasses.                                       |
| Ochreous Brown H            | „ <i>lithargyria</i>                | —        | 1-5        | 5, 6  | { Plantain, chickweed, grasses, &c.            |
| Dark Sword-grass H          | <i>Agrotis suffusa</i> .            | 4        | 5, 7       | —     | { Roots of lettuce and spinach.                |
| Chestnut . . . . H          | <i>Cerastis vaccinii</i> .          | —        | 6, 7       | —     | Oak, elm, willow, willow.                      |
| Dark do. . . . . H          | „ <i>spadicea</i> . .               | —        | 5, 6       | —     | { Hawthorn, sloe, and honeysuckle.             |
| Red-headed do. . H          | „ <i>erythrocephala</i>             | —        | 5          | —     | Low plants.                                    |
| Large do. . . . . H         | { <i>Scopelosoma sa-tellitica</i> } | 3        | 5, 6       | 7, 8  | { Oak. A cannibal in confinement.              |
| Dotted do. . . . . H        | { <i>Dasycampa rubi-ginea</i> }     | 3        | 5-7        | —     | Apple and low plants.                          |
| Orange Upper-wing . H       | <i>Hopiorina croceago</i>           | 4        | 5, 6       | 7     | Oak.   |
| Olive Rustic . . . H        | <i>Dasypolia templi</i> .           | 3        | 4-7        | 8     | Cow-parsley.                                   |
| Red Sword-grass H           | <i>Calocampa vetusta</i>            | 3, 4     | 4-6        | 8     | { Poplar and various plants.                   |
| Common do. . . . H          | „ <i>exoleta</i> . .                | 4        | 4-7        | 8     | { Scabious, rest-harrow, campion, dock.        |
| Tawny Pinion . . H          | <i>Xylina conformis</i> .           | 3        | 5, 6       | 7, 8  | Birch and alder.                               |
| Grey Shoulder-knot . . H    | „ <i>rhizolitha</i> .               | —        | 5-7        | 7, 8  | Oak.   |
| Dark Pinion . . . H         | „ <i>semibrunnea</i> .              | —        | 7          | 8, 9  | Ash and willow.                                |
| Pale do. . . . . H          | „ <i>petrificata</i> .              | 5        | 5-7        | 8, 9  | Oak, birch, and lime.                          |
| Herald . . . . . H          | <i>Gonoptera libatrix</i> .         | —        | 6, 7       | 7, 8  | Poplar, willow, willow.                        |











## P L A N T S .

| Popular Name.                              | Scientific Name.                                     | Localities.                            | Duration.  |
|--|--|--|------------|
| Shepherd's Purse . . .                     | { <i>Capsella Bursa-pas-</i><br><i>toris</i> . . . } | A common weed . . .                    | Annual.    |
| Chickweed . . . . .                        | <i>Stellaria media</i> . . .                         | Do. . . . .                            | Shrub.     |
| Dwarf Furze . . . . .                      | <i>Ulex nanus</i> . . . . .                          | Heaths . . . . .                       | Perennial. |
| Yellow Mountain<br>Saxifrage . . . . .     | <i>Saxifraga aizoides</i> . . .                      | { Boggy places on<br>mountains . . . } | Annual.    |
| Groundsel . . . . .                        | <i>Senecio vulgaris</i> . . .                        | A common weed . . .                    | Perennial. |
| Ivy-leaved Snap-<br>dragon, or Toad-flax } | <i>Linaria Cymbalaria</i> . .                        | Walls. Not native. .                   | Annual.    |
| Moth Mullein . . . . .                     | <i>Verbascum Blattaria</i> . .                       | Banks. Rare . . . . .                  | Perennial. |
| Wall Germander . . . .                     | <i>Teucrium Chamædrys</i> . .                        | Old walls . . . . .                    | Annual.    |
| Red Dead-nettle . . . .                    | <i>Lamium purpureum</i> . . .                        | A common weed . . .                    | Perennial. |
| Perennial Knawel . . . .                   | <i>Scleranthus perennis</i> . .                      | Sandy fields . . . . .                 | Annual.    |
| Knot-grass . . . . .                       | <i>Polygonum aviculare</i> . .                       | A common weed . . .                    | Perennial. |
| Sea do. . . . .                            | " <i>maritimum</i> . . . . .                         | Sandy shores . . . . .                 | Annual.    |
| Petty Spurge . . . . .                     | <i>Euphorbia Peplus</i> . . .                        | A common weed . . .                    | Perennial. |
| Pellitory . . . . .                        | <i>Parietaria officinalis</i> . .                    | Old walls . . . . .                    | "          |
| Naked-flowering<br>Crocus . . . . .        | <i>Crocus nudiflorus</i> . . .                       | Meadows . . . . .                      | "          |
| Meadow Saffron . . . . .                   | <i>Colchicum autumnale</i> . .                       | Do. . . . .                            | Annual.    |
| Annual Meadow-grass                        | <i>Poa annua</i> . . . . .                           | Waste ground . . . .                   |            |



| No. | Name            | Address                | Remarks |
|-----|-----------------|------------------------|---------|
| 1   | John Smith      | 123 Main St.           |         |
| 2   | Jane Doe        | 456 Elm St.            |         |
| 3   | Robert Brown    | 789 Oak St.            |         |
| 4   | Mary White      | 101 Pine St.           |         |
| 5   | James Black     | 202 Cedar St.          |         |
| 6   | Elizabeth Green | 303 Birch St.          |         |
| 7   | William Hall    | 404 Spruce St.         |         |
| 8   | Anna Taylor     | 505 Willow St.         |         |
| 9   | Thomas Adams    | 606 Walnut St.         |         |
| 10  | Sarah Jones     | 707 Chestnut St.       |         |
| 11  | Charles Miller  | 808 Hickory St.        |         |
| 12  | Patricia Wilson | 909 Poplar St.         |         |
| 13  | Richard Moore   | 1010 Sycamore St.      |         |
| 14  | Louise Clark    | 1111 Magnolia St.      |         |
| 15  | George Evans    | 1212 Dogwood St.       |         |
| 16  | Frances King    | 1313 Redwood St.       |         |
| 17  | Edward Wright   | 1414 Cypress St.       |         |
| 18  | Martha Scott    | 1515 Juniper St.       |         |
| 19  | Harold Hill     | 1616 Fir St.           |         |
| 20  | Beatrice Young  | 1717 Ash St.           |         |
| 21  | Albert King     | 1818 Olive St.         |         |
| 22  | Joseph Baker    | 1919 Pear St.          |         |
| 23  | Emily Nelson    | 2020 Peach St.         |         |
| 24  | Frank Phillips  | 2121 Plum St.          |         |
| 25  | Grace Turner    | 2222 Cherry St.        |         |
| 26  | Henry Scott     | 2323 Apple St.         |         |
| 27  | Ida Roberts     | 2424 Banana St.        |         |
| 28  | Samuel Green    | 2525 Grape St.         |         |
| 29  | Lucy Adams      | 2626 Lemon St.         |         |
| 30  | Benjamin Hall   | 2727 Lime St.          |         |
| 31  | Anna Taylor     | 2828 Orange St.        |         |
| 32  | Thomas Adams    | 2929 Tangerine St.     |         |
| 33  | Sarah Jones     | 3030 Citrus St.        |         |
| 34  | Charles Miller  | 3131 Mandarin St.      |         |
| 35  | Patricia Wilson | 3232 Guava St.         |         |
| 36  | Richard Moore   | 3333 Passion Fruit St. |         |
| 37  | Louise Clark    | 3434 Strawberry St.    |         |
| 38  | George Evans    | 3535 Raspberry St.     |         |
| 39  | Frances King    | 3636 Blueberry St.     |         |
| 40  | Edward Wright   | 3737 Elderberry St.    |         |
| 41  | Martha Scott    | 3838 Currant St.       |         |
| 42  | Harold Hill     | 3939 Gooseberry St.    |         |
| 43  | Beatrice Young  | 4040 Mulberry St.      |         |
| 44  | Albert King     | 4141 Elder St.         |         |
| 45  | Joseph Baker    | 4242 Hawthorn St.      |         |
| 46  | Emily Nelson    | 4343 Yew St.           |         |
| 47  | Frank Phillips  | 4444 Boxwood St.       |         |
| 48  | Grace Turner    | 4545 Lavender St.      |         |
| 49  | Henry Scott     | 4646 Rose St.          |         |
| 50  | Ida Roberts     | 4747 Iris St.          |         |
| 51  | Samuel Green    | 4848 Daffodil St.      |         |
| 52  | Lucy Adams      | 4949 Tulip St.         |         |
| 53  | Benjamin Hall   | 5050 Hyacinth St.      |         |
| 54  | Anna Taylor     | 5151 Crocus St.        |         |
| 55  | Thomas Adams    | 5252 Pansy St.         |         |
| 56  | Sarah Jones     | 5353 Violet St.        |         |
| 57  | Charles Miller  | 5454 Marigold St.      |         |
| 58  | Patricia Wilson | 5555 Zinnia St.        |         |
| 59  | Richard Moore   | 5656 Begonia St.       |         |
| 60  | Louise Clark    | 5757 Fuchsia St.       |         |
| 61  | George Evans    | 5858 Camellia St.      |         |
| 62  | Frances King    | 5959 Azalea St.        |         |
| 63  | Edward Wright   | 6060 Gardenia St.      |         |
| 64  | Martha Scott    | 6161 Hibiscus St.      |         |
| 65  | Harold Hill     | 6262 Petunia St.       |         |
| 66  | Beatrice Young  | 6363 Salvia St.        |         |
| 67  | Albert King     | 6464 Verbena St.       |         |
| 68  | Joseph Baker    | 6565 Stachys St.       |         |
| 69  | Emily Nelson    | 6666 Mentha St.        |         |
| 70  | Frank Phillips  | 6767 Echinacea St.     |         |
| 71  | Grace Turner    | 6868 Rudbeckia St.     |         |
| 72  | Henry Scott     | 6969 Achillea St.      |         |
| 73  | Ida Roberts     | 7070 Thymus St.        |         |
| 74  | Samuel Green    | 7171 Oregano St.       |         |
| 75  | Lucy Adams      | 7272 Basil St.         |         |
| 76  | Benjamin Hall   | 7373 Parsley St.       |         |
| 77  | Anna Taylor     | 7474 Cilantro St.      |         |
| 78  | Thomas Adams    | 7575 Dill St.          |         |
| 79  | Sarah Jones     | 7676 Fennel St.        |         |
| 80  | Charles Miller  | 7777 Coriander St.     |         |
| 81  | Patricia Wilson | 7878 Cardamom St.      |         |
| 82  | Richard Moore   | 7979 Mustard St.       |         |
| 83  | Louise Clark    | 8080 Sesame St.        |         |
| 84  | George Evans    | 8181 Poppy St.         |         |
| 85  | Frances King    | 8282 Sunflower St.     |         |
| 86  | Edward Wright   | 8383 Pumpkin St.       |         |
| 87  | Martha Scott    | 8484 Watermelon St.    |         |
| 88  | Harold Hill     | 8585 Cantaloupe St.    |         |
| 89  | Beatrice Young  | 8686 Honeydew St.      |         |
| 90  | Albert King     | 8787 Strawberry St.    |         |
| 91  | Joseph Baker    | 8888 Raspberry St.     |         |
| 92  | Emily Nelson    | 8989 Blueberry St.     |         |
| 93  | Frank Phillips  | 9090 Elderberry St.    |         |
| 94  | Grace Turner    | 9191 Currant St.       |         |
| 95  | Henry Scott     | 9292 Gooseberry St.    |         |
| 96  | Ida Roberts     | 9393 Mulberry St.      |         |
| 97  | Samuel Green    | 9494 Elder St.         |         |
| 98  | Lucy Adams      | 9595 Hawthorn St.      |         |
| 99  | Benjamin Hall   | 9696 Yew St.           |         |
| 100 | Anna Taylor     | 9797 Boxwood St.       |         |



DECEMBER

1. The first of the month was a very cold day, with a heavy frost. The wind was from the north, and the sun was not out for long.

2. On the second day, the weather was a little warmer, but still very cold. The wind was from the east, and the sun was out for a longer time.

3. On the third day, the weather was very cold, with a heavy frost. The wind was from the north, and the sun was not out for long.

4. On the fourth day, the weather was a little warmer, but still very cold. The wind was from the east, and the sun was out for a longer time.

5. On the fifth day, the weather was very cold, with a heavy frost. The wind was from the north, and the sun was not out for long.

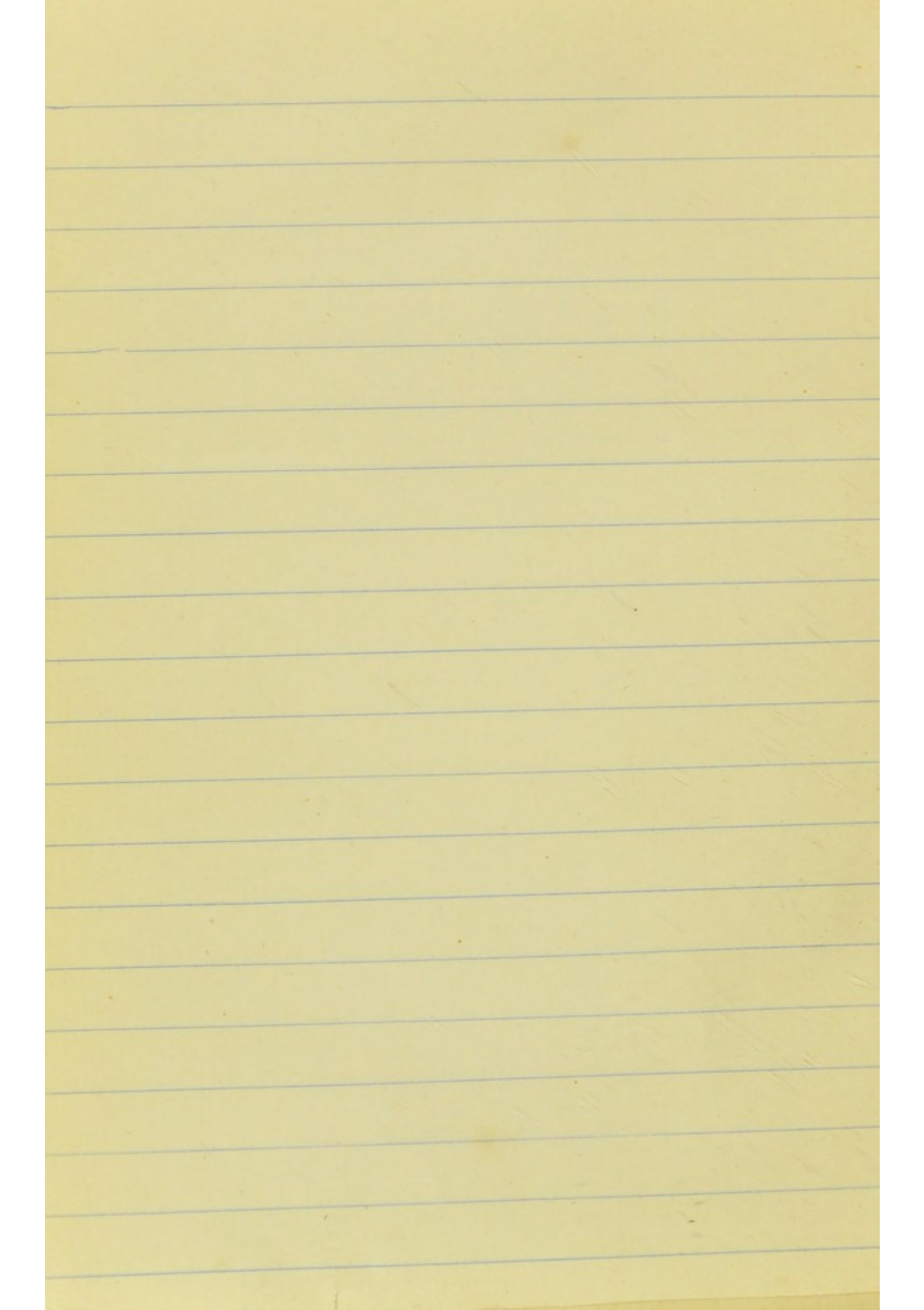
6. On the sixth day, the weather was a little warmer, but still very cold. The wind was from the east, and the sun was out for a longer time.

7. On the seventh day, the weather was very cold, with a heavy frost. The wind was from the north, and the sun was not out for long.

8. On the eighth day, the weather was a little warmer, but still very cold. The wind was from the east, and the sun was out for a longer time.

9. On the ninth day, the weather was very cold, with a heavy frost. The wind was from the north, and the sun was not out for long.







# DECEMBER.

## GENERAL HINTS.

WINTER now has its full sway, and there is hardly any work for the entomologist out of doors. Even should he try pupa-digging, his fingers will be too numbed by the cold to exercise the delicate sense of touch on which so much depends, and the wind may be expected to cool the ardour of the egg-hunter.

The December moth (*Pæcilocampa populi*) may occasionally be seen fluttering about the lamps, and relieving our eyes with some sign of active insect life, but we can do very little in the field. In fact, as mentioned in January, the chief work of the entomologist will be restricted to his cabinets, and, if he takes proper care of his collection, he will find that he has quite enough work in hand to fill up the whole of his time in those bleak, unproductive months.

## INSECTS.

| Popular Name.                 | Scientific Name.                    | Ova.     | Larva.     | Pupa. | Food-plants.                                   |
|-------------------------------|-------------------------------------|----------|------------|-------|--|
| <b>BUTTERFLIES.</b>           |                                     |          |            |       |  |
| Brimstone, or Sulphur . . . H | <i>Gonepteryx rhamni</i>            | 4        | 6, 7       | 7     | Buckthorn.                                     |
| Clouded Yellow . . . H        | <i>Colias Edusa</i> . . .           | 9-5      | 6, 7       | 8     | { Lucerne, Dutch clover, trefoils, &c.         |
| Pale do. do. . . . H          | „ <i>Hyale</i> . . .                | 5        | 7          | 8     | { Melilot, clover, lucerne, &c.                |
| Comma . . . . H               | <i>Vanessa C-album</i> . .          | 5 & 7    | 5 & 8      | 6 & 9 | { Nettle, elm, willow, hop, sloe, and currant. |
| Small Tortoise-shell . . . H  | „ <i>urticæ</i> . . .               | 4, 5 & 7 | 5, 6 & 8   | 6 & 8 | Nettle.  |
| Large do. . . . H             | „ <i>polychloros</i>                | 5, s. 10 | s. 10-5, 6 | 7     | { Elm, aspen, osier, willow, and fruit trees.  |
| Camberwell Beauty . . . H     | „ <i>Antiopa</i> . . .              | 5        | 6, 7       | 7     | { Birch, poplar, willow, and nettle.           |
| Peacock . . . . H             | „ <i>Io</i> . . .                   | 4, 5     | 6, 7       | 7     | Nettle.  |
| Red-Admiral . . . H           | „ <i>Atalanta</i> . .               | 5        | 6, 7       | 7     | Do.  |
| Painted Lady . . . H          | „ <i>Cardui</i> . . .               | 6        | 6-9        | 7-9   | { Thistles, nettle, mallow, and scarlet bean.  |
| <b>MOTHS.</b>                 |                                     |          |            |       |  |
| Humming-bird Hawk . . . H     | { <i>Macroglossa stel-latarum</i> } | 5        | 8, 9       | —     | Hedge bedstraw.                                |
| December Moth . . .           | <i>Pæcilocampa populi</i>           | 11-3     | 5, 6       | 8-10  | Poplar, oak, ash, lime.                        |
| Belted Beauty . . . H         | <i>Nyssia zonaria</i> . .           | —        | 5, 6       | 6-9   | Sea-reed.                                      |
| Early Moth . . . . E          | { <i>Hibernia rupica-praria</i> }   | 2        | 5          | 7-1   | Oak, hawthorn, sloe.                           |
| Mottled Umber . . .           | „ <i>defoliaria</i> . .             | 11-3     | 5          | 7-11  | { Oak, nut, sloe, hawthorn, elm, birch.        |
| Winter Moth . . . .           | { <i>Cheimatobia brumata</i> }      | 11-3     | 5, 6       | 7-12  | { Oak and many other trees.                    |
| Northern do. do. . .          | „ <i>boreata</i> . . .              | 11-3     | 6          | —     | Birch.   |
| November Moth . . . B         | <i>Oporabia dilutata</i> .          | 11-3     | 5, 6       | 7-10  | Oak.   |
| Gem . . . . . H               | { <i>Camptogramma fluviala</i> }    | 7        | 8          | 9     | { Spotted persicaria, groundsel.               |



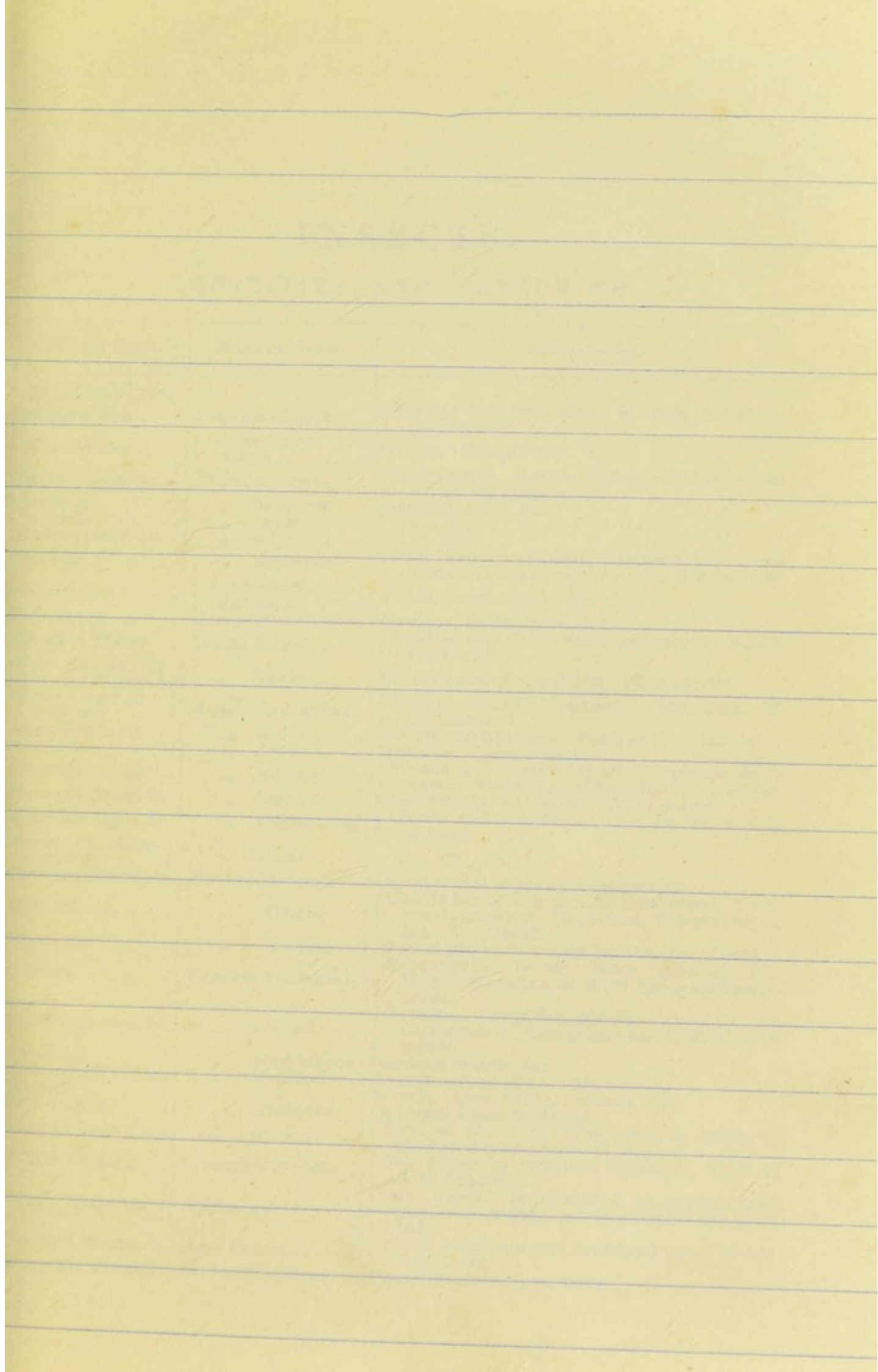
INSECTS (*continued*).

| Popular Name.                  | Scientific Name.            | Ova. | Larva. | Pupa. | Food-plants.                             |
|--------------------------------|-----------------------------|------|--------|-------|--|
| <b>MOTHS.</b>                  |                             |      |        |       |  |
| Silky Tissue . H               | <i>Scotosia dubitata</i> .  | 4    | 6      | 7     | Buckthorn.                               |
| Parrot Carpet . H              | <i>Cidaria psittacata</i>   | —    | 7, 8   | 9     | Oak, lime, apple, rose.                  |
| Autumn Green do. H             | „ <i>miata</i> .            | —    | 8      | 9     | { Oak, birch, alder, wil-                |
| Sprawler . . .                 | <i>Petasia cassinea</i> .   | 11-4 | 5, 6   | 7-10  | { low, poplar.                           |
| Ochreous Brown H               | { <i>Leucania lithar-</i>   | —    | 1-5    | 5, 6  | { Oak.                                   |
|                                | <i>gyria</i> . . }          |      |        |       | { Plantain, chickweed,                   |
| Dark Sword-grass H             | <i>Agrotis suffusa</i> .    | 4    | 5-7    | —     | { grasses, &c.                           |
| Chestnut . . H                 | <i>Cerastis vaccini</i> .   | —    | 6, 7   | —     | { Roots of lettuce and                   |
| Dark do. . . H                 | „ <i>spadicea</i> .         | —    | 5, 6   | —     | { spinach.                               |
| Red-headed do. H               | „ <i>erythrocephala</i>     | —    | 5      | —     | { Oak, elm, willow, saw-<br>low, poplar. |
| Large do. . . H                | { <i>Scopelosoma sa-</i>    | 3    | 5, 6   | 7, 8  | { Hawthorn, sloe, and                    |
|                                | <i>tellitia</i> . . }       |      |        |       | { honeysuckle.                           |
| Dotted do. . . H               | { <i>Dasyampa rubi-</i>     | 3    | 5-7    | —     | { Low plants.                            |
|                                | <i>ginea</i> . . }          |      |        |       | { Oak. A cannibal in                     |
| Orange Upper-<br>wing . . . H  | <i>Hopiorina croceago</i>   | 4    | 5, 6   | 7     | { confinement.                           |
| Olive Rustic . H               | <i>Dasypolia templi</i> .   | 3    | 4-7    | 8     | { Apple and low plants.                  |
| Red Sword-grass H              | <i>Calocampa vetusta</i>    | 3, 4 | 4-6    | 8     | { Oak.                                   |
| Common do. . H                 | „ <i>exoleta</i>            | 4    | 4-7    | 8     | { Cow-parsley.                           |
| Tawny Pinion . H               | <i>Xylina conformis</i> .   | 3    | 5, 6   | 7, 8  | { Poplar and various                     |
| Grey Shoulder-<br>knot . . . H | „ <i>rhizolitha</i> .       | —    | 5-7    | 7, 8  | { plants.                                |
| Dark Pinion . H                | „ <i>semibrunnea</i>        | —    | 7      | 8, 9  | { Scabious, rest-harrow,                 |
| Pale do. . . H                 | „ <i>petrificata</i> .      | 5    | 5-7    | 8, 9  | { campion, dock.                         |
| Herald . . . H                 | <i>Gonoptera libatrix</i> . | —    | 6, 7   | 7, 8  | { Birch and alder.                       |
|                                |                             |      |        |       | { Oak.                                   |
|                                |                             |      |        |       | { Ash and willow.                        |
|                                |                             |      |        |       | { Oak, birch, and lime.                  |
|                                |                             |      |        |       | { Poplar, willow, saw-<br>low, poplar.   |

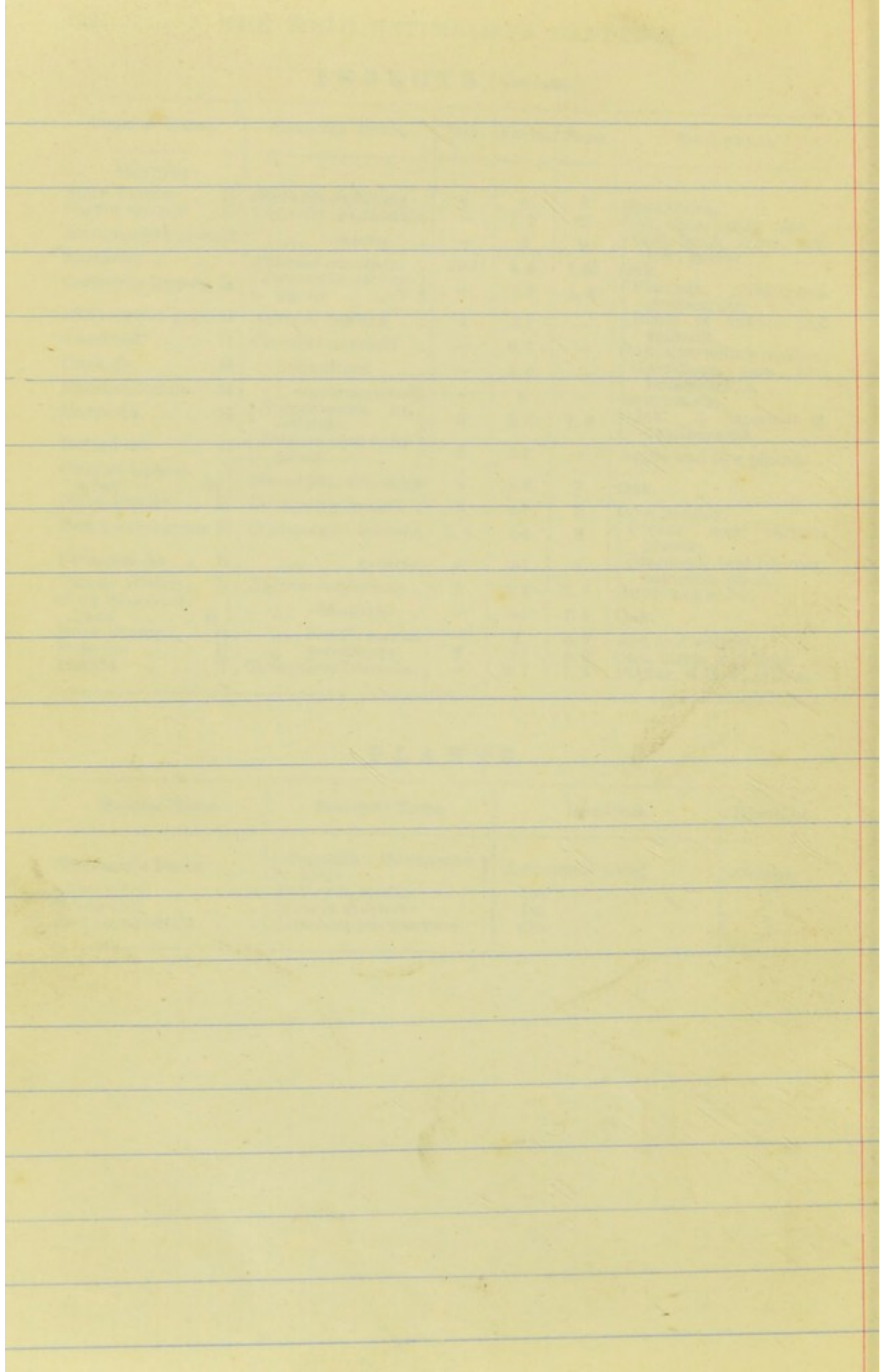
## PLANTS.

| Popular Name.        | Scientific Name.             | Localities.       | Duration. |
|----------------------|------------------------------|-------------------|-----------|
| Shepherd's Purse . . | { <i>Capsella Bursa-pas-</i> | A common weed . . | Annual.   |
| Chickweed . . .      | <i>toris</i> . . }           | Do. . . . .       | „         |
| Groundsel . . .      | <i>Stellaria media</i> . .   | Do. . . . .       | „         |
| Red Dead-nettle . .  | <i>Senecio vulgaris</i> . .  | Do. . . . .       | „         |
|                      | <i>Lamium purpureum</i> .    | Do. . . . .       | „         |











# INSECTS.

## LOCALITIES AND CAPTURING.

| Popular Name.                           | Scientific Name.                               | Where Found.   |
|---|--|--|
| <b>BUTTERFLIES.</b>                     |  |  |
| Swallow Tail . .                        | <i>Papilio Machaon</i> .                       | { Fens of Cambridgeshire, Norfolk, and Huntingdonshire.  |
| Wood White . .                          | { <i>Leucophasia si-</i><br><i>napis</i> . . } | Woods. Flies slowly. Local.  |
| Black-veined do. .                      | <i>Pieris crataegi</i> .                       | { Near woods. Local. Often mistaken, when flying, for <i>P. brassicae</i> .                              |
| Large do. . . .                         | " <i>brassicae</i> .                           | Gardens, fields, &c.   |
| Small do. . . .                         | " <i>rapae</i> .                               | Do. do.  |
| Green-veined do. .                      | " <i>napi</i> .                                | Do. do.  |
| Bath do. . . .                          | " <i>daphidice</i> .                           | { Has been occasionally captured in lucerne fields. Also in turnpike roads. Flies slowly.                |
| Orange Tip . .                          | { <i>Anthocharis car-</i><br><i>damines</i> }  | Fields, lanes, woods, &c.  |
| Brimstone . .                           | <i>Gonepteryx rhamni</i>                       | Gardens, fields, lanes, &c.  |
| Clouded Yellow .                        | <i>Colias Edusa</i> .                          | { Lucerne and clover fields and railway banks. Flies swiftly.  |
| Pale do. do., or }<br>Clouded Sulphur } | " <i>Hyale</i> .                               | Lucerne and clover fields. Flies swiftly.  |
| Silver - washed }<br>Fritillary }       | <i>Argynnis Paphia</i> .                       | { Woods. Fond of settling on brambles. S. at jasmine fl.   |
| Dark Green do. .                        | " <i>Aglaia</i> .                              | Woods and hillsides. Fond of fl. of thistle.   |
| Niobe do. . . .                         | " <i>Niobe</i> .                               | Hillsides. Very scarce.  |
| High Brown do. .                        | " <i>Adippe</i> .                              | { Woods and heaths, especially open paths in woods. Fond of fl. of bramble and jasmine.                  |
| Queen of Spain do.                      | " <i>Latona</i> .                              | Clover fields, woods, &c. Very scarce.   |
| Pearl-bordered do.                      | " <i>Euphrosyne</i>                            | { Woods and hedgerows. May be taken at fl. of bugle.   |
| Small Pearl-bor- }<br>dered do. }       | " <i>Selene</i> .                              | Do. do. do.  |
| Greasy or Marsh do.                     | <i>Melitæa Artemis</i> .                       | Damp woods, marshy meadows, &c.  |
| Glanville do. . .                       | " <i>Cinxia</i> .                              | { Chiefly Isle of Wight; also Folkestone, Birchwood, Dartford, Stapleford, Peterborough, &c. Very local. |
| Wood do. . . .                          | " <i>Athalia</i> .                             | Cleared places in woods, heaths, &c. Local.  |
| Comma . . . .                           | <i>Vanessa C-album</i> .                       | { Hopgrounds, woods, lanes, gardens, &c. May S. be taken at fl. of hemp-agrimony. Local.                 |
| Small Tortoiseshell                     | " <i>urticae</i> .                             | { Gardens, roadsides, fields, &c. All the butterflies of this genus are fond of fl. of thistle.          |
| Large do. . . .                         | " <i>polychloros</i>                           | Gardens, woods, &c.  |
| Camberwell Beauty                       | " <i>Antiope</i> .                             | At rotten fruit, &c. Very scarce.  |
| Peacock . . . .                         | " <i>Io</i> .                                  | Woods, lanes, fields, gardens, &c.   |
| Red Admiral . .                         | " <i>Atalanta</i> .                            | Gardens, lanes, fields, &c.  |
| Painted Lady . .                        | " <i>cardui</i> .                              | { Fond of clover fl. May often be taken in sheltered sand or gravel pits.                                |
| White Admiral .                         | <i>Limenitis Sibylla</i> .                     | { Oak woods in southern counties. Fond of fl. of bramble.  |
| Purple Emperor .                        | <i>Apatura Iris</i> .                          | { Oak woods. Is attracted to carrion and puddles. A dead cat in a puddle is a good bait.                 |
| Marbled White .                         | <i>Arge Galatea</i> .                          | { Wood clearings and meadows near woods. Very local.   |
| Mountain Ringlet.                       | <i>Erebia Epiphron</i> .                       | Damp places on mountains.  |



| Popular Name.               | Scientific Name.                            | Where Found.  |
|-----------------------------|---|---|
| <b>BUTTERFLIES.</b>         |   |   |
| Scotch do.                  | <i>Erebia Medea</i>                         | Mountains and moors in the North.   |
| Speckled Wood               | <i>Satyrus Egeria</i>                       | Woods and lanes.  |
| Wall Butterfly              | " <i>Megæra</i>                             | Lanes and fields.   |
| Grayling                    | " <i>Semele</i>                             | Hillsides, heaths, &c. Very local.  |
| Meadow Brown                | " <i>janira</i>                             | { Meadows, hillsides, and roadsides. Comes to fl. of bramble.                         |
| Large Heath, or Gatekeeper. | " <i>Tithonus</i>                           | { Heaths, dry fields, lanes, hedgerows, &c. Comes to bramble fl.                      |
| Ringlet                     | " <i>hyperanthus</i>                        | { Woods, shady lanes, &c. Comes to fl. of bramble.                                    |
| Marsh do.                   | <i>Cænonympha Davus</i>                     | Moors and marshy heaths in the North.   |
| Small Heath                 | " <i>Pamphilus</i>                          | { Heaths, meadows, downs, &c. Fond of fl. of bramble.                                 |
| Green Hairstreak.           | <i>Thecla rubi</i>                          | Hedges, woods, &c.  |
| Purple do.                  | " <i>quercus</i>                            | Oak woods. Flies high up, round tops of trees.  |
| White Letter do.            | " <i>W-album</i>                            | { Woods, &c. Fond of fl. of bramble and marjoram. Local.                              |
| Black do.                   | " <i>pruni</i>                              | Woods. Local.   |
| Brown do.                   | " <i>betulae</i>                            | Oak woods. Local.   |
| Large Copper                | { <i>Polyommatus</i><br><i>Hippothoe</i> }  | { Formerly in Cambridgeshire and Huntingdonshire fens. Probably now extinct.          |
| Small do.                   | " <i>Phlaeas</i>                            | Common everywhere.  |
| Long-tailed Blue            | <i>Lycæna bætica</i>                        | Has been recently taken near Brighton.  |
| Silver-studded do.          | " <i>Egon</i>                               | Heaths, commons, downs, &c. Local.  |
| Scotch Argus.               | " <i>Artaxerxes</i>                         | Not uncommon at Arthur's Seat, Edinburgh.   |
| Brown do.                   | " <i>Agestis</i>                            | Hills, fields, railway banks, &c.   |
| Common Blue                 | " <i>Alexis</i>                             | Fields, lanes, open spaces in woods, &c.  |
| Adonis do.                  | " <i>Adonis</i>                             | Chalk downs and limestone hills.  |
| Chalk-hill do.              | " <i>Corydon</i>                            | Do. do.   |
| Mazarine do.                | " <i>Acis</i>                               | Has been taken near Leominster. Very scarce.  |
| Little, or Bedford do.      | " <i>Alsus</i>                              | Railway banks, chalky downs, &c.  |
| Holly, or Azure do.         | " <i>Argiolus</i>                           | Woods and hedges. Fond of holly fl.   |
| Large do.                   | " <i>Arion</i>                              | { Dry fields, stone-quarries, &c. May be taken at fl. of bugle and thyme. Very local. |
| Duke of Burgundy Fritillary | <i>Nemeobius Lucina</i>                     | Woods. Fond of fl. of spurge. Local.  |
| Grizzled Skipper            | <i>Syrichthus alveolus</i>                  | Open spaces in woods, roadsides, &c.  |
| Dingy do.                   | <i>Thanaos tages</i>                        | { Hill-sides, dry banks, chalk pits, railway banks, &c.                               |
| Chequered do.               | <i>Hesperia paniscus</i>                    | Woods. Local.   |
| Large do.                   | " <i>sylvanus</i>                           | Grassy places in woods, roadsides, &c.  |
| Silver-spotted do.          | " <i>comma</i>                              | Hills, &c. Local.   |
| Small do.                   | " <i>linea</i>                              | Woods, fields, &c.  |
| Lulworth do.                | " <i>Actæon</i>                             | { Lulworth Cove, The "Burning Cliff" and Sidmouth, Devon.                             |
| <b>MOTHS.</b>               |   |   |
| Eyed Hawk                   | { <i>Smerinthus ocel-</i><br><i>latus</i> } | On tree trunks and palings. Comes to light.   |
| Poplar do.                  | " <i>populi</i>                             | { Tree-trunks and palings. Comes to light, and may be taken commonly at street lamps. |
| Lime do.                    | " <i>tiliæ</i>                              | Tree-trunks and palings. Comes to light.  |
| Death's Head do.            | <i>Acherontia atropos</i>                   | On palings, &c. S. comes to light.  |
| Convolvulus do.             | <i>Sphinx convolvuli</i>                    | { Hovers over flowers, especially petunias, at dusk. S. comes to light.               |
| Privet do.                  | " <i>ligustri</i>                           | { Palings, and hovering over flowers. Is fond of fl. of honeysuckle.                  |
| Spotted Elephant do.        | { <i>Deilephila Eu-</i><br><i>phorbiæ</i> } | On the coast.   |
| Madder do.                  | " <i>galii</i>                              | Do. S. comes to light.  |
| Silver-striped do.          | " <i>lineata</i>                            | { Has been taken hovering over flowers at dusk. Very rare.                            |
| Sharp-winged do.            | { <i>Chærocampa ce-</i><br><i>lerio</i> }   | Do. do.   |
| Small Elephant do.          | " <i>porcellus</i>                          | { Hovers over fl. at dusk, especially valerian and honeysuckle. S. comes to treacle.  |
| Large Elephant do.          | " <i>elpenor</i>                            | Hovers over flowers at dusk. Comes to light.  |
| Oleander do.                | " <i>nerii</i>                              | { Has only been taken two or three times in Great Britain.                            |



| Popular Name.              | Scientific Name.                              | Where Found.   |
|----------------------------|---|--|
| <b>MOTHS.</b>              |   |  |
| Humming-bird do.           | { <i>Macroglossa stel-</i><br><i>atarum</i> } | { Flies in day and evening. Hovers over<br>flowers. Comes to light.  |
| Broad-bordered<br>Bee do.  | { „ <i>fuciformis</i> }                       | Flies in sunshine, and hovers over flowers.  |
| Narrow-bordered<br>Bee do. | { „ <i>bombylifformis</i> }                   | Do. do.  |
| Apple Clearing             | <i>Sesia myopæformis</i>                      | { On apple and pear trees, &c., and on ground<br>and palings near. S. comes to fl. of privet.              |
| Red-belted do.             | „ <i>culiciformis</i>                         | On birch.  |
| Willow do.                 | „ <i>formicæformis</i> .                      | { Flies in sunshine in or near osier beds.<br>Sometimes sits on leaves.                                    |
| Ruby do.                   | „ <i>chrysidiformis</i> .                     | { Flies in sunshine on S.E. coast. May be<br>taken at fl. of Viper's Bugloss.                              |
| Ichneumon do.              | { „ <i>ichneumoni-</i><br><i>formis</i> }     | On rushes, &c. Hovers over fl.   |
| Yellow-belted do.          | „ <i>cynipiformis</i>                         | On oak, at rest.   |
| Thrift do.                 | „ <i>muscæformis</i>                          | Among sea pink, on coast.  |
| Currant do.                | „ <i>tipuliformis</i>                         | { Among currant bushes. Flies in sunshine.<br>S. comes to fl. of privet.                                   |
| Orange-tailed do.          | „ <i>andreniformis</i> .                      | Has been occasionally beaten from bushes, &c.  |
| Orange do.                 | „ <i>scolicæformis</i>                        | On birch trunks.   |
| Sphex do.                  | „ <i>sphegiformis</i>                         | On alder, and hovers over fl.  |
| Dusky do.                  | „ <i>asiliiformis</i>                         | Has been occasionally beaten from bushes, &c.  |
| Lunar Hornet do.           | „ <i>bembeciformis</i>                        | Among willows and osiers.  |
| Hornet do.                 | „ <i>apiformis</i> .                          | On poplars. Looks very like a hornet.  |
| Reed Moth                  | { <i>Macrogaster</i><br><i>arundinis</i> }    | { Among reeds. Emerges from the pupa about<br>10 p.m., and may then be found sitting on<br>the reed-stems. |
| Wood Leopard               | <i>Zeuzera Æsculi</i>                         | { On tree-trunks and palings. Flies at dusk.<br>Comes to light.  |
| Goat Moth                  | <i>Cossus ligniperda</i>                      | On tree-trunks and palings.  |
| Golden Swift               | <i>Heptalus hectus</i>                        | Flies at dusk.   |
| Livid do.                  | „ <i>lupulinus</i>                            | Flies at dusk. Comes to light.   |
| Orange do.                 | „ <i>sylvinus</i>                             | Do. do.  |
| Northern do.               | „ <i>velleda</i>                              | On walls and birch trunks.   |
| Ghost do.                  | „ <i>humuli</i>                               | Flies at dusk, in fields, &c.  |
| Tinsel Moth                | <i>Limacodes asellus</i>                      | New Forest.  |
| Festoon Moth               | „ <i>testudo</i>                              | Can be beaten from oak. ♂ flies in sunshine.   |
| Green Forester             | <i>Procris statice</i>                        | Borders of woods and in damp meadows.  |
| Scarce do.                 | „ <i>geryon</i> .                             | Grassy hill-sides. Flies in sunshine.  |
| Blue-green do.             | „ <i>globulariæ</i> .                         | Grassy places. Very local.   |
| Transparent Bur-<br>net    | <i>Zygæna minos</i> .                         | { Flies in sunshine. Rests on flowers. Very<br>local.  |
| Irish do.                  | „ <i>nubigena</i>                             | Flies in sunshine. Very local.   |
| Scotch do.                 | „ <i>exulans</i>                              | { Scotland. Very local. Has been most com-<br>monly taken on high ground near Perth.                       |
| Trefoil do.                | „ <i>trifolii</i>                             | Flies in sunshine.   |
| New Forest do.             | „ <i>meliloti</i>                             | New Forest.  |
| Five-spot do.              | „ <i>loniceræ</i>                             | Flies in sunshine.   |
| Six-spot do.               | „ <i>filipendulæ</i> .                        | Do.  |
| Handmaid                   | <i>Syntomis phegea</i>                        | Old ramparts.  |
| Ribbon Bar                 | <i>Nactia ancilla</i>                         | Very scarce. In flowery woods.   |
| Dotted do.                 | <i>Nola cucullatella</i>                      | On tree-trunks and palings.  |
| Scarce Dotted do.          | „ <i>confusalis</i>                           | Do.  |
| Scarce Black do.           | „ <i>strigula</i>                             | On oak trunks.   |
|                            | „ <i>centonalis</i>                           | { Has been beaten from blackthorn. Very<br>scarce.   |
| Kentish do.                | „ <i>albulalis</i> .                          | { Has been taken among young ash-trees in<br>Kent.   |
| Scarce Muslin              | <i>Nudaria senex</i>                          | Wet places. Flies after dark.  |
| Muslin                     | „ <i>mundana</i>                              | Beaten from weeds, &c., against stone walls.   |
| Dew Lackey                 | <i>Setina irrorella</i>                       | On coast.  |
| Rose Wing                  | <i>Calligenia miniata</i>                     | Beaten from trees.   |
| Four Spotted<br>Footman    | <i>Lithosia mesomella</i>                     | On tree-trunks, &c.  |
| Pearl do.                  | „ <i>muscerda</i>                             | In fens.   |
| Orange do.                 | „ <i>aureola</i>                              | { High up on larch trunks. Can also be beaten<br>from trees.   |
| Small do.                  | „ <i>pygmæola</i>                             | Deal. Kent.  |
| Scarce do.                 | „ <i>caniola</i>                              | Cliffs of Howth. Flies at dusk. Comes to light.  |



| Popular Name.                  | Scientific Name.                            | Where Found.   |
|--------------------------------|---|--|
| <b>MOTHS.</b>                  |   |  |
| Buff Footman .                 | <i>Lithosia deplana</i> .                   | Can be beaten from trees.  |
| Common do. .                   | " <i>lurideola</i> .                        | At flowers.  |
| Leaden Footman .               | " <i>molybdeola</i> .                       | { Has been taken among willows in the North.   |
| Scarce do. .                   | " <i>complanata</i> .                       | Flies at dusk. Comes to heather fl.  |
| Dun do. .                      | " <i>griseola</i> .                         | At flowers.  |
| Straw do. .                    | " <i>stramineola</i> .                      | In damp places.  |
| Large do. .                    | " <i>quadra</i> .                           | { Can be beaten from oak and fir. Comes to flowers.  |
| Red-necked do. .               | " <i>rubricollis</i> .                      | Flies in sunshine.   |
| Feathered do. .                | <i>Eulepia grammica</i> .                   | Heaths, &c.  |
| Grey do. .                     | " <i>cribrum</i> .                          | Do.  |
| Crimson speckled do. .         | <i>Deiopeia pulchella</i> .                 | Flies by day in stubble fields, &c. Scarce.  |
| Cinnabar Moth .                | { <i>Callimorpha Ja-</i><br><i>cobea</i> }  | Gardens, fields, &c. Flies in sunshine.  |
| Scarlet Tiger .                | " <i>dominula</i> .                         | At rest.   |
| Clouded Buff .                 | { <i>Euthemonia rus-</i><br><i>sula</i> }   | Heaths.  |
| Wood Tiger .                   | { <i>Chelonia planta-</i><br><i>ginis</i> } | On hills and in woods.   |
| Common do. .                   | " <i>caja</i> .                             | { Gardens, palings, &c., at rest. Comes to light.  |
| Cream-spot do. .               | " <i>villica</i> .                          | Comes to light. May be found on palings.   |
| Ruby do. .                     | <i>Arctia fuliginosa</i> .                  | Comes to light.  |
| Spotted Muslin .               | " <i>mendica</i> .                          | Do.  |
| Buff Ermine .                  | " <i>lubricipeda</i> .                      | { Gardens, &c. Comes to light. Can be found on palings.  |
| White do. .                    | " <i>menthastri</i> .                       | Do. do. do.  |
| Water do. .                    | " <i>urtice</i> .                           | Wet places. Comes to light.  |
| Brown Tail .                   | { <i>Liparis chry-</i><br><i>sorrhæa</i> }  | At rest.   |
| Gold Tail. .                   | " <i>auriflua</i> .                         | Palings, hedges, trees, &c.  |
| Satin .                        | " <i>salicis</i> .                          | { On trunks of willows and poplars, and palings near.  |
| Gipsy .                        | " <i>dispar</i> .                           | Mostly bred from the egg.  |
| Black Arches. .                | " <i>monacha</i> .                          | At rest.   |
| Hop Dog, or<br>Light Tussock } | <i>Orgyia pudibunda</i> .                   | Palings, gardens, &c. Flies about 11 p.m.  |
| Dark Tussock .                 | " <i>fascelina</i> .                        | Heaths, &c.  |
| Whittlesea Er-<br>mine }       | " <i>cænosa</i> .                           | Marshes and fens.  |
| Scarce Vapourer .              | " <i>gonostigma</i> .                       | Very local. ♂ flies at dusk. ♀ wingless.   |
| Common do. .                   | " <i>antiqua</i> .                          | { ♂ flies in sunshine. ♀ (wingless) on palings and trees, sitting on cocoon.   |
| Nut Tree Tussock               | <i>Demas coryli</i> .                       | Beech woods, &c.   |
| Grey Eggar .                   | <i>Trichiura cratægi</i> .                  | Flies in the early evening.  |
| December Moth .                | { <i>Pæcilocampa po-</i><br><i>puli</i> }   | Palings, oak trunks, &c. Comes to light.   |
| Small Eggar .                  | { <i>Eriogaster lanestris</i> }             | Tree-trunks.   |
| Lackey .                       | <i>Bombyx neustria</i> .                    | Comes to light. Noisy when boxed.  |
| Coast do. .                    | " <i>castrensis</i> .                       | At rest. On S.E. coast.  |
| Fox Moth .                     | " <i>rubi</i> .                             | Heaths, &c.  |
| Oak Eggar .                    | " <i>roboris</i> .                          | { ♂ Can be attracted by a newly bred ♀. Noisy if boxed.  |
| Northern do. .                 | " <i>quercus</i> .                          | Heaths, &c.  |
| Grass do. .                    | " <i>trifolii</i> .                         | Near the coast.  |
| Drinker .                      | <i>Odonestis potatoria</i> .                | { At rest, among coarse grasses. Comes to light.   |
| Lappet .                       | { <i>Lasiocampa</i><br><i>quercifolia</i> } | Hedges, trees, &c. Comes to light.   |
| Small do. .                    | " <i>ilicifolia</i> .                       | At rest on moors. Scarce.  |
| Kentish Glory .                | { <i>Endromis versi-</i><br><i>color</i> }  | { Flies by day. ♂ can be attracted by a newly-bred ♀.  |
| Emperor Moth .                 | <i>Saturnia carpini</i> .                   | Heaths and open places. Flies in sunshine.   |
| Swallow-tail Moth.             | { <i>Uropteryx sam-</i><br><i>bucata</i> }  | { Flies at dusk and for a short time after dark. Can be beaten from bushes and ivy, &c., during day. Comes to light. |
| Bordered Beauty .              | <i>Epione vespertaria</i> .                 | Flies in early evening.  |



| Popular Name.         | Scientific Name.  | Where Found.   |
|-----------------------|---|--|
| <b>MOTHS.</b>         |   |  |
| Dark Bordered Beauty  | <i>Epione apiciaria</i>   | { Flies at dusk along hedges, &c. May be beaten during day.                              |
| Little Thorn          | " <i>advenaria</i>  | { In woods.  |
| Brimstone Moth        | <i>Rumia crataegata</i>   | { Hedges, &c. Comes to light. Can be taken on palings.                                   |
| Spotted Yellow        | <i>Venilia maculata</i>   | { Woods. Can be beaten from bushes.  |
| Orange Moth           | <i>Angerona prunaria</i>  | { Woods. Flies in sunshine and at dusk.  |
| Light Emerald         | { <i>Metrocampa margaritata</i>   | { Hedges, &c. May be beaten.   |
| Barred Red            | <i>Ellopiia fasciaria</i>   | { Can be beaten from fir. Flies at night.  |
| Scorched Wing         | { <i>Eurymene dolo-</i><br><i>braria</i>                                | { Woods. Can be beaten from oak.   |
| Lilac Beauty          | { <i>Pericallia sy-</i><br><i>ringaria</i>                              | { Gardens and woods. Can be beaten from bushes. Hovers over flowers at dusk.             |
| Early Thorn           | <i>Selenia illunaria</i>  | { At rest, on trees, palings, &c. Comes to light.  |
| Lunar do.             | " <i>lunaria</i>  | { Woods. Also at rest on palings, &c.  |
| Purple do.            | " <i>illustraria</i>  | { Do. do.  |
| Scalloped Hazel       | { <i>Odontopera bi-</i><br><i>dentata</i>                               | { On tree-trunks and palings. Comes to light.  |
| Scalloped Oak         | <i>Crocallis elinguarua</i>   | { Hedges, tree-trunks, and palings. Comes to light.                                      |
| Large Thorn           | <i>Ennomos alniaria</i>   | { Has been taken three or four times only in Great Britain.                              |
| Canary-shouldered do. | " <i>tiliaria</i>   | { Tree-trunks, &c. Comes to light.   |
| Dusky do.             | " <i>fuscantaria</i>  | { Do. do.  |
| September do.         | " <i>erosaria</i>   | { Do. do.  |
| August do.            | " <i>angularia</i>  | { Do. do.  |
| Feathered do.         | <i>Himera pennaria</i>  | { Woods. At rest on trees, &c. Comes to light.   |
| Pale Brindled Beauty  | <i>Phigalia pilosaria</i>   | { Tree-trunks and palings. Comes to light. ♀ wingless.                                   |
| Belted Beauty         | <i>Nyssia zonaria</i>   | { Very local, having only been taken in two or three localities in Cheshire. ♀ wingless. |
| Small Brindled Beauty | " <i>hispidaria</i>   | { Oak-trunks. ♀ wingless.  |
| Brindled Beauty       | <i>Biston hirtaria</i>  | { Tree-trunks and palings. Comes to light. Very common in London squares.                |
| Oak Beauty            | { <i>Amphidasis pro-</i><br><i>dromaria</i>                             | { At rest on tree-trunks and palings.  |
| Peppered Moth         | " <i>betularia</i>  | { Tree-trunks and palings. Comes to light.   |
| Waved Umber           | { <i>Hemerophila ab-</i><br><i>ruptaria</i>                             | { Palings, tree-trunks, &c. Comes to light.  |
| Widower               | <i>Cleora viduaria</i>  | { On oak-trunks, in the New Forest and in Sussex.  |
| Dotted Beauty         | " <i>glabraria</i>  | { On fir trees, in the New Forest and the Lake District.                                 |
| Brussels Lace         | " <i>lichenaria</i>   | { Oak trunks.  |
| Mottled Beauty        | <i>Boarmia repandata</i>  | { Tree-trunks, palings, &c., and at treacle.   |
| Willow do.            | " <i>rhomboidaria</i>   | { Do. Flies at dusk, and comes to light.   |
| Satin Beauty          | " <i>perfumaria</i>   | { Tree-trunks.   |
| Ringed Beauty         | " <i>abietaria</i>  | { Do., in pine forests.  |
| Great Oak do.         | " <i>cinctaria</i>  | { Tree-trunks, &c.   |
| Pale Oak do.          | " <i>roboraria</i>  | { Oak-trunks. Local.   |
| Square Spot Engrailed | " <i>consortaria</i>  | { Tree-trunks. Local.  |
| Engrailed             | { <i>Tephrosia conso-</i><br><i>naria</i>                               | { Do. do.  |
| Pale do.              | " <i>crepuscularia</i>  | { Palings and tree-trunks. Comes to light.   |
| Brindled White Spot   | " <i>biundularia</i>  | { Do. do.  |
| Grey Birch            | " <i>extersaria</i>   | { At Treacle. Local.   |
| Annulet               | " <i>punctulata</i>   | { Tree-trunks, &c. May be beaten from bushes during day.                                 |
| Scotch do.            | <i>Gnophos obscurata</i>  | { Flies by day. Local.   |
| Black Mountain Moth   | <i>Dasydia obfuscata</i>  | { Heaths on Scotch mountains.  |
| Scarce Birch          | <i>Psodos trepidaria</i>  | { Scotch mountains. Flies by day.  |
| Obscure do.           | { <i>Mniophila cineraria</i><br><i>Boletobia fulig-</i><br><i>naria</i> | { Very scarce.<br>Comes to light.  |



| Popular Name.                        | Scientific Name.                    | Where Found.   |
|--------------------------------------|-------------------------------------|--|
| MOTHS.                               |                                     |  |
| Grass Emerald .                      | { <i>Pseudoterpna cytisaria</i> . } | { Flies at dusk. Can be beaten from broom, &c., in daytime. Soon fades. }                      |
| Large do. . .                        | { <i>Geometra papi-lionaria</i> . } | { Flies at dusk. Can be beaten from trees and bushes during day. Comes to light. Soon fades. } |
| Essex do. . .                        | „ <i>smaragdaria</i> .              | On Kent and Essex coasts.  |
| Small Grass do. .                    | <i>Nemoria veridata</i> .           | { Fens and New Forest. Flies by day. Comes to fl. of heather. }                                |
| Clematis do. . .                     | <i>Iodis vernaria</i> .             | { Can be beaten from bushes during day. Comes to light. Soon fades. }                          |
| Little do. . .                       | „ <i>lactearia</i> .                | Woods. Flies by day. Soon fades.   |
| Blotched do. . .                     | { <i>Phorodesma bajularia</i> . }   | { Can be beaten from bushes and trees during day. Flies at dusk. Comes to light. Soon fades. } |
| Dark do. . .                         | { <i>Hemithea thy-miaria</i> . }    | { Hedges, &c. May be beaten ; also comes to light. Soon fades. }                               |
| False Mocha . .                      | <i>Ephyra porata</i> .              | { Can be beaten from bushes during day. Flies at dusk. }                                       |
| Maiden's Blush .                     | „ <i>punctaria</i> .                | Do.  |
| Clay Treble Lines.                   | „ <i>trilinearia</i> .              | Do.  |
| Mocha . . .                          | „ <i>omicronaria</i>                | Do.  |
| Dingy do. . .                        | „ <i>orbicularia</i>                | Do.  |
| Birch do. . .                        | „ <i>pendularia</i>                 | Do.  |
| Purple Bordered Gold                 | <i>Hyria auroraria</i> .            | Fens, &c. Flies in sunshine.   |
| Small Yellow Wave                    | <i>Asthena luteata</i> .            | { Woods. Can be beaten from bushes during day. Flies at dusk. }                                |
| Small White do. .                    | „ <i>candidata</i> .                | Do. do. do.  |
| Waved Carpet . .                     | „ <i>sylvata</i> .                  | Woods. Flies at dusk about small oak trees.  |
| Blomer's Wave . .                    | „ <i>Blomeraria</i>                 | Wooded hill-sides. Local.  |
| Dingy Shell . . .                    | { <i>Eupisteria hepa-rata</i> . }   | Near alder. Can be beaten during day.  |
| Welsh Wave . . .                     | { <i>Venusia cambri-caria</i> . }   | At rest, on rocks in the north.  |
| Brown do. . .                        | <i>Acidalia ochrata</i> .           | On Kent and Essex coasts.  |
| Tawny Red Wave                       | „ <i>perochraria</i>                | Near Redhill.  |
| Single Dotted do. .                  | „ <i>rubricata</i> .                | Heaths and coast sand-hills. Flies at dusk.  |
| Treble Brown }<br>Spotted do. . }    | „ <i>scutulata</i> .                | Hedges. Also palings.  |
| Small Bordered do.                   | „ <i>bisetata</i> .                 | Do. do.  |
| Allied do. . .                       | „ <i>trigeminata</i>                | Palings, &c.   |
| London do. . .                       | „ <i>contiguaria</i>                | Bangor, Conway, &c.  |
| Pretty do. . .                       | „ <i>herbariata</i> .               | Has been found in herbalists' shops.   |
| Bone do. . .                         | „ <i>rusticata</i> .                | { Northfleet, Kent, and Isle of Portland. Comes to light. }                                    |
| Dark Cream do. .                     | „ <i>osseata</i>                    | Palings, &c.   |
| Silky do. . .                        | „ <i>interjectaria</i>              | Flies at dusk about the bottom of hedges.  |
| Small Dusky do. .                    | „ <i>holosericata</i>               | Bristol and Thetford.  |
| Ringed do. . .                       | „ <i>incanata</i> .                 | Palings, walls, &c.  |
| Lace Border . . .                    | „ <i>circellata</i> .               | Manchester.  |
| Mullein Wave . .                     | „ <i>ornata</i> .                   | Grassy hills.  |
| Dotted - bordered }<br>Cream do. . } | „ <i>promutata</i> .                | Woods. Also on palings.  |
| Satin Wave . . .                     | „ <i>straminata</i>                 | Flies over heaths at dusk. Local.  |
| Lesser Cream Wave                    | „ <i>mancuniata</i>                 | Flies about hedges at night.   |
| Cream do. . .                        | „ <i>subsericeata</i>               | Beaten from wild rose.   |
| Smoky do. . .                        | „ <i>strigaria</i> .                | Bushes, on hills.  |
| Sub-angled do. .                     | „ <i>immutata</i> .                 | Fens, &c.  |
| Small Blood Vein .                   | „ <i>remutata</i> .                 | Woods. Also palings.   |
| Pink Wave . . .                      | „ <i>fumata</i> .                   | Heaths in the North.   |
| Ribbon do. . .                       | „ <i>strigilata</i> .               | Folkestone.  |
| Plain do. . .                        | „ <i>imitaria</i> .                 | Isle of Portland.  |
| Portland Ribbon }<br>do. . }         | „ <i>emutaria</i> .                 | { Salt marshes of Kent and Norfolk ; also in New Forest. Flies at dusk. }                      |
| Small Scallop . .                    | „ <i>aversata</i> .                 | Woods, &c., and on palings.  |
|                                      | „ <i>inornata</i> .                 | At rest on fir trunks. Flies at dusk.  |
|                                      | „ <i>degeneraria</i>                | At rest in Isle of Portland.   |
|                                      | „ <i>emarginata</i>                 | May be beaten from bushes, &c.   |



| Popular Name.                                   | Scientific Name.   | Where Found.  |
|---|--|---|
| <b>MOTHS.</b>                                   |  |   |
| Blood Vein . . .                                | { <i>Timandra ama-</i><br><i>taria</i> . . . }           | { Lanes, fields, woods, &c. Can be beaten from<br>bushes during day. Comes to light.                                    |
| Common White<br>Wave . . .                      | <i>Cabera pusaria</i> . . .                              | { Woods. Can be beaten from bushes during<br>day.   |
| Round-winged<br>White do. . .                   | „ <i>rotundaria</i> . . .                                | Among birch trees. Scarce.  |
| Dingy White . . .                               | „ <i>exanthemaria</i> . . .                              | Woods. Can be beaten from bushes during day.  |
| Clouded Silver . . .                            | <i>Corycia temerata</i> . . .                            | Do. do.   |
| Spotted Pinion . . .                            | „ <i>taminata</i> . . .                                  | Do. do. May also be taken on palings.   |
| Grey Carpet . . .                               | <i>Alucis pictaria</i> . . .                             | At fl. of sloe.   |
| Sharp-angled<br>Peacock . . .                   | <i>Macaria alternata</i> . . .                           | Woods. Local.   |
| Peacock . . .                                   | „ <i>notata</i> . . .                                    | { Woods. Can be beaten from bushes during<br>day. Also on palings.  |
| Tawny Barred<br>Angle . . .                     | „ <i>liturata</i> . . .                                  | Can be beaten from larch and pine.  |
| V. Moth . . .                                   | <i>Halia vauaria</i> . . .                               | Gardens and palings. Flies at dusk.   |
| Latticed Heath . . .                            | <i>Strenia clathrata</i> . . .                           | Clover and sainfoin fields. Flies by day.   |
| Brown Silver Line . . .                         | <i>Panagra petrarica</i> . . .                           | Heaths, &c. Flies by day.   |
| Barred Umber . . .                              | { <i>Numeria pul-</i><br><i>veraria</i> . . . }          | Woods. Can be beaten from bushes during day.  |
| Grey Scalloped<br>Bar . . .                     | <i>Scodinoa belgiaria</i> . . .                          | Heaths.   |
| Bordered Grey . . .                             | { <i>Selidosema plu-</i><br><i>maria</i> . . . }         | Do. Local.  |
| Netted Mountain<br>Moth . . .                   | <i>Fidonia carbonaria</i> . . .                          | Among heather, in the North.  |
| Common Heath<br>Moth . . .                      | „ <i>atomaria</i> . . .                                  | Fields, woods, heaths, &c. Flies in sunshine.   |
| Bordered White . . .                            | „ <i>pinaria</i> . . .                                   | Flies in sunshine, round fir trees.   |
| Rannoch Looper . . .                            | „ <i>pinetaria</i> . . .                                 | Scotch heaths. Flies in sunshine.   |
| Frosted Yellow . . .                            | „ <i>conspicua</i> . . .                                 | On broom. Only found in Suffolk.  |
| Drab Looper . . .                               | <i>Minoa euphorbiata</i> . . .                           | Woods in the South.   |
| Black Veined . . .                              | <i>Scoria dealbata</i> . . .                             | Flies in the sunshine. Local.   |
| Belle . . .                                     | <i>Sterrhia sacraria</i> . . .                           | { Has been taken at fl., at light, and at treacle.<br>Also flies by day.  |
| Purple Bar . . .                                | { <i>Lythria purpu-</i><br><i>raria</i> . . . }          | Dry hills in the North. Flies by day. Scarce.   |
| Rest Harrow . . .                               | <i>Aplasta ononaria</i> . . .                            | Among rest-harrow.  |
| Grass Wave . . .                                | { <i>Aspilates strigil-</i><br><i>laria</i> . . . }      | Heaths.   |
| Yellow Belle . . .                              | „ <i>citraria</i> . . .                                  | { Among wild carrot and in clover fields,<br>especially near coast.   |
| Straw do. . .                                   | „ <i>gilvaria</i> . . .                                  | May be beaten.  |
| Magpie, Currant,<br>or Gooseberry<br>Moth . . . | { <i>Abraxas grossu-</i><br><i>lariata</i> . . . }       | { Gardens, hedges, &c. Also on palings. May<br>be beaten during day.  |
| Clouded Magpie . . .                            | „ <i>ulmata</i> . . .                                    | Woods, near wych elms. Can be beaten.   |
| Scorched Carpet . . .                           | <i>Ligdia adustata</i> . . .                             | Woods. Can be beaten from bushes during day.  |
| Clouded Border . . .                            | { <i>Lomaspilis mar-</i><br><i>ginata</i> . . . }        | Do. do.   |
| Horse Chestnut . . .                            | { <i>Pachynemias hip-</i><br><i>pocastanaria</i> . . . } | Among heather. Flies after dark.  |
| Early Moth . . .                                | { <i>Hibernia rupi-</i><br><i>capraria</i> . . . }       | { Palings and tree-trunks. ♂ comes to light.<br>♀ wingless.   |
| Spring Usher . . .                              | „ <i>leucophearia</i> . . .                              | { Palings, tree-trunks, hedges, &c. Very fond<br>of tarred palings. ♂ comes to light, and s.<br>to willows. ♀ wingless. |
| Golden Umber . . .                              | „ <i>aurantiaria</i> . . .                               | Palings and tree-trunks. ♀ wingless.  |
| Dotted Border . . .                             | „ <i>progemma</i> . . .                                  | { Palings, tree-trunks, hedges, &c. ♂ comes to<br>light and s. to willows. ♀ wingless.                                  |
| Mottled Umber . . .                             | „ <i>defoliaria</i> . . .                                | { Palings, tree-trunks, &c. ♂ comes to light.<br>♀ wingless.  |
| March Moth . . .                                | { <i>Anisopteryx æs-</i><br><i>cularia</i> . . . }       | { Palings, tree-trunks, hedges, &c. ♂ comes to<br>light and s. to willows. ♀ wingless.                                  |
| Winter Moth . . .                               | { <i>Cheimatobia bru-</i><br><i>mata</i> . . . }         | { Palings, tree-trunks, hedges, &c. ♂ comes to<br>light. ♀ wingless.  |
| Northern do. do. . .                            | „ <i>boreata</i> . . .                                   | Among birch. ♀ wingless.  |
| November Moth . . .                             | <i>Oporabia dilutata</i> . . .                           | { Palings, tree-trunks, &c. Comes to light.<br>♀ wingless.  |



| Popular Name.          | Scientific Name.           | Where Found.                                |
|------------------------|----------------------------|---|
| <b>MOTHS.</b>          |                            |   |
| Autumnal Moth . . .    | <i>Oporabia filigram-</i>  | On stems of heath and dwarf willow, in the  |
| Twin-spot Carpet . . . | <i>maria</i> . . .         | North.                                      |
| Mottled Grey . . .     | <i>Larentia didymata</i>   | Tree-trunks, &c., at rest.                  |
| February Carpet . . .  | <i>multistrigaria</i>      | Bottoms of palings.                         |
| Yellow-ringed do. . .  | <i>casata</i> . . .        | Scotland. Comes to treacle.                 |
| Striped Twin-spot      | <i>ruficinctata</i> . . .  | Woods in the North.                         |
| do. . . . .            | <i>salicata</i> . . .      | { May be beaten from bushes, &c. Comes to   |
| Beech Green do. . .    | <i>olivata</i> . . .       | light.                                      |
| Mottled Green do. . .  | <i>pectinaria</i> . . .    | Woods.                                      |
| Rivulet . . . . .      | <i>Emmelesia affini-</i>   | Hedges, &c. Comes to treacle.               |
| Small do. . . . .      | <i>tata</i> . . .          | Can be beaten from bushes, &c.              |
| Grass do. . . . .      | <i>alchemillata</i>        | Flies at dusk about whitethorn, in fens.    |
| Sandy do. . . . .      | <i>albulata</i> . . .      | Among yellow rattle.                        |
| Barred do. . . . .     | <i>decolorata</i> . . .    | Flies at dusk; at fl. of white campion.     |
| Single Barred do. . .  | <i>taeniata</i> . . .      | Lake district, &c.                          |
| Heath do. . . . .      | <i>unifasciata</i> . . .   | Comes to light. Local.                      |
| Pretty Pinion. . . .   | <i>erictata</i> . . .      | Flies by day. At fl. on heaths, &c.         |
| Netted Pug . . . . .   | <i>blandiata</i> . . .     | Hills, &c.                                  |
| Pinion Spotted do. . . | <i>Eupithecia venosata</i> | { Palings, &c., and among campions. Nearly  |
| Beautiful do. . . . .  | <i>consignata</i> . . .    | all this genus come to light.               |
| Red do. . . . .        | <i>linariata</i> . . .     | On trunks of apple-trees in orchards, &c.   |
| Lime-speck do. . . .   | <i>pulchellata</i> . . .   | Among toadflax.                             |
| Bordered Lime-         | <i>centaureata</i> . . .   | Among foxglove.                             |
| speck do. . . . .      | <i>succenturiata</i>       | Palings, &c.                                |
| Valerian do. . . . .   | <i>valerianata</i> . . .   | May be beaten from hawthorn.                |
| Rufous do. . . . .     | <i>subfulvata</i> . . .    | Among valerian.                             |
| Small Brindled do. . . | <i>subumbrata</i> . . .    | At fl. Comes to light and treacled flowers. |
| Guenée's do. . . . .   | <i>pernotata</i> . . .     | Cambridgeshire and Yorkshire.               |
| Lead do. . . . .       | <i>plumbeolata</i> . . .   | Scarce.                                     |
| Haworth's do. . . . .  | <i>isogrammata</i>         | Comes to light.                             |
| Dwarf do. . . . .      | <i>pygmaea</i> . . .       | { Common among clematis. May be beaten      |
| Swiss do. . . . .      | <i>helveticata</i> . . .   | from hedges containing that plant.          |
| Freyer's do. . . . .   | <i>arceuthata</i> . . .    | Flies in sunshine, settles on low flowers.  |
| Beech do. . . . .      | <i>satyrata</i> . . .      | Among juniper, near Edinburgh, &c.          |
| Pauper do. . . . .     | <i>egenaria</i> . . .      | Flies among juniper and savine.             |
| Grey do. . . . .       | <i>castigata</i> . . .     | Open spaces in beech woods.                 |
| Triple-spotted do. . . | <i>trisignata</i> . . .    | { Scarce. Occurs in Buckinghamshire, and in |
| Larch do. . . . .      | <i>lariciata</i> . . .     | the Cambridgeshire fens.                    |
| Golden Rod do. . . .   | <i>virgaureata</i> . . .   | Palings, &c.                                |
| White-spot do. . . . . | <i>albipunctata</i> . . .  | Damp places, among wild angelica.           |
| Spruce do. . . . .     | <i>pusillata</i> . . .     | Among larch.                                |
| Marbled do. . . . .    | <i>irriguata</i> . . .     | Among golden rod.                           |
| Burnet do. . . . .     | <i>pimpinellata</i>        | Damp places, among wild angelica.           |
| Ash do. . . . .        | <i>fraxinata</i> . . .     | Among spruce.                               |
| Ochreous do. . . . .   | <i>extensaria</i> . . .    | On trunks of birch and oak. Can be beaten.  |
| Ribbed do. . . . .     | <i>indigata</i> . . .      | Among burnet saxifrage.                     |
| Narrow-winged          | <i>constrictata</i> . . .  | Among ash.                                  |
| do. . . . .            | <i>nanata</i> . . .        | Has been taken near Hull.                   |
| Plain do. . . . .      | <i>subnotata</i> . . .     | In fir woods.                               |
| Harebell do. . . . .   | <i>campanulata</i>         | { Among wild thyme, on chalk and limestone  |
| Common do. . . . .     | <i>vulgata</i> . . .       | downs. Rests on limestone rocks.            |
| Large Pale do. . . . . | <i>expallidata</i> . . .   | On heaths. Also palings.                    |
| Wormwood do. . . . .   | <i>absynthiata</i> . . .   | Banks of rivers, &c.                        |
| Small Wormwood         | <i>minutata</i> . . .      | At fl. in woods.                            |
| do. . . . .            | <i>assimilata</i> . . .    | Palings, &c.                                |
| Currant do. . . . .    | <i>tenuiata</i> . . .      | Among golden rod in Kentish woods.          |
| Slender do. . . . .    | <i>subciliata</i> . . .    | Common everywhere. Comes to light.          |
| Downy do. . . . .      | <i>dodoneata</i> . . .     | On heaths, among heather.                   |
| Brindled Brown do. . . | <i>abbreviata</i> . . .    | Among hop and black currant bushes.         |
| Short do. . . . .      | <i>exiguata</i> . . .      | Can be beaten from willows, &c.             |
| Mottled do. . . . .    |                            | Can be beaten from maple.                   |
|                        |                            | Flies in sunshine.                          |
|                        |                            | Among oak.                                  |
|                        |                            | { Common everywhere on palings, &c. May     |
|                        |                            | be beaten from hedges containing the food-  |
|                        |                            | plants.                                     |



| Popular Name.               | Scientific Name.                    | Where Found.                                    |
|-----------------------------|-------------------------------------|---|
| <b>MOTHS.</b>               |                                     |   |
| Juniper do. . . . .         | { <i>Eupithecia sobri-</i>          | Can be beaten from juniper. May s. be           |
| Cloaked do. . . . .         | <i>nata</i> . . . . .               | found at flowers.                               |
| Double Striped do. . . . .  | <i>togata</i> . . . . .             | Tree-trunks.                                    |
| V. do. . . . .              | <i>pumilata</i> . . . . .           | Palings, &c.                                    |
| Green do. . . . .           | <i>coronata</i> . . . . .           | Tree-trunks and palings.                        |
| Manchester do. . . . .      | <i>rectangulata</i> . . . . .       | Trunks of apple and pear trees, and on palings. |
| Broom Scallop . . . . .     | <i>debiliata</i> . . . . .          | May be beaten from grass, &c.                   |
| Small Seraphim . . . . .    | <i>Collix sparsata</i> . . . . .    | Flies in the evening, round willows, &c.        |
| Seraphim . . . . .          | <i>Lobophora sexalata</i> . . . . . | Tree-trunks, &c. May also be beaten.            |
| Brindle Barred } . . . . .  | <i>hexapterata</i> . . . . .        | Woods.  |
| Yellow . . . . .            | <i>viretata</i> . . . . .           | { Birch and fir trunks. May be beaten. May      |
| Early Striped . . . . .     | <i>lobulata</i> . . . . .           | also be found on palings.                       |
| Barred do. . . . .          | <i>polyommata</i> . . . . .         | Trunks of Scotch fir, &c.                       |
| Juniper Carpet . . . . .    | <i>Thera juniperata</i> . . . . .   | Low down among beech, &c., at night.            |
| Grey do. . . . .            | <i>simulata</i> . . . . .           | { Comes to light. May be found on stems of      |
| Shaded Broad Bar . . . . .  | <i>variata</i> . . . . .            | juniper at night.                               |
| Pine Carpet . . . . .       | <i>firmata</i> . . . . .            | Palings, &c. Comes to treacle.                  |
| March Highflyer . . . . .   | <i>Ypsipetes ruberata</i> . . . . . | Among larch. Comes to treacle.                  |
| May do. . . . .             | <i>impluviata</i> . . . . .         | Among larch.                                    |
| July do. . . . .            | <i>elutata</i> . . . . .            | May be beaten from willows.                     |
| Blue-bordered } . . . . .   | { <i>Melanthia rubi-</i>            | Among alders at dusk.                           |
| Carpet . . . . .            | <i>ginata</i> . . . . .             | { Can be beaten in woods. Flies high and        |
| Purple Bar . . . . .        | <i>ocellata</i> . . . . .           | { wildly when disturbed. Comes to light.        |
| Beautiful Carpet . . . . .  | <i>albicillata</i> . . . . .        | Palings, &c. May be beaten.                     |
| Argent and Sable . . . . .  | <i>Melanippe hastata</i> . . . . .  | Do. do.   |
| Small do. . . . .           | <i>tristata</i> . . . . .           | { Flies at dusk. May be beaten from bushes      |
| Bordered Chalk } . . . . .  | <i>procellata</i> . . . . .         | during day.                                     |
| Carpet . . . . .            | <i>unangulata</i> . . . . .         | { May be beaten from birch and other trees      |
| Sharp-angled do. . . . .    | <i>rivata</i> . . . . .             | { Flies by day.                                 |
| Wood do. . . . .            | <i>subtristata</i> . . . . .        | Can be beaten.                                  |
| Common do. . . . .          | <i>montanata</i> . . . . .          | Among clematis.                                 |
| Silver Ground do. . . . .   | <i>galiata</i> . . . . .            | May be beaten from hedges, &c.                  |
| Bedstraw Chalk do. . . . .  | <i>fluctuata</i> . . . . .          | May be beaten.                                  |
| Garden do. . . . .          | <i>Anticlea sinuata</i> . . . . .   | { Palings, &c. Can be beaten from bushes,       |
| Royal Mantle . . . . .      | <i>rubidata</i> . . . . .           | { &c., during day.                              |
| Rosy Carpet . . . . .       | <i>badiata</i> . . . . .            | { Woods. Can be beaten from bushes, &c.,        |
| Shoulder Stripe do. . . . . | <i>derivata</i> . . . . .           | during day.                                     |
| Streamer . . . . .          | <i>berberata</i> . . . . .          | Do. do.   |
| Barberry Carpet . . . . .   | <i>Coremia munitata</i> . . . . .   | { Palings, tree-trunks, &c. Can be beaten dur-  |
| Red-barred do. . . . .      | <i>propugnata</i> . . . . .         | ing day. Flies at dusk.                         |
| Flame do. . . . .           | <i>ferrugata</i> . . . . .          | Cambridgeshire; and Birchwood, Kent.            |
| Red Twin-spot do. . . . .   | <i>unidentata</i> . . . . .         | Flies at dusk.                                  |
| Dark-barred } . . . . .     | <i>quadrifasciata</i> . . . . .     | { Palings, &c. Flies at dusk. Comes to light    |
| Twin-spot do. . . . .       | { <i>Camptogramma</i> . . . . .     | { and s. to willows.                            |
| Large do. . . . .           | <i>bilineata</i> . . . . .          | Palings, &c. Flies at dusk.                     |
| Yellow Shell . . . . .      | <i>fluviata</i> . . . . .           | Among barberry. Local.                          |
| Gem. . . . .                | { <i>Phibalapteryx</i> . . . . .    | Can be beaten from bushes, &c., in the North.   |
| Fern Moth . . . . .         | <i>tersata</i> . . . . .            | Woods.  |
| Slender-striped } . . . . . | <i>lapidata</i> . . . . .           | Woods. May be beaten. Also on palings.          |
| Carpet . . . . .            | <i>lignata</i> . . . . .            | Palings, &c. May also be beaten from bushes.    |
| Oblique-striped do. . . . . | <i>polygrammata</i> . . . . .       | Do. Very local.                                 |
| Many Lined . . . . .        | <i>vitalbata</i> . . . . .          | { May be beaten from bushes and hedges.         |
| Small Waved } . . . . .     | <i>Scotosia dubitata</i> . . . . .  | { Flies at dusk.                                |
| Umber . . . . .             | <i>retulata</i> . . . . .           | At ivy blossoms. Comes to light.                |
| Silky Tissue . . . . .      | <i>rharnata</i> . . . . .           | Among clematis.                                 |
| Brown Scallop . . . . .     | <i>certata</i> . . . . .            | At Rannoch.                                     |
| Buckthorn Umber } . . . . . |                                     | { Flies at dusk about open drains, &c., in damp |
| Tissue . . . . .            |                                     | meadows.  |
|                             |                                     | Damp meadows, &c. Local.                        |
|                             |                                     | Among clematis.                                 |
|                             |                                     | Comes to light and fl. of heather.              |
|                             |                                     | Among buckthorn.                                |
|                             |                                     | Do. Comes to light.                             |
|                             |                                     | Palings and among barberry.                     |



| Popular Name.                       | Scientific Name.                             | Where Found.   |
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| <b>MOTHS.</b>                       |  |  |
| Scallop Shell . . .                 | <i>Scotosia undulata</i> .                   | Woods. Can be beaten.  |
| Parrot Carpet . . .                 | <i>Cidaria psittacata</i> .                  | { Comes to light, and ivy blossoms. S. at<br>sallows after hibernation.              |
| Autumn Green do. . .                | " <i>miata</i> .                             | { Ivy blossoms. Comes to light. S. at<br>sallows after hibernation.                  |
| Short Cloak do. . .                 | " <i>picata</i> .                            | Can be beaten from bushes, &c.   |
| Broken Bar . . .                    | " <i>corylata</i> .                          | Woods.   |
| Beautiful Marsh<br>Carpet . . .     | " <i>sagittata</i> .                         | Fens in Cambridgeshire.  |
| Marbled do. . .                     | " <i>russata</i> .                           | Woods, &c. Comes to treacle.   |
| Dark Marbled do. . .                | " <i>immanata</i> .                          | { Palings, &c. May be beaten from bushes<br>during day. Flies at dusk.               |
| Water do. . .                       | " <i>suffumata</i> .                         | Flies at dusk.   |
| Small Phoenix . . .                 | " <i>silacea</i> .                           | { Among willow herb, &c. May be beaten<br>from bushes near. Comes to fl. of heather. |
| Netted Carpet . . .                 | " <i>reticulata</i> .                        | Lake District.   |
| Phoenix . . .                       | " <i>prunata</i> .                           | Palings, &c.   |
| Agate . . .                         | " <i>testata</i> .                           | { Tree-trunks, &c. May be beaten from bushes,<br>&c. Comes to fl. of heather.        |
| Clouded Spinach . . .               | " <i>populata</i> .                          | { May be beaten from bushes, &c. Can be<br>found on palings.                         |
| Clouded Yellow<br>Moth . . .        | " <i>fulvata</i> .                           | Can be beaten from bushes, &c. Flies at dusk.  |
| Straw Spinach . . .                 | " <i>pyraliata</i> .                         | { Gardens and fields. Can be beaten from<br>bushes, &c.                              |
| Spinach . . .                       | " <i>dotata</i> .                            | { Near woods. May be beaten from bushes,<br>&c.                                      |
| Dark do. . .                        | <i>Pelurga comitata</i> .                    | Comes to light.  |
| Mallow . . .                        | <i>Eubolia cervinaria</i> .                  | Comes to light.  |
| Small do. . .                       | " <i>mensuraria</i> .                        | Clover fields, &c. Comes to light.   |
| Fortified Carpet . . .              | " <i>maeniata</i> .                          | Has been beaten from broom. Very scarce.   |
| Lead Belle . . .                    | " <i>palumbaria</i> .                        | Comes to light.  |
| Chalk Carpet . . .                  | " <i>bipunctaria</i> .                       | On chalk and limestone soil.   |
| Oblique Striped<br>Manchester . . . | " <i>lineolata</i> .                         | On the coast. Rests on grasses, &c.  |
| Treble Barred . . .                 | <i>Carsia imbutata</i> .                     | Manchester, and at Howth, in Ireland.  |
| Treble Barred . . .                 | <i>Anaitis plagiata</i> .                    | Palings, &c.   |
| Olive Drab . . .                    | <i>Lithostege griseata</i> .                 | On Norfolk coast, among flixweed.  |
| Streak . . .                        | <i>Chesias spartiata</i> .                   | Among broom. Comes to light.   |
| Chevron . . .                       | " <i>obliquaria</i> .                        | Do. do. Flies late in the evening.   |
| Chimney Sweep . . .                 | { <i>Tanagra chæro-</i><br><i>phyllata</i> . | Flies in sunshine, near woods.   |
| Scalloped Hook-tip . . .            | { <i>Platypteryx la-</i><br><i>certula</i> . | Can be beaten from birch.  |
| Scarce do. . .                      | " <i>sicula</i> .                            | { Very scarce. Has been taken in Leigh<br>Woods, near Bristol.                       |
| Pebble do. . .                      | " <i>falcula</i> .                           | Can be beaten from birch, &c.  |
| Oak do. . .                         | " <i>hamula</i> .                            | { Palings. Can be beaten from oak. Flies in<br>the daytime.                          |
| Beech do. . .                       | " <i>unguicula</i> .                         | Flies in the day time.   |
| Chinese Character . . .             | <i>Cilix spinula</i> .                       | Palings, &c. Comes to light.   |
| Scarce Kitten . . .                 | <i>Dicranura bicuspsis</i> .                 | At rest, on alder, beech, and birch.   |
| Kitten . . .                        | " <i>furcula</i> .                           | At rest on poplars and willows.  |
| Broad-barred<br>Kitten . . .        | " <i>bifida</i> .                            | Do.  |
| Puss Moth . . .                     | " <i>vinula</i> .                            | Do.  |
| Lobster . . .                       | <i>Stauropus fagi</i> .                      | Tree-trunks and palings. Local.  |
| Sprawler . . .                      | <i>Petasia cassinea</i> .                    | Comes to light.  |
| Rannoch do. . .                     | " <i>nubeculosa</i> .                        | Rannoch, on birch trunks.  |
| Buff Tip . . .                      | <i>Pygæra bucephala</i> .                    | Palings, tree-trunks, &c. Comes to light.  |
| Chocolate Tip . . .                 | <i>Clostera curtula</i> .                    | On trunks of poplars.  |
| Scarce do. . .                      | " <i>anachoreta</i> .                        | Scarce. Mostly found in the larval state.  |
| Small do. . .                       | " <i>reclusa</i> .                           | { On willow trunks, and may be beaten from<br>willow.                                |
| Dusky Prominent . . .               | <i>Gluphisia crenata</i> .                   | Epping, and Halton, Bucks. Very scarce.  |
| Plumed do. . .                      | { <i>Ptilophora plu-</i><br><i>migera</i> .  | Woods and hedges.  |
| Pale do. . .                        | <i>Ptilodontis palpina</i> .                 | Comes to light.  |
| Coxcomb do. . .                     | <i>Notodonta camelina</i> .                  | Do.  |
| Maple do. . .                       | " <i>cucullina</i> .                         | Among maple.   |



| Popular Name.                   | Scientific Name.                                       | Where Found.  |
|---------------------------------|--|---|
| <b>MOTHS.</b>                   |  |   |
| Birch do. . . . .               | <i>Notodonta carmelita</i>                             | { Birch trunks, and palings near. Flies in the sunshine.            |
| Swallow do. . . . .             | " <i>dictæa</i> . . . . .                              | Tree-trunks, palings, &c.   |
| Small Swallow do. . . . .       | " <i>dictæoides</i> . . . . .                          | Do. do.   |
| Iron do. . . . .                | " <i>dromedarius</i> . . . . .                         | Palings. Comes to light.  |
| Dark do. . . . .                | " <i>trilophus</i> . . . . .                           | Very scarce.  |
| Pebble do. . . . .              | " <i>ziczac</i> . . . . .                              | On trunks of poplar.  |
| Great do. . . . .               | " <i>trepida</i> . . . . .                             | On oak trunks. Comes to light.                                      |
| Lunar Marbled . . . . .         | " <i>chaonia</i> . . . . .                             | On oak trunks, and paling near.                                     |
| Marbled Brown . . . . .         | " <i>dodonea</i> . . . . .                             | Do. do.   |
| Figure of 8 . . . . .           | { <i>Diloba cæruleo-</i><br><i>cephala</i> . . . . . } | Comes to light.   |
| Buff Arches . . . . .           | <i>Thyatira derasa</i> . . . . .                       | { Flies at dusk over brambles and low plants, and comes to treacle. |
| Peach Blossom . . . . .         | " <i>batis</i> . . . . .                               | Comes to treacle. Very shy of the lantern rays.                     |
| Lesser Satin Carpet . . . . .   | { <i>Cymatophora du-</i><br><i>plaris</i> . . . . . }  | May be beaten from bushes, &c.                                      |
| Satin . . . . .                 | " <i>fluctuosa</i> . . . . .                           | { May be beaten from dwarf birches. Comes to treacle.               |
| Lesser Lutestring . . . . .     | " <i>diluta</i> . . . . .                              | Comes to treacle.   |
| Poplar do. . . . .              | " <i>or</i> . . . . .                                  | At rest on aspens, &c. Comes to treacle.                            |
| Figure of 80 . . . . .          | " <i>ocularis</i> . . . . .                            | Comes to treacle occasionally.                                      |
| Yellow Horned . . . . .         | " <i>flavicornis</i> . . . . .                         | { Palings and birch trunks and twigs. Comes to light.               |
| Frosted Green . . . . .         | " <i>ridens</i> . . . . .                              | Tree-trunks, &c. Comes to light and treacle.                        |
| Marble Green . . . . .          | { <i>Bryophila gland-</i><br><i>ifera</i> . . . . . }  | Old walls. Comes to treacle.  |
| Marbled Beauty . . . . .        | " <i>perla</i> . . . . .                               | Old walls and fences.   |
| Scarce Marbled Green . . . . .  | " <i>algæ</i> . . . . .                                | Very scarce.  |
| Scarce Marvel de jour . . . . . | <i>Diphthera Orion</i> . . . . .                       | On oak trunks, &c. Comes to treacle. Local.                         |
| Dark Dagger . . . . .           | <i>Acronycta tridens</i> . . . . .                     | Tree-trunks, palings, &c.   |
| Grey do. . . . .                | " <i>psi</i> . . . . .                                 | Do. do.   |
| Miller . . . . .                | " <i>leporina</i> . . . . .                            | Tree-trunks, &c. Generally high up.                                 |
| Sycamore do. . . . .            | " <i>aceris</i> . . . . .                              | Sycamore trunks, fences, and brick walls.                           |
| Poplar Grey . . . . .           | " <i>megacephala</i> . . . . .                         | Tree-trunks, and palings near poplars.                              |
| Streaked . . . . .              | " <i>strigosa</i> . . . . .                            | Cambridgeshire.   |
| Alder . . . . .                 | " <i>alni</i> . . . . .                                | Comes to treacle. Scarce.   |
| Coronet . . . . .               | " <i>ligustri</i> . . . . .                            | Trunks of ash trees.  |
| Knot Grass . . . . .            | " <i>rumicis</i> . . . . .                             | Walls and palings.  |
| Scarce Dagger . . . . .         | " <i>auricoma</i> . . . . .                            | Comes to treacle.   |
| Light Knotgrass . . . . .       | " <i>menyanthidis</i> . . . . .                        | Heaths, &c.   |
| Sweet Gale . . . . .            | " <i>myricæ</i> . . . . .                              | Rannoch, Scotland, and at Killarney, Ireland.                       |
| Powdered Wainscot. . . . .      | <i>Simyra venosa</i> . . . . .                         | In the Cambridgeshire fens.   |
| Mouselet . . . . .              | <i>Synia musculosa</i> . . . . .                       | Very scarce. Has been taken at light.                               |
| Bright Eye . . . . .            | <i>Leucania conigera</i> . . . . .                     | Comes to light and fl. of ragwort.                                  |
| Yellow Wainscot. . . . .        | " <i>vitellina</i> . . . . .                           | Very scarce. Has been taken at treacle.                             |
| Double Line . . . . .           | " <i>turca</i> . . . . .                               | In grassy woods. Local.   |
| Ochreous Brown . . . . .        | " <i>lithargyria</i> . . . . .                         | Comes freely to light and treacle.                                  |
| Lunar White Spot . . . . .      | " <i>albipuncta</i> . . . . .                          | At fl. Comes to treacle. Scarce.                                    |
| Peppered Wainscot. . . . .      | " <i>extranea</i> . . . . .                            | { At fl. of scabious, and comes to treacle. Very scarce.            |
| Obscure do. . . . .             | " <i>obsoleta</i> . . . . .                            | { In marshes, especially on banks of the Thames.                    |
| Confluent do. . . . .           | " <i>loreyi</i> . . . . .                              | A doubtful British species.   |
| Southern do. . . . .            | " <i>putrescens</i> . . . . .                          | { Among grass, especially on the Devonshire coast.                  |
| Shore do. . . . .               | " <i>littoralis</i> . . . . .                          | On coast sand-hills. Local.   |
| Striped do. . . . .             | " <i>pudorina</i> . . . . .                            | Marshes and fens.   |
| Shoulder Stripe do. . . . .     | " <i>comma</i> . . . . .                               | Comes to treacle, light, and fl.                                    |
| Pure do. . . . .                | " <i>L-album</i> . . . . .                             | A doubtful British species.   |
| Streaked do. . . . .            | " <i>straminea</i> . . . . .                           | Marshes and fens. At fl. of ragwort.                                |
| Smoky do. . . . .               | " <i>impura</i> . . . . .                              | Comes to treacle.   |
| Common do. . . . .              | " <i>pallens</i> . . . . .                             | Palings. Comes to treacle.  |
| Fen do. . . . .                 | " <i>phragmitidis</i> . . . . .                        | Marshes and fens. Local.  |
| Pale do. . . . .                | <i>Tapinostola Bondii</i> . . . . .                    | On grass stems.   |
| Coast do. . . . .               | " <i>elymi</i> . . . . .                               | On coast sand-hills.  |
| Flame do. . . . .               | <i>Meliana flammea</i> . . . . .                       | Marshes and fens. Local.  |



| Popular Name.                     | Scientific Name.  | Where Found.  |
|-----------------------------------|---|---|
| <b>MOTHS.</b>                     |   |   |
| Silky do. . . . .                 | <i>Senta ulvæ</i> . . . . .                               | Do. do.   |
| Lineated do. . . . .              | <i>Nonagria despecta</i> . . . . .                        | Flies at dusk. Marshes and fens.  |
| Small do. . . . .                 | " <i>fulva</i> . . . . .                                  | Flies at dusk.  |
| Twin Spot Wainscot. . . . .       | " <i>concolor</i> . . . . .                               | Cambridgeshire. Fens.   |
| Mere do. . . . .                  | " <i>Hellmanni</i> . . . . .                              | Do.   |
| Nerved do. . . . .                | " <i>neurica</i> . . . . .                                | In wet places.  |
| Scarce do. . . . .                | " <i>brevilinea</i> . . . . .                             | { Fens, &c. Flies at dusk among reed mace.<br>Scarce.                         |
| Twin Spotted do. . . . .          | " <i>geminipuncta</i> . . . . .                           | In wet places. Local.   |
| Reed do. . . . .                  | " <i>cannæ</i> . . . . .                                  | Fens and marshes.   |
| Bullrush . . . . .                | " <i>typhæ</i> . . . . .                                  | Do.   |
| Large Wainscot . . . . .          | " <i>lutosa</i> . . . . .                                 | Do.   |
| Frosted Orange . . . . .          | <i>Gortyna flavago</i> . . . . .                          | Comes to light. Is apt to fly into the flame.                                 |
| Golden Ear . . . . .              | <i>Hydræcia nictitans</i> . . . . .                       | { Treacle, and comes to light. May be<br>found over fl. and on palings.       |
| Butter Bur . . . . .              | " <i>petasitis</i> . . . . .                              | Among butter-bur.   |
| Rosy Rustic . . . . .             | " <i>micacea</i> . . . . .                                | Comes to treacle and light; and fl. of ragwort.                               |
| Clouded Dart . . . . .            | <i>Axytia putris</i> . . . . .                            | At roots of trees, &c. Comes to treacle.                                      |
| Bordered Brindle . . . . .        | <i>Xylophasia rurea</i> . . . . .                         | Palings. Comes to treacle.  |
| Light Arches . . . . .            | " <i>lithoxylea</i> . . . . .                             | Palings and tree-trunks. Comes to treacle.                                    |
| Reddish Light Arches . . . . .    | " <i>sublustris</i> . . . . .                             | Do.   |
| Dark Arches . . . . .             | " <i>polyodon</i> . . . . .                               | Palings and treacle.  |
| Clouded Brindle . . . . .         | " <i>hepatica</i> . . . . .                               | Comes to treacle.   |
| Slender Clouded Brindle . . . . . | " <i>scolopacina</i> . . . . .                            | Grassy places. Local.   |
| Bird's Wing . . . . .             | <i>Dipterygia pinastri</i> . . . . .                      | Palings and tree-trunks. Comes to treacle.                                    |
| Silver Cloud . . . . .            | { <i>Xylomiges con-</i><br><i>spicillaris</i> . . . . . } | At rest on tree-trunks. Scarce.   |
| Feathered Brindle . . . . .       | <i>Aporophyla australis</i> . . . . .                     | Comes to light. Local.  |
| Small Mottled Willow . . . . .    | <i>Laphygma exigua</i> . . . . .                          | { Gas lamps, &c., and comes to treacle. Very<br>scarce.                       |
| Bordered Gothic . . . . .         | <i>Neuria saponariæ</i> . . . . .                         | { Palings, and comes to light. May be taken<br>at fl. of viper's bugloss.     |
| Feathered do. . . . .             | { <i>Heliophobus po-</i><br><i>pularis</i> . . . . . }    | Common on grass stems at night. Comes to<br>light and fl.                     |
| Beautiful do. . . . .             | " <i>hispidus</i> . . . . .                               | Local. On the ground among very short<br>grass.                               |
| Antler . . . . .                  | <i>Charæas graminis</i> . . . . .                         | On commons. Flies in early morning. May<br>be taken at fl. of ragwort.        |
| Feathered Ear . . . . .           | { <i>Pachetra leu-</i><br><i>cophæa</i> . . . . . }       | Among grass and at fl. Comes to light.<br>Scarce.                             |
| Straw Underwing . . . . .         | <i>Cerigo cytherea</i> . . . . .                          | Comes to treacle and light. Is apt to fly into<br>the flame.                  |
| Lesser Flounced Rustic . . . . .  | <i>Luperina testacea</i> . . . . .                        | On grass stems at night. Comes to light.                                      |
| Guenée's do. . . . .              | " <i>Guenéei</i> . . . . .                                | Very scarce.  |
| Tawny do. . . . .                 | " <i>Dumerili</i> . . . . .                               | Do.   |
| Turf do. . . . .                  | " <i>cespitis</i> . . . . .                               | { Comes to light. May be taken on grass<br>stems at night, and at ragwort fl. |
| Exile . . . . .                   | <i>Crymodes exulis</i> . . . . .                          | A doubtful British species.   |
| Dusky Nutmeg . . . . .            | <i>Mamestra abjecta</i> . . . . .                         | Among grass. Local.   |
| Nutmeg . . . . .                  | " <i>anceps</i> . . . . .                                 | { Comes to treacle. May be found on palings<br>and at fl. of viper's bugloss. |
| Large do. . . . .                 | " <i>albicolon</i> . . . . .                              | On the coast.   |
| Dusky Brocade . . . . .           | " <i>furva</i> . . . . .                                  | { Grassy places. Comes to light and fl. of<br>ragwort.                        |
| Cabbage Moth . . . . .            | " <i>brassicæ</i> . . . . .                               | Palings, &c. Comes to light and treacle.                                      |
| Dot . . . . .                     | " <i>persicariæ</i> . . . . .                             | Palings, &c. Comes to light.  |
| Rustic Shoulder Knot . . . . .    | <i>Apamea basilinea</i> . . . . .                         | { Palings. The ♀ may be taken flying over<br>wheat-fields. Comes to treacle.  |
| Union Rustic . . . . .            | " <i>connexa</i> . . . . .                                | Comes to treacle.   |
| Brown Pinion . . . . .            | " <i>gemina</i> . . . . .                                 | Grassy places. Comes to treacle.  |
| Uniform Rustic . . . . .          | " <i>unanimis</i> . . . . .                               | Marshes and fens. Comes to treacle.   |
| Double Lobed . . . . .            | " <i>ophiogramma</i> . . . . .                            | Do. Comes to light.   |
| Crescent . . . . .                | " <i>fibrosa</i> . . . . .                                | Comes to treacle. Local.  |
| Common do. . . . .                | " <i>oculea</i> . . . . .                                 | Palings, &c. Comes to light and treacle.                                      |
| Marbled Minor . . . . .           | <i>Miana strigilis</i> . . . . .                          | Palings, &c. Flies at dusk, and comes to treacle                              |



| Popular Name.   | Scientific Name.                            | Where Found.  |
|---|---|---|
| <b>MOTHS.</b>   |   |   |
| Middle-barred do.   | <i>Miana fasciuncula</i>                    | Woods, &c. Comes to treacle.  |
| Rosy do. . . . .  | " <i>literosa</i>                           | On coast. May be taken at fl. of ragwort.                                     |
| Cloaked do. . . . .   | " <i>furuncula</i>                          | Flies at dusk, and comes to treacle.  |
| Wood do. . . . .  | " <i>arcuosa</i>                            | Do. do.   |
| Least do. . . . .   | { <i>Photedes capti-</i><br><i>uncula</i> } | Darlington.   |
| Haworth's do. . . . .                                       | <i>Celæna Haworthii</i>                     |   |
| Triple Lines . . . . .                                      | { <i>Grammesia tri-</i><br><i>linea</i> }   | Comes to light.   |
| Gold Line . . . . .   | <i>Hydrilla palustris</i>                   | Has been taken at light. Very scarce.   |
| Dingy . . . . .   | { <i>Acosmetia caligi-</i><br><i>nosa</i> } | Damp woods.   |
| Bordered Rustic . . . . .                                   | { <i>Caradrina Mor-</i><br><i>pheus</i> }   | Comes to light and treacle.   |
| Dotted do. . . . .  | " <i>alsines</i>                            | Do. Also at fl. and treacle.  |
| Powdered do. . . . .  | " <i>blanda</i>                             | Do. do.   |
| Mottled Beauty . . . . .                                    | " <i>cubicularis</i>                        | Comes to light and treacle.   |
| Brown Feathered }<br>Rustic . . . . .                       | <i>Rusina tenebrosa</i>                     | Do.   |
| Archer's Dart . . . . .                                     | <i>Agrotis valligera</i>                    | Chiefly on coast. At fl. of ragwort.  |
| Shuttle-shaped do. . . . .                                  | " <i>puta</i>                               | Comes to treacle. May be found on palings.                                    |
| Dark Sword Grass . . . . .                                  | " <i>suffusa</i>                            | Comes to treacle.   |
| Scarce do. . . . .  | " <i>fennica</i>                            | A doubtful British species.   |
| Pearly Underwing . . . . .                                  | " <i>saucia</i>                             | { Comes to light and treacle. May also be<br>taken on ivy blossoms.           |
| Turnip Moth . . . . .                                       | " <i>segetum</i>                            | { Comes to treacle. Many of this genus may<br>be taken at the fl. of bean.    |
| Crescent Rustic . . . . .                                   | " <i>lunigera</i>                           | { Comes to treacle and light, and may be<br>taken at fl. of ragwort. Local.   |
| Heart and Dart . . . . .                                    | " <i>exclamationis</i>                      | Palings, &c. Comes to treacle.  |
| Heart and Club . . . . .                                    | " <i>corticea</i>                           | Comes to light and treacle, and to lime blossoms.                             |
| Light Feathered }<br>Rustic . . . . .                       | " <i>cinerea</i>                            | Comes to light. Is apt to fly into the flame.                                 |
| Cloud Dart . . . . .  | " <i>ripæ</i>                               | On coast. Local.  |
| Veined do. . . . .  | " <i>cursoria</i>                           | { Coast sand-hills. Can be beaten. Comes<br>to fl. of ragwort.                |
| Garden Dart . . . . .                                       | " <i>nigricans</i>                          | Comes to treacle and fl. of ragwort.  |
| White Line do. . . . .                                      | " <i>tritici</i>                            | { Comes to treacle and fl. of heather and rag-<br>wort.                       |
| Eagle do. . . . .   | " <i>aquilina</i>                           | Do. Also on palings.  |
| Square Spot do. . . . .                                     | " <i>obelisca</i>                           | On fl. of ragwort. Comes to light.  |
| White Letter . . . . .                                      | " <i>agathina</i>                           | Among heath. Comes to light.  |
| True Lover's Knot . . . . .                                 | " <i>porphyrea</i>                          | Among heath.  |
| Portland Moth . . . . .                                     | " <i>præcox</i>                             | { Coast sand-hills. Comes to light and fl. of<br>ragwort.                     |
| Stout Dart . . . . .  | " <i>ravida</i>                             | Comes to light.   |
|   | " <i>helvetina</i>                          | A doubtful British species.   |
| Dotted Rustic. . . . .                                      | " <i>pyrophila</i>                          | At fl. Local.   |
| Kidney . . . . .  | " <i>lucerna</i>                            | Comes to treacle, flowers, and light.   |
| Welsh Rustic. . . . .                                       | " <i>Ashworthii</i>                         | Local. Comes to treacle.  |
| Small Broad-bor- }<br>dered Yellow }<br>Underwing . . . . . | <i>Triphaena janthina</i>                   | { Comes to treacle. Also at fl. May be beaten<br>during day from hedges, &c.  |
| Large Broad-bor- }<br>dered do. . . . .                     | " <i>fimbria</i>                            | Treacle and light.  |
| Least Broad-bor- }<br>dered do. . . . .                     | " <i>interjecta</i>                         | Light, and at fl. of ragwort.   |
| Crescent do. . . . .  | " <i>subsequa</i>                           | { Treacle and light. Scarce. Has mostly been<br>taken in the New Forest.      |
| Lesser do. . . . .  | " <i>orbona</i>                             | Comes to treacle and light.   |
| Large do. . . . .   | " <i>pronuba</i>                            | Do.   |
| Autumnal Rustic . . . . .                                   | <i>Noctua glareosa</i>                      | { On heaths and in woods. Comes to treacle<br>and fl. of heather and ragwort. |
| Black Spotted . . . . .                                     | " <i>depuncta</i>                           | Comes to treacle.   |
| Double Dart . . . . .                                       | " <i>augur</i>                              | Do.   |
| Flame Shoulder . . . . .                                    | " <i>plecta</i>                             | Do.   |
| Flame . . . . .   | " <i>flammatra</i>                          | { Has once been taken in Isle of Wight at<br>treacle.                         |
| Setaceous Hebrew }<br>Character . . . . .                   | " <i>C-nigrum</i>                           | Comes to treacle and light.   |



| Popular Name.      | Scientific Name.                             | Where Found.   |
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| <b>MOTHS.</b>      |  |  |
| Scarce Rustic      | <i>Noctua ditrapezium</i>                    | New Forest, Birchwood, &c.   |
| Double Square Spot | " <i>triangulum</i>                          | Comes to light.  |
| Clay Rustic        | " <i>rhomboidea</i>                          | Comes to light and treacle.  |
| Purple Clay        | " <i>brunnea</i>                             | At treacle.  |
| Ingrailed do.      | " <i>festiva</i>                             | At treacle and light.  |
| Confluent do.      | " <i>conflua</i>                             | Comes to treacle. Local.   |
| Barred Chestnut    | " <i>Dahlia</i>                              | Comes to treacle and heather fl. Local.  |
| Rosy Marsh Moth    | " <i>subrosea</i>                            | Fens and marshes; comes to treacle. Very scarce.   |
| Small Square Spot  | " <i>rubi</i>                                | At treacle and light.  |
| Six-striped Rustic | " <i>umbrosa</i>                             | At fl. of ragwort and comes to treacle.  |
| Dotted Clay        | " <i>baja</i>                                | At treacle.  |
| Scotch Rustic      | " <i>sobrina</i>                             | Rannoch. Comes to treacle.   |
| Neglected do.      | " <i>neglecta</i>                            | Treacle and fl. of heather.  |
| Square Spot do.    | " <i>xanthographa</i>                        | { At treacle, light, flowers, &c. Flies from<br>early dusk till late at night.                       |
| Pine Beauty        | <i>Trachea piniperda</i>                     | On fir trunks and at willows.  |
| Mountain Drab      | <i>Pachnobia alpina</i>                      | Scotch mountains.  |
| Hebrew Character   | { <i>Taeniocampa</i><br><i>gothica</i> }     | { At willows and treacle. Also tree-trunks<br>and palings. Comes to light.                           |
| White Letter       | " <i>leucographa</i>                         | At willows.  |
| Rustic             | " <i>rubricosa</i>                           | At willows and treacle.  |
| Red Quaker         | " <i>instabilis</i>                          | { At willows and treacle. Also on tree-trunks<br>and palings. Comes to light.                        |
| Clouded Drab       | " <i>opima</i>                               | At willows.  |
| Northern do.       | " <i>populeti</i>                            | Do. Comes to light.  |
| Intermediate       | " <i>stabilis</i>                            | { At willows and treacle. Also palings and<br>tree-trunks.   |
| Common Quaker      | " <i>gracilis</i>                            | At willows and treacle.  |
| Lead - coloured    | " <i>miniosa</i>                             | Do.  |
| Drab               | " <i>munda</i>                               | Willows, treacle, and palings and tree-trunks.   |
| Blossom Underwing  | " <i>cruda</i>                               | Do. do.  |
| Twin - spotted     | <i>Orthosia suspecta</i>                     | Comes to treacle. Local.   |
| Quaker             | " <i>upsilon</i>                             | Flies over willows.  |
| Small do.          | " <i>lota</i>                                | At treacle and ivy blossoms. Comes to light.   |
| Allied Rustic      | " <i>macilenta</i>                           | Do. Also at yew-berries.   |
| Dingy Shears       | <i>Anchocelis rufina</i>                     | At ivy blossoms and treacle.   |
| Red Line Quaker    | " <i>pistacina</i>                           | { Ivy - blossoms, yew - berries, and treacle.<br>Comes to light.                                     |
| Yellow Line do.    | " <i>lunosa</i>                              | Do. do.  |
| Flounced Rustic    | " <i>litura</i>                              | Do. do.  |
| Pale-headed        | <i>Cerastis vaccinii</i>                     | { Ivy blossoms and treacle. Willows in spring<br>after hibernation. May also be taken on<br>palings. |
| Chestnut           | " <i>spadicea</i>                            | Do. do. do.  |
| Lunar Underwing    | " <i>erythrocephala</i>                      | Very scarce. Has been taken at treacle.  |
| Brown Spot Pinion  | { <i>Scopelosoma</i><br><i>satellitica</i> } | { Ivy and treacle. Willows in spring after<br>hibernation. Comes to light.                           |
| Chestnut           | { <i>Dasycampa rubi-</i><br><i>ginea</i> }   | { Ivy-blossoms and yew-berries. S. taken at<br>willows after hibernation.                            |
| Dark do.           | <i>Hoplorina croceago</i>                    | { At ivy and fl. S. taken at willows after<br>hibernation. Local.                                    |
| Red-headed do.     | <i>Xanthia citrargo</i>                      | { Ivy-blossoms and treacle. May be taken at<br>fl. of ragwort. Comes to light.                       |
| Large do.          | " <i>cerargo</i>                             | Do. do. do.  |
| Dotted do.         | " <i>silago</i>                              | Do. do. do.  |
| Orange Upperwing   | " <i>aurago</i>                              | Ivy-blossoms. Local.   |
| Orange Sallow      | " <i>gilvago</i>                             | At fl. and ivy. Local.   |
| Lemon do.          | " <i>ferruginea</i>                          | Ivy-blossoms and treacle. Comes to light.  |
| Pink-barred do.    | { <i>Cirrhædia xer-</i><br><i>ampelina</i> } | On ash-trunks. Comes to light. Local.  |
| Barred do.         | <i>Tethea subtusa</i>                        | { Comes to light and treacle. May be taken on<br>the aphid juice on plum-trees.                      |
| Ruddy do.          | " <i>retusa</i>                              | Comes to light. Local.   |
| Mottled do.        | <i>Euperia fulvago</i>                       | At fl. of heath. Local.  |
| Centre-barred do.  |  |  |
| Olive              |  |  |
| Small do.          |  |  |
| Angle-striped      |  |  |
| Sallow             |  |  |



| Popular Name.                 | Scientific Name.                       | Where Found.  |
|-------------------------------|--|---|
| <b>MOTHS.</b>                 |  |   |
| Heart Moth . . .              | <i>Dicycla Oo.</i> . . .               | Comes to light. Local.  |
| Dunbar . . .                  | <i>Cosmia trapezina</i> . . .          | Palings, &c. Comes to light and treacle.                            |
| Lunar-spotted Pinion . . .    | „ <i>pyralina</i> . . .                | Comes to treacle. Local.  |
| White-spotted do. . .         | „ <i>diffinis</i> . . .                | Comes to light and treacle.   |
| Lesser-spotted do. . .        | „ <i>affinis</i> . . .                 | Do.   |
| Dusky Sallow. . .             | { <i>Eremobia ochroleuca</i> . . .     | At fl.; rests on thistles, &c. Local.                               |
| Marbled Shears . . .          | { <i>Dianthæcia irregularis</i> . . .  | On tree-trunks, &c. Comes to fl.                                    |
| Tawny do. . .                 | „ <i>carpophaga</i> . . .              | Among campions. Comes to fl.  |
| Mottled do. . .               | „ <i>capsophila</i> . . .              | Comes to fl. and light.   |
| Lychnis . . .                 | „ <i>capsicola</i> . . .               | Among campions. At fl.  |
| Campion . . .                 | „ <i>cucubali</i> . . .                | Among ragged robin. Flies in sunshine.                              |
| White-spotted Coronet . . .   | „ <i>albimacula</i> . . .              | At fl.  |
| Marbled do. . .               | „ <i>conspersa</i> . . .               | Do.   |
| Scarce do. . .                | „ <i>compta</i> . . .                  | Do.   |
| Northern Grey . . .           | „ <i>cæsia</i> . . .                   | Do.   |
| Dwarf Shears . . .            | „ <i>Barrettii</i> . . .               | { Hill of Howth, Ireland, and Isle of Man. Comes to light.          |
| Ranunculus . . .              | <i>Hecatera dysodea</i> . . .          | Palings, and at fl. of red valerian. Local.                         |
| Broad-barred White . . .      | „ <i>serena</i> . . .                  | Palings and tree-trunks. May be taken at fl.                        |
| July Chi . . .                | <i>Polia chi</i> . . .                 | Tree-trunks. Local.   |
| Black-banded . . .            | { „ <i>xanthomista</i> . . .           | Has been taken at treacle and light.                                |
| Large Ranunculus . . .        | { ( <i>nigro-cincta</i> N ) . . .      |   |
| Olive Rustic . . .            | „ <i>flavicincta</i> . . .             | Palings, tree-trunks, and walls.                                    |
| Smoky do. . .                 | <i>Dasypolia templi</i> . . .          | Under stones, in hilly districts. Comes to light.                   |
| Dusky Nutmeg . . .            | <i>Epunda lutulenta</i> . . .          | At fl. of heath. Comes to treacle.                                  |
| Minor Shoulder-knot . . .     | „ <i>nigra</i> . . .                   | At fl. Local.   |
| Feathered Ranunculus . . .    | „ <i>viminalis</i> . . .               | Among sallows, and on palings.                                      |
| Green-brindled Dot . . .      | „ <i>lichenæa</i> . . .                | On coast. Comes to light.   |
| Green-brindled Crescent . . . | <i>Valeria oleagina</i> . . .          | Very scarce.  |
| Marvel de Jour . . .          | <i>Miselia bimaculosa</i> . . .        | A doubtful British species.   |
| Angle Shades . . .            | „ <i>oxyacanthæ</i> . . .              | At treacle and fl. May be found on palings.                         |
| Scarce do. . .                | <i>Agriopsis aprilina</i> . . .        | At treacle.   |
| Small do. . .                 | { <i>Phlogophora meticulosa</i> . . .  | At treacle and ivy-blossoms. Also on palings.                       |
| Green Arches . . .            | „ <i>empyrea</i> . . .                 | At ivy-blossoms. Local.   |
| Great Brocade . . .           | <i>Euplexia lucipara</i> . . .         | Tree-trunks, &c. Comes to light and treacle.                        |
| Grey Arches . . .             | <i>Aplecta herbida</i> . . .           | Woods. Local.   |
| Silvery do. . .               | „ <i>occulta</i> . . .                 | Flies in early morning. Local.                                      |
| Brown do. . .                 | „ <i>nebulosa</i> . . .                | Tree-trunks and palings. Comes to treacle.                          |
| Scarce Brocade . . .          | „ <i>tincta</i> . . .                  | { Tree-trunks, palings, &c. May be taken at fl. of viper's bugloss. |
| Dark do. . .                  | „ <i>advena</i> . . .                  | At fl. Also tree-trunks and palings.                                |
| Brindled Green . . .          | <i>Hadena satura</i> . . .             | Very scarce.  |
| Glaucous Shears . . .         | „ <i>adusta</i> . . .                  | Comes to treacle.   |
| Shears . . .                  | „ <i>protea</i> . . .                  | On tree trunks and palings.   |
| Scarce do. . .                | „ <i>glaucia</i> . . .                 | Comes to treacle in the North.                                      |
| Nutmeg . . .                  | „ <i>dentina</i> . . .                 | Palings, &c.  |
| Orache . . .                  | „ <i>peregrina</i> . . .               | Very scarce.  |
| Dingy Brocade . . .           | „ <i>chenopodii</i> . . .              | Palings, &c. Comes to light.  |
| Bright Line . . .             | „ <i>atriplicis</i> . . .              | Comes to treacle and light. Local.                                  |
| Broom Moth . . .              | „ <i>suasa</i> . . .                   | Palings. Comes to treacle.  |
| Pale Shouldered Brocade . . . | „ <i>oleracea</i> . . .                | Palings, and at light and treacle.                                  |
| Beautiful do. . .             | „ <i>pisi</i> . . .                    | Comes to light.   |
| Light do. . .                 | „ <i>thalassina</i> . . .              | Palings, &c. Comes to treacle.                                      |
| Northern do. . .              | „ <i>contigua</i> . . .                | On birch trunks. Comes to treacle.                                  |
| Early Grey . . .              | „ <i>genistæ</i> . . .                 | Palings, &c. Comes to treacle.                                      |
| Purple Cloud . . .            | { <i>Xyllocampa lithoriza</i> . . .    | At rest on stones, &c., in the North.                               |
|                               | { <i>Cloantha perspicillaris</i> . . . | Tree-trunks, palings, &c.   |
|                               |  | Very scarce.  |

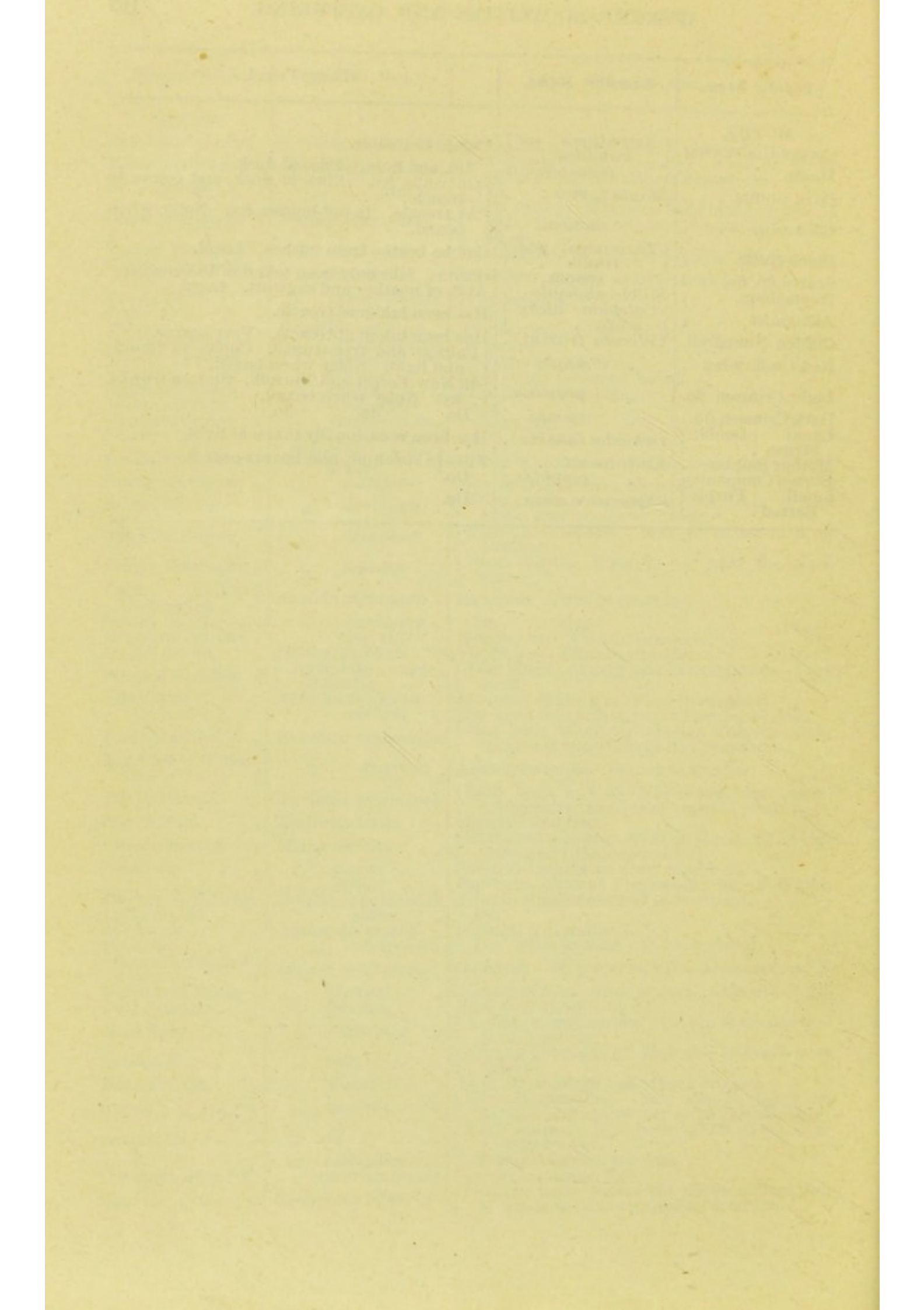


| Popular Name.                       | Scientific Name.                             | Where Found.  |
|-------------------------------------|--|---|
| <b>MOTHS.</b>                       |  |   |
| Shepherd's Purse .                  | <i>Cloantha solidaginis</i>                  | Tree-trunks, at rest, and at treacle.   |
| Red Sword-grass .                   | <i>Calocampa vetusta</i>                     | { Ivy-blossoms and treacle. Also at fl. 8.<br>taken at salallows after hibernation.                 |
| Sword-grass . . .                   | " <i>exoleta</i>                             | Do. do. do.   |
| Obscure Dagger .                    | <i>Xylina zinckenii</i>                      | { Very scarce. Has once been taken at treacle<br>near Erith, Kent, and occasionally else-<br>where. |
| Tawny Pinion . . .                  | " <i>conformis</i>                           | Ivy-blossoms, and on tree-trunks. Very scarce.  |
| Grey Shoulder-<br>knot . . .        | " <i>rhizolitha</i>                          | Ivy-blossoms, and on tree-trunks.   |
| Dark Pinion . . .                   | " <i>semibrunnea</i>                         | Ivy-blossoms.   |
| Pale do. . . . .                    | " <i>petrificata</i>                         | Do.   |
| Mullein . . . . .                   | <i>Cucullia verbasci</i>                     | Among mulleins and on palings.  |
| Water Betony . . .                  | " <i>scrophulariæ</i>                        | On palings.   |
| Striped Lychnis . .                 | " <i>lychnitis</i>                           | Chiefly near Arundel.   |
| Starwort . . . . .                  | " <i>asteris</i>                             | Flies round flowers. Local.   |
| Cudweed Shark . .                   | " <i>gnaphalii</i>                           | Flies in the evening.   |
| Wormwood do. . .                    | " <i>absynthii</i>                           | Local.  |
| Chamomile do . . .                  | " <i>chamomillæ</i>                          | Palings, &c.  |
| Shark . . . . .                     | " <i>umbratica</i>                           | Do., and at fl.   |
| Bordered Sallow . .                 | { <i>Heliothis mar-</i><br><i>ginata</i> }   | S. flies in sunshine. Comes to treacle and fl.  |
| Bordered Straw . .                  | " <i>peltigera</i>                           | May be beaten from herbage.   |
| Scarce do. do. . .                  | " <i>armigera</i>                            | { Flies over clover and lucerne fields in sun-<br>shine, and comes to treacle.                      |
| Marbled Clover . .                  | " <i>dipsacea</i>                            | { Flies in sunshine. May be taken at fl. of<br>heather.   |
| Scarce Four-spot . .                | " <i>scutosa</i>                             | { Near Silloth. Flies by day near the food-<br>plant.   |
| Dark Yellow<br>Underwing . . .      | <i>Anarta melanopa</i>                       | Rannoch. Flies in sunshine.   |
| Scotch do. do. . .                  | " <i>cordigera</i>                           | Do. do.   |
| Beautiful do. do. .                 | " <i>myrtili</i>                             | Heaths, &c. Flies in sunshine.  |
| Dwarf do. do. . .                   | <i>Heliodes arbuti</i>                       | Fields, &c. Flies in sunshine.  |
| Spotted Sulphur . .                 | { <i>Agrophila sul-</i><br><i>phuralis</i> } | { Wet places, among small convolvulus. Very<br>local  |
| Four Spot . . . .                   | <i>Acontia luctuosa</i>                      | In clover fields, &c. Flies in sunshine.  |
|                                     | " <i>solaris</i>                             | Has been taken flying over flowers by day.  |
| Rosy Marbled . . .                  | <i>Erastria venustula</i>                    | { Has been taken in Epping Forest. Very<br>local and uncertain in its appearance.                   |
| Marbled White<br>Spot . . . . .     | " <i>fuscata</i>                             | Among bramble. Comes to treacle.  |
| Silver Barred . . .                 | <i>Banksia argentula</i>                     | { Irish bogs, and at Whittlesea Mere, Cam-<br>bridgeshire, and Beachamwell, Norfolk.                |
| Silver Hook . . .                   | <i>Hydrelia unca</i>                         | Marshes and fens.   |
| Purple Barred . .                   | <i>Micra ostrina</i>                         | { Sheltered places on coast sand-hills, in Devon-<br>shire and Glamorganshire.                      |
| Small do. . . . .                   | " <i>parva</i>                               | Sheltered places on coast sand-hills.   |
|                                     | " <i>paula</i>                               | Has been taken at Freshwater, Isle of Wight.  |
| Orange Underwing                    | <i>Brephos parthenias</i>                    | Flies in sunshine round salallows, &c.  |
| Light do. do. . .                   | " <i>notha</i>                               | Do.   |
| Spectacle . . . .                   | <i>Abrostola urticæ</i>                      | Palings, &c., and at fl.  |
| Dark do. . . . .                    | " <i>triplesia</i>                           | Do. Flies at dusk and comes to fl.  |
| Scarce Burnished<br>Brass . . . . . | <i>Plusia orichalcea</i>                     | On coast. Very scarce. Has been taken at fl.  |
| Burnished Brass . .                 | " <i>chrysitis</i>                           | Among nettles. Flies at dusk. Comes to light.   |
| Gold Spangle . . .                  | " <i>bractea</i>                             | Flies over flowers by day.  |
| Gold Spot . . . .                   | " <i>festuæ</i>                              | { Among campions, &c. Comes to treacle and<br>fl. of heather.                                       |
| Golden Y . . . .                    | " <i>iota</i>                                | { Among ground-ivy. May also be taken over<br>flowers.  |
| Beautiful do. . .                   | " <i>V-aureum</i>                            | At fl. of campions and viper's bugloss.   |
| Silver Y . . . . .                  | " <i>gamma</i>                               | { Flies in sunshine. May also be taken on<br>palings, and sometimes at treacle and light.           |
| Scarce do. . . .                    | " <i>ni</i>                                  | { Very scarce. Has been taken flying over<br>flowers by day.  |
|                                     | " <i>verticillata</i>                        | A doubtful British species.   |
| Northern Silver Y                   | " <i>interrogationis</i>                     | On rocks, stumps, &c.   |
| Herald . . . . .                    | <i>Gonoptera libatrix</i>                    | { Palings, trees, out-houses, sheds, cellars, &c.<br>S. comes to salallows after hibernation.       |



| Popular Name.                | Scientific Name.                             | Where Found.  |
|------------------------------|--|---|
| MOTHS.                       |  |   |
| Copper Underwing             | { <i>Amphipyra py-</i><br><i>ramidea</i> . } | Comes to treacle.   |
| Mouse . . .                  | „ <i>tragopogonis</i>                        | Do. and light. Flies at dusk.   |
| Dark Gothic . .              | <i>Mania typica</i> . .                      | { On walls, &c. Flies at dusk, and comes to<br>treacle.                     |
| Old Lady . . .               | „ <i>maura</i> . .                           | { At treacle. In out-houses, &c. Noisy when<br>boxed.                       |
| Black Neck . .               | { <i>Toxocampa pas-</i><br><i>tinum</i> . }  | Can be beaten from bushes. Local.   |
| Scarce do. do. .             | <i>cracca</i> . .                            | Scarce. Has only been taken in Devonshire.                                  |
| Anomalous . .                | <i>Stilbia anomala</i> .                     | At fl. of heather and ragwort. Local.                                       |
| Alchymist . .                | { <i>Catephia alchy-</i><br><i>mista</i> . } | Has been taken at treacle.  |
| Clifden Nonpareil            | <i>Catocala fraxini</i> .                    | Has been taken at treacle. Very scarce.                                     |
| Red Underwing .              | „ <i>nupta</i> . .                           | { Palings and tree-trunks. Comes to treacle<br>and light. Noisy when boxed. |
| Light Crimson do.            | „ <i>promissa</i> .                          | { In New Forest and Norfolk. On tree-trunks,<br>&c. Noisy when boxed.       |
| Dark Crimson do.             | „ <i>sponsa</i> . .                          | Do. do. do.   |
| Lunar Double<br>Stripe }     | <i>Ophiodes lunaris</i> .                    | Has been occasionally taken at light.                                       |
| Mother Shipton .             | <i>Euclidia mi</i> . .                       | Flies in sunshine, and hovers over fl.                                      |
| Burnet Companion             | „ <i>glyphica</i> . .                        | Do.   |
| Small Purple<br>Barred . . } | <i>Phytometra ænea</i> .                     | Do.   |







# BIRDS.

## NESTS AND EGGS.

| Popular Name.  | Scientific Name.              | Stay in England. | Localities of Nest.                                | Av. No. of Eggs |
|--|-------------------------------|------------------|--|-----------------|
| Golden Eagle . .                                     | <i>Aquila chrysaetos</i> .    | All the year .   | Mountain rocks . .                                 | 2               |
| White-tailed do. .                                   | <i>Haliaeetus albicilla</i> . | Do. . . .        | Do. . . .  | 2               |
| Osprey . . . .                                       | <i>Pandion haliaetus</i> .    | Do. . . .        | High trees or rocks .                              | 2               |
| Peregrine do. . .                                    | <i>Falco peregrinus</i> .     | Do. . . .        | Cliffs and rocks . .                               | 2-3             |
| Hobby . . . .  | " <i>subbuteo</i> .           | April—October.   | High trees . . . .                                 | 2-5             |
| Merlin, Stone Falcon, or Blue Hawk                   | " <i>aesalon</i> .            | All the year .   | On the ground . . .                                | 3-5             |
| Kestrel, Wind-hover, or Hover-hawk . . . .           | " <i>tinnunculus</i> .        | Do. . . .        | Trees or rocks . . .                               | 4               |
| Goshawk . . . .                                      | <i>Astur palumbarius</i> .    | Do. . . .        | High trees . . . .                                 | 3               |
| Sparrow-hawk . .                                     | <i>Accipiter Nisus</i> .      | Do. . . .        | Trees . . . .                                      | 4-5             |
| Kite, Glead, Gled, or Puttock . .                    | <i>Milvus vulgaris</i> .      | Do. . . .        | High trees . . . .                                 | 2-3             |
| Buzzard . . . .                                      | <i>Buteo vulgaris</i> .       | Do. . . .        | Do. . . .  | 2-4             |
| Rough-legged do. .                                   | " <i>lagopus</i> .            | Do. . . .        | Do. . . .  | 2-4             |
| Honey do. . . .                                      | <i>Pernis apivorus</i> .      | Do. . . .        | Do. . . .  | 2               |
| Marsh Harrier, Harpy, or Marsh Hawk . . . .          | <i>Circus rufus</i> .         | Do. . . .        | { On the ground at foot of a bush }                | 3-4             |
| Hen Harrier . . .                                    | " <i>cyaneus</i> .            | Do. . . .        | Do. . . .  | 4-5             |
| Ash-coloured, or Montagu's Harrier . . . .           | " <i>cineraceus</i> .         | Do. . . .        | Do. . . .  | 4-5             |
| Long-eared Owl . .                                   | <i>Otus vulgaris</i> .        | Do. . . .        | { Generally a deserted Crow's or Magpie's nest }   | 4-5             |
| Short-eared do., or Hawk Owl . . .                   | " <i>brachyotus</i> .         | Do. . . .        | { On ground, or in a rabbit burrow }               | 3               |
| Barn do., or Screech Owl . .                         | <i>Strix flammea</i> .        | Do. . . .        | { Church towers, dovecots, ruins, &c. . . . }      | 3-4             |
| Tawny do., or Hoot Owl . .                           | <i>Syrnium stridula</i> .     | Do. . . .        | Hollow trees . . . .                               | 3-4             |
| Red-backed do., or Lesser Butcher Bird . . . .       | <i>Lanius collurio</i> .      | Summer visitor   | { High up in thick bushes . . . }                  | 4-5             |
| Spotted Flycatcher or Bee-bird . .                   | <i>Muscicapa grisola</i> .    | Do. . . .        | Almost anywhere . .                                | 4-5             |
| Pied do., or Cold-finch . . . .                      | " <i>atricapilla</i> .        | Do. . . .        | Holes in trees . . .                               | 4-8             |
| Dipper, Water-Ouzel, or Water-Crow . . . .           | <i>Cinclus aquaticus</i> .    | All the year .   | { Holes in stream-banks, &c. . }                   | 5-6             |
| Missel Thrush, or Stormcock . .                      | <i>Turdus viscivorus</i> .    | Do. . . .        | Trees . . . .                                      | 4-5             |
| Fieldfare, or Blue-back . . . .                      | " <i>pilaris</i> .            | Winter visitor . | { Has never been known to nest in Great Britain }  | —               |
| Thrush, Thrustle, or Mavis . . .                     | " <i>musicus</i> .            | All the year .   | Bushes and hedges .                                | 4-5             |
| Redwing . . . .                                      | " <i>iliacus</i> .            | Winter visitor . | { Has seldom been known to nest in Great Britain } | —               |
| Blackbird, Black-Ouzel, or Amzel, or Grozel-cock . . | " <i>merula</i> .             | All the year .   | Bushes and hedges .                                | 4-5             |
| Ring Ouzel . . . .                                   | " <i>torquatus</i> .          | Summer visitor   | On or near the ground                              | 3-5             |



| Popular Name.                         | Scientific Name.                     | Stay in England. | Localities of Nest.                                    | Av. No. of Eggs |
|---------------------------------------|--------------------------------------|------------------|--|-----------------|
| Hedge-sparrow, or Hedge Accentor      | <i>Accentor modularis</i>            | All the year     | Hedges and bushes                                      | 4-5             |
| Robin, Redbreast, or Ruddock          | <i>Erythaca rubecula</i>             | Do. . . .        | Almost anywhere  | 5-7             |
| Redstart, or Fire-tail                | <i>Phoenicurea ruticilla</i>         | Do. . . .        | { Holes in trees, walls, &c. }                         | 4-6             |
| Stonechat                             | <i>Saxicola rubicola</i>             | Do. . . .        | On or near the ground                                  | 5-6             |
| Whinchat                              | „ <i>rubetra</i>                     | Summer visitor   | Do. . . .  | 5-6             |
| Wheat-ear                             | „ <i>ananthe</i>                     | Do. . . .        | Holes in walls, &c.                                    | 5-6             |
| Grasshopper Warbler                   | <i>Salicaria locustella</i>          | Do. . . .        | { Furze and other bushes }                             | 5-7             |
| Sedge do.                             | „ <i>phragmitis</i>                  | Do. . . .        | Bushes, reeds, &c.                                     | 5-6             |
| Reed do., or Reed Wren                | „ <i>arundinacea</i>                 | —                | Fastened to reeds                                      | 4-5             |
| Nightingale                           | <i>Philomela Luscinia</i>            | April—August     | Hedges and bushes                                      | 4-5             |
| Blackcap                              | <i>Curruca atricapilla</i>           | Summer visitor   | Do. . . .  | 4-5             |
| Garden Warbler, or Pettychaps         | „ <i>hortensis</i>                   | Do. . . .        | Hedges and bushes                                      | 4-6             |
| Whitethroat, or Nettle-creeper        | „ <i>cinerea</i>                     | Do. . . .        | Bushes and hedges                                      | 4-5             |
| Lesser do.                            | „ <i>sylvicola</i>                   | Do. . . .        | { Low bushes and brambles }                            | 4-5             |
| Wood Warbler, or Wood Wren            | <i>Sylvia sibilatrix</i>             | Do. . . .        | { On the ground amongst grass or weeds }               | 6               |
| Willow Wren, or Willow Warbler        | „ <i>trochilus</i>                   | Do. . . .        | Banks, bank-sides, &c.                                 | 5-7             |
| Chiff-chaff, or Lesser Pettychaps     | „ <i>hippolais</i>                   | Do. . . .        | { On or near the ground on a hedge-bank }              | 6               |
| Dartford Warbler                      | { <i>Melizophilus provincialis</i> } | Do. . . .        | { Almost invariably in furze }                         | —               |
| Golden-crested Wren, or Gold-crest    | <i>Regulus cristatus</i>             | All the year     | { Below the branch of a spruce fir }                   | 7-8             |
| Fire-crested Regulus, or Fire-crest   | „ <i>ignicapillus</i>                | Do. . . .        | Do. . . .  | 7-8             |
| Great Titmouse, or Tomtit             | <i>Parus major</i>                   | Do. . . .        | { Holes in walls and trees }                           | 6-9             |
| Blue do., Blue-cap, or Blue-tit       | „ <i>cæruleus</i>                    | Do. . . .        | Do. . . .  | 6-12            |
| Cole do., or Colemouse                | „ <i>ater</i>                        | Do. . . .        | Holes in trees   | 6-8             |
| Marsh do.                             | „ <i>palustris</i>                   | Do. . . .        | Old willows, &c.                                       | 5-9             |
| Long-tailed do., or Bottle-tit        | „ <i>candatus</i>                    | Do. . . .        | Trees and bushes                                       | 9-12            |
| Bearded do.                           | „ <i>biarmicus</i>                   | Do. . . .        | { On or near the ground, near water }                  | 4-6             |
| Bohemian Wax-wing, or Waxen Chatterer | { <i>Bombycilla garrula</i> }        | Winter visitor   | { Does not nest in Great Britain }                     | —               |
| Pied Wagtail, or Dishwasher           | <i>Motacilla alba</i>                | All the year     | { Holes in banks, sheds, haystacks, &c. }              | 4-5             |
| Grey do.                              | „ <i>boarula</i>                     | Do. . . .        | { On ground, near water }                              | 5-6             |
| Ray's do.                             | „ <i>flava</i>                       | Do. . . .        | { On ground, banks, and in holes in walls near water } | 4-6             |
| Tree Pipit, Field Lark, or Tree Lark  | <i>Anthus arboreus</i>               | Summer visitor   | { On ground near hedges or bushes }                    | 5               |
| Meadow do., or Titlark                | „ <i>pratensis</i>                   | All the year     | On ground  | 4-6             |
| Rock do., or Rock Lark                | „ <i>petrosus</i>                    | Do. . . .        | Do. . . .  | 4-5             |
| Sky Lark, or Field Lark               | <i>Alauda arvensis</i>               | Do. . . .        | Do. . . .  | 3-5             |
| Wood do.                              | „ <i>arborea</i>                     | Do. . . .        | Do. . . .  | 4-5             |
| Snow Bunting, or Lapland Bunting      | { <i>Plectrophanes nivalis</i> }     | Winter visitor   | { Does not breed in Great Britain }                    | —               |



| Popular Name.                             | Scientific Name.                                  | Stay in England.                        | Localities of Nest.  | Av. No. of Eggs |
|---|---|---|--|-----------------|
| Common do., or Corn do.                   | <i>Emberiza miliaria</i>                          | All the year                            | On or near the ground  | 4-5             |
| Black-headed do., or Water Sparrow.       | „ <i>schœniculus</i>                              | Do. . . .                               | On ground near water   | 4-5             |
| Yellow Hammer or Ammer, or Yeörling . . . | „ <i>citrinella</i> .                             | Do. . . .                               | { Low thick bushes }<br>on hedge-banks   | 3-5             |
| Cirl Bunting . .                          | „ <i>cirlus</i> . .                               | Do. . . .                               | Furze, or low bushes   | 4-5             |
| Chaffinch . . .                           | <i>Fringilla Cœlebs</i> .                         | Do. . . .                               | { Tree-forks, bushes, }<br>and hedges . .  | 4-5             |
| Mountain Finch, or Brambling }            | „ <i>montifringilla</i>                           | Winter visitor .                        | { Does not nest in }<br>Great Britain }  | —               |
| Tree Sparrow . .                          | <i>Passer montanus</i> .                          | All the year .                          | { Holes in trees and }<br>thatch . . .   | 4-5             |
| House or Common do. . . . .               | „ <i>domesticus</i> .                             | Do. . . .                               | { Thatch, gutters, }<br>holes, deserted }<br>nests, trees, &c.                     | 4-6             |
| Greenfinch, or Green Linnet }             | { <i>Coccothraustes</i> }<br>{ <i>Chloris</i> . } | Do. . . .                               | { Hedges, bushes, }<br>and trees . .   | 4-6             |
| Hawfinch, or Common Grosbeak }            | „ <i>vulgaris</i> .                               | Do. . . .                               | Trees and bushes .   | 4-6             |
| Goldfinch, or Thistle-finch .             | <i>Carduelis elegans</i> .                        | Do. . . .                               | { Hedges, bushes, or }<br>tree-forks . .   | 4-5             |
| Siskin, or Aberdaveine . . . }            | „ <i>spinus</i> .                                 | Winter visitor .                        | { Seldom nests in }<br>Great Britain }   | —               |
| Linnet . . . .                            | <i>Linota cannabina</i> .                         | All the year .                          | { Thorn-hedges, or }<br>furze-bushes }   | 4-6             |
| Mealy Redpole . .                         | „ <i>canescens</i> .                              | Winter visitor .                        | { Does not breed in }<br>Great Britain }   | —               |
| Lesser or Common do. . . . .              | „ <i>linaria</i> .                                | { All year. }<br>Winter visitor in S. } | { Bushes and stunted }<br>trees . . .  | 4-5             |
| Mountain Linnet, or Twite . . . }         | „ <i>montium</i> .                                | All the year .                          | { On ground amongst }<br>grass, heather, }<br>&c. . . .                            | 4-6             |
| Bullfinch, Olph, or Hoop . . . . .        | <i>Pyrrhula vulgaris</i>                          | Do. . . .                               | { Thick bushes and }<br>trees . . .  | 4-5             |
| Common Crossbill .                        | <i>Loxia curvirostra</i> .                        | { Early winter }<br>visitor . }         | { Does not breed in }<br>Great Britain }   | —               |
| Starling . . . .                          | <i>Sturnus vulgaris</i> .                         | All the year .                          | { Dove-cotes, ruins, }<br>towers, chim- }<br>neys, holes in }<br>trees, &c. . .    | 4-6             |
| Chough . . . .                            | <i>Coracia graculus</i> .                         | Do. . . .                               | { Cliffs, and towers, }<br>and castles near }<br>sea . . .                         | 4-5             |
| Raven, or Corbie .                        | <i>Corvus corax</i> . .                           | Do. . . .                               | { Ruins, rocks, and }<br>trees . . .   | 4-5             |
| Crow . . . . .                            | „ <i>corone</i> . .                               | Do. . . .                               | Forks of large trees .   | 4-5             |
| Hooded do. . . .                          | „ <i>cornix</i> . .                               | Do. . . .                               | Rocks . . . .  | 4-5             |
| Rook . . . . .                            | „ <i>frugilegus</i> .                             | Do. . . .                               | Trees . . . .  | 4-5             |
| Jackdaw . . . .                           | „ <i>monedula</i> .                               | Do. . . .                               | { Holes and crevices }<br>in rocks, towers, }<br>ruins, dove-cotes, }<br>&c. . . . | 3-6             |
| Magpie . . . .                            | <i>Pica caudata</i> . .                           | Do. . . .                               | High up in trees . .   | 5-7             |
| Jay . . . . .                             | { <i>Garrulus glan-</i> }<br>{ <i>darius</i> . }  | Do. . . .                               | Tall bushes and trees  | 5-6             |
| Green Woodpecker                          | <i>Picus viridis</i> . .                          | Do. . . .                               | { Holes in trees. No }<br>nest . . . .   | 4-7             |
| Great Spotted do. .                       | „ <i>major</i> . .                                | Do. . . .                               | Do. do. . . .  | 4-5             |
| Lesser Spotted do. .                      | „ <i>minor</i> . .                                | Do. . . .                               | Do. do. . . .  | 4-5             |
| Wryneck . . . .                           | <i>Yunx torquilla</i> .                           | Summer visitor                          | Holes in trees . .   | 6-10            |
| Creeper . . . .                           | <i>Certhia familiaris</i> .                       | All the year .                          | Do. . . .  | 6-9             |
| Wren, or Jenny }                          | { <i>Troglodytes vul-</i> }<br>{ <i>garis</i> . } | Do. . . .                               | { Banks, tree-trunks, }<br>thatch, walls, &c. }                                    | 6-10            |
| Wren . . . . .                            | „ <i>garis</i> . .                                | Do. . . .                               | —  | —               |
| Hoopoe . . . .                            | <i>Upupa epops</i> . .                            | —                                       | —  | —               |
| Nut-hatch . . . .                         | <i>Sitta Europæa</i> . .                          | All the year .                          | Holes in trees . .   | 5-6             |
| Cuckoo, or Gowk .                         | <i>Cuculus canorus</i> .                          | April—Aug. .                            | { Nests of Hedge- }<br>sparrow, Lark, }<br>{ Wagtail, &c. . }                      | —               |



| Popular Name.                   | Scientific Name.                      | Stay in England.                           | Localities of Nest.   | Av. No. of Eggs |
|---------------------------------|---------------------------------------|--|---|-----------------|
| King-fisher . . .               | <i>Alcedo ispida</i> . .              | All the year . .                           | { Holes in banks of streams, ponds, rivers, &c. . . }               | 5-6             |
| Swallow . . .                   | <i>Hirundo rustica</i> . .            | April—Oct. . .                             | Eaves, chimneys, &c. . .  | 4-6             |
| Martin . . .                    | „ <i>urbica</i> . .                   | Do. . .                                    | Do. . .   | 5-6             |
| Sand do. . .                    | „ <i>riparia</i> . .                  | Mar.—Sept. . .                             | { Holes in banks, sand-cliffs, &c. . . }                            | 4-6             |
| Swift . . .                     | <i>Cypselus apus</i> . .              | April—Aug. . .                             | { Towers, steeples, roofs, &c. . . }                                | 2-4             |
| Night-jar, or Goat-sucker . . . | { <i>Caprimulgus Europæus</i> . . }   | Summer visitor . .                         | Hole in ground . .  | 2               |
| Ring-dove, or Wood-pigeon . . . | <i>Columba palumbus</i> . .           | All the year . .                           | Trees and tall bushes . .   | 2               |
| Stock-dove . . .                | „ <i>œnas</i> . .                     | Do. . .                                    | { Trees and some-times holes . . }                                  | 2               |
| Rock-dove . . .                 | „ <i>livia</i> . .                    | Do. . .                                    | { Holes and crevices in rocks . . }                                 | 2               |
| Turtle-dove . . .               | „ <i>turtur</i> . .                   | Summer visitor . .                         | Trees and bushes . .  | 2               |
| Pheasant . . .                  | { <i>Phasianus Colchicus</i> . . }    | All the year . .                           | On ground . . .   | 10-12           |
| Capercaillie . . .              | <i>Tetrao urogallus</i> . .           | Do. . .                                    | Do. . .   | 6-12            |
| Black Grouse . . .              | „ <i>tetrix</i> . .                   | Do. . .                                    | Do. . .   | 7-10            |
| Red do. . .                     | <i>Lagopus Scoticus</i> . .           | Do. . .                                    | Do. . .   | 7-10            |
| Ptarmigan . . .                 | „ <i>vulgaris</i> . .                 | Do. . .                                    | Do. . .   | 7-10            |
| Partridge . . .                 | <i>Perdix cinerea</i> . .             | Do. . .                                    | Do. . .   | 10-15           |
| Red-legged do. . .              | „ <i>rufa</i> . .                     | Do. . .                                    | Do. . .   | 10-15           |
| Quail . . .                     | <i>Coturnix vulgaris</i> . .          | Summer visitor . .                         | Do. . .   | 7-10            |
| Great Bustard . . .             | <i>Otis tarda</i> . .                 | — . .                                      | { Do. Practically extinct . . }                                     | 2-3             |
| Great Plover . . .              | { <i>Edicnemus crepitans</i> . . }    | Summer visitor . .                         | Do. . .   | 2               |
| Golden Plover . . .             | { <i>Charadrius plumbeus</i> . . }    | All the year . .                           | Do. . .   | 4               |
| Dotterel . . .                  | „ <i>morinellus</i> . .               | Summer visitor . .                         | Do. . .   | 3               |
| Ringed Plover . . .             | „ <i>hiaticula</i> . .                | — . .                                      | Do. . .   | 4               |
| Kentish do. . .                 | „ <i>cantianus</i> . .                | — . .                                      | Do. . .   | 4               |
| Grey Plover . . .               | <i>Squatarola cinerea</i> . .         | Winter visitor . .                         | { Does not breed in England . . }                                   | —               |
| Lapwing, or Peewit . . .        | <i>Vanellus cristatus</i> . .         | All the year . .                           | On ground . . .   | 4               |
| Turnstone . . .                 | <i>Streptopelia interpres</i> . .     | Winter visitor . .                         | { Does not breed in England . . }                                   | —               |
| Sanderling . . .                | <i>Calidris arenaria</i> . .          | Do. . .                                    | Do. . .   | —               |
| Oyster-catcher . . .            | { <i>Haematopus ostralegus</i> . . }  | All the year . .                           | On ground . . .   | 3-4             |
| Heron . . .                     | <i>Ardea cinerea</i> . .              | Do. . .                                    | Trees and rocks . .   | 4-5             |
| Bittern . . .                   | <i>Botaurus stellaris</i> . .         | Do. . .                                    | On ground . . .   | 3-5             |
| Curlew, or Whaup . . .          | <i>Numenius arquata</i> . .           | Do. . .                                    | Do. . .   | 4               |
| Whimbrel . . .                  | „ <i>phæopus</i> . .                  | Winter visitor . .                         | { Does not nest in Great Britain. S. in Orkneys and Shetland. . . } | —               |
| Red-shank . . .                 | <i>Totanus calidris</i> . .           | Do. . .                                    | Do. . .   | 4               |
| Green Sandpiper . . .           | „ <i>ochropus</i> . .                 | { Mostly a winter visitor . . }            | { On banks near streams . . }                                       | 4               |
| Wood do. . .                    | „ <i>glareola</i> . .                 | Do. . .                                    | Do. . .   | 4               |
| Common do. . .                  | „ <i>hypoleuca</i> . .                | Summer visitor . .                         | Do. . .   | 4               |
| Green-shank . . .               | „ <i>glottis</i> . .                  | { Winter visitor, except in Hebrides . . } | On ground . . .   | —               |
| Avocet . . .                    | { <i>Recurvirostra avocetta</i> . . } | — . .                                      | { Holes in ground in marshes . . }                                  | 2               |
| Black-tailed Godwit . . .       | <i>Limosa melanura</i> . .            | — . .                                      | { On ground in marshes, &c. . . }                                   | 4               |
| Bar-tailed do. . .              | „ <i>rufa</i> . .                     | Winter visitor . .                         | { Does not breed in Great Britain. . . }                            | —               |
| Ruff . . .                      | <i>Machetes pugnax</i> . .            | April—Sep. . .                             | { Fens of Lincolnshire and Cambridgeshire . . }                     | 4               |
| Woodcock . . .                  | <i>Scolopax rusticola</i> . .         | { Oct.—April, mostly . . }                 | On ground . . .   | 4               |
| Great Snipe . . .               | „ <i>major</i> . .                    | Winter visitor . .                         | Do. . .   | —               |



| Popular Name.                           | Scientific Name.                                  | Stay in England.   | Localities of Nest.                                   | Av.<br>No.<br>of<br>Eggs |
|---|---|--|---|--------------------------|
| Common do. . . .                        | <i>gallinago</i> . . .                            | { Do., some-<br>times re-<br>maining to<br>breed . . . } | Do. . . . .   | 4                        |
| Jack do. . . . .                        | " <i>gallinula</i> . . .                          | Winter visitor . . .                                     | { Does not breed in<br>Great Britain. }               | —                        |
| Curlew Sandpiper . . .                  | <i>Tringa subarquata</i> . . .                    | Do. . . . .  | Do. . . . .   | —                        |
| Knot . . . . .                          | " <i>Canutus</i> . . .                            | Do. . . . .  | Do. . . . .   | —                        |
| Little Stint . . . .                    | " <i>minuta</i> . . .                             | Do. . . . .  | Do. . . . .   | —                        |
| Dunlin, Stint, or<br>Purre . . . . }    | " <i>variabilis</i> . . .                         | { Do., some-<br>times re-<br>maining to<br>breed . . . } | On ground . . . .                                     | 4                        |
| Purple Sandpiper . . .                  | " <i>maritima</i> . . .                           | Winter visitor . . .                                     | { Seldom breeds in<br>Great Britain. }                | —                        |
| Land-rail, or Corn<br>Crake . . . . }   | <i>Orex pratensis</i> . . .                       | Summer visitor . . .                                     | On ground . . . .                                     | 7-10                     |
| Spotted Crake . . . .                   | " <i>porzana</i> . . .                            | Do. . . . .  | Do. in marshes . . .                                  | 7-10                     |
| Water-rail . . . . .                    | <i>Rallus aquaticus</i> . . .                     | All the year . . .                                       | Do. do. . . . .                                       | 6-10                     |
| Moor-hen, Water-<br>hen, or Gallinule } | <i>Gallinula chloropus</i> . . .                  | Do. . . . .  | { On banks near<br>water and small<br>islands . . . } | 6-8                      |
| Coot . . . . .                          | <i>Fulica atra</i> . . .                          | Do., generally . . .                                     | { Edge of water or<br>small islands . }               | 7-10                     |
| Grey Phalarope . . .                    | <i>Phalaropus lobatus</i> . . .                   | Winter visitor . . .                                     | { Does not breed in<br>Great Britain. }               | —                        |
| Grey-legged Goose . . .                 | <i>Anser ferus</i> . . .                          | Do. . . . .  | Do. . . . .   | —                        |
| Bean do. . . . .                        | " <i>segetum</i> . . .                            | Do. . . . .  | Do. . . . .   | —                        |
| Pink-footed do. . . .                   | " <i>brachyrhynchus</i> . . .                     | Do. . . . .  | Do. . . . .   | —                        |
| White-fronted do. . . .                 | " <i>albifrons</i> . . .                          | Do. . . . .  | Do. . . . .   | —                        |
| Bernicle do. . . . .                    | " <i>leucopsis</i> . . .                          | Do. . . . .  | Do. . . . .   | —                        |
| Brent do. . . . .                       | " <i>brenta</i> . . .                             | Do. . . . .  | Do. . . . .   | —                        |
| Hooper . . . . .                        | <i>Cygnus ferus</i> . . .                         | Do. . . . .  | Do. . . . .   | —                        |
| Bewick's Swan . . . .                   | " <i>Bewickii</i> . . .                           | Do. . . . .  | Do. . . . .   | —                        |
| Mute do. . . . .                        | " <i>olor</i> . . .                               | Do. . . . .  | Do. . . . .   | —                        |
| Shieldrake . . . . .                    | <i>Tadorna vulpanser</i> . . .                    | { Do., remain-<br>ing to breed }                         | { Rabbit barrows on<br>coast . . . }                  | 8-14                     |
| Shoveller . . . . .                     | <i>Anas clypeata</i> . . .                        | Winter visitor . . .                                     | { Seldom breeds in<br>Great Britain. }                | —                        |
| Gadwall . . . . .                       | " <i>strepera</i> . . .                           | Do. . . . .  | Do. . . . .   | —                        |
| Pintail Duck . . . .                    | " <i>acuta</i> . . .                              | Do. . . . .  | { Does not breed in<br>Great Britain. }               | —                        |
| Wild do., or Mal-<br>lard . . . . }     | " <i>boschas</i> . . .                            | { Do., remains<br>to breed }                             | Among reeds, &c. . .                                  | 9-12                     |
| Garganey . . . . .                      | " <i>querquedula</i> . . .                        | Do. do. . . .  | Do. . . . .   | 8-12                     |
| Teal . . . . .                          | " <i>crecca</i> . . .                             | Do., sometimes . . .                                     | Marshes . . . . .                                     | 8-12                     |
| Wigeon . . . . .                        | " <i>Penelope</i> . . .                           | Winter visitor . . .                                     | { Seldom breeds in<br>Great Britain. }                | —                        |
| Eider Duck . . . . .                    | { <i>Somateria mal-</i><br><i>lissima</i> . . . } | { Do., remain-<br>ing to breed }                         | { Rocks and preci-<br>pices on coast. }               | 5                        |
| Velvet Scoter . . . .                   | <i>Oidemia fusca</i> . . .                        | Winter visitor . . .                                     | { Does not breed in<br>Great Britain. }               | —                        |
| Common do. . . . .                      | " <i>nigra</i> . . .                              | Do. . . . .  | Do. . . . .   | —                        |
| Pochard . . . . .                       | <i>Fuligula ferina</i> . . .                      | Do. . . . .  | Do. . . . .   | —                        |
| Scaup Duck . . . . .                    | " <i>marila</i> . . .                             | Do. . . . .  | Do. . . . .   | —                        |
| Tufted do. . . . .                      | " <i>cristata</i> . . .                           | Do. . . . .  | Do. . . . .   | —                        |
| Long-tailed do. . . .                   | " <i>glacialis</i> . . .                          | Do. . . . .  | Do. . . . .   | —                        |
| Golden Eye . . . . .                    | " <i>clangula</i> . . .                           | Do. . . . .  | Do. . . . .   | —                        |
| Smew . . . . .                          | <i>Mergus albellus</i> . . .                      | Do. . . . .  | Do. . . . .   | —                        |
| Red-breasted Mer-<br>ganser . . . . }   | " <i>serrator</i> . . .                           | { Do., remain-<br>ing to breed }                         | { At foot of a tree, on<br>small islands . }          | 6-9                      |
| Goosander . . . . .                     | " <i>merganser</i> . . .                          | Do. do. . . .  | { On ground, among<br>bushes, stones, &c. }           | 6-7                      |
| Great Crested Grebe . . .               | <i>Podiceps cristatus</i> . . .                   | Nearly all year . . .                                    | { In rushes, &c.,<br>touching water }                 | 3-5                      |
| Red-crested do. . . .                   | " <i>rubricollis</i> . . .                        | Winter visitor . . .                                     | { Does not breed in<br>Great Britain. }               | —                        |
| Slavonian do. . . . .                   | " <i>cornutus</i> . . .                           | Do. . . . .  | Do. . . . .   | —                        |
| Little do., or Dab<br>Chick . . . . }   | " <i>minor</i> . . .                              | { Do., remain-<br>ing to breed }                         | { Rushes, &c., touch-<br>ing water . . . }            | 4-6                      |



| Popular Name.                                  | Scientific Name.                                   | Stay in England.                 | Localities of Nest.   | Av. No. of Eggs |
|--|--|----------------------------------|---|-----------------|
| Great Northern Diver . . .                     | <i>Colymbus glacialis</i>                          | Winter visitor .                 | { Not known to breed in Great Britain }                     | —               |
| Black-throated do. .                           | „ <i>arcticus</i> . .                              | { Do., remain-<br>ing to breed } | On ground, near water                                       | 2               |
| Red-throated do. .                             | „ <i>septentrionalis</i>                           | Do. do. .                        | Do. . . . .   | 2               |
| Guillemot . . .                                | <i>Uria troile</i> . .                             | All the year .                   | { On ledges of rocks and cliffs }                           | 1               |
| Brunnich's do. .                               | „ <i>Brunnichii</i> .                              | Winter visitor .                 | { Does not breed in Great Britain. }                        | —               |
| Ringed do. . .                                 | „ <i>lacrymans</i> .                               | All the year .                   | { Ledges of rocks and cliffs }                              | —               |
| Black do. . . .                                | „ <i>Grylle</i> . . .                              | Do. . . . .                      | { Holes and crevices in rocks and cliffs }                  | 2               |
| Little Auk . . .                               | { <i>Mergulus mela-</i><br><i>noleucos</i> . . }   | Winter visitor .                 | { Does not breed in Great Britain. }                        | —               |
| Puffin . . . .                                 | <i>Fratercula arctica</i> .                        | All the year .                   | { Holes, &c., in rocks and cliffs, also rabbit holes . }    | 1               |
| Razor-bill . . .                               | <i>Alca torda</i> . .                              | Do. . . . .                      | —   | —               |
| Cormorant . . .                                | { <i>Phalacrocorax</i><br><i>carbo</i> . . }       | Do. . . . .                      | { On ledges of precipices, &c. . }                          | 4-6             |
| Shag . . . . .                                 | „ <i>cristatus</i> . .                             | Do. . . . .                      | Do. . . . .   | 3-5             |
| Gannet, or Solan Goose . . . }                 | <i>Sula Bassana</i> . .                            | Do. . . . .                      | Do. . . . .   | 1               |
| Caspian Tern . .                               | <i>Sterna Caspia</i> .                             | Winter visitor .                 | { Does not breed in Great Britain. }                        | —               |
| Sandwich do. . .                               | „ <i>cantiaca</i> . .                              | All the year .                   | Holes in ground .   | 3-4             |
| Roseate do. . .                                | „ <i>Dougallii</i> . .                             | Summer visitor                   | —   | 2-3             |
| Common do., or Sea-swallow . }                 | „ <i>hirundo</i> . .                               | All the year .                   | On ground, near water                                       | 2-3             |
| Arctic do. . . .                               | „ <i>arctica</i> . .                               | Do. . . . .                      | Do. . . . .   | 2-3             |
| Lesser do. . . .                               | „ <i>minuta</i> . .                                | Do. . . . .                      | { Holes in ground on coast }                                | 2-3             |
| Black do. . . .                                | „ <i>nigra</i> . . .                               | Do. . . . .                      | { Marshy places, on ground }                                | 4               |
| Black-headed do .                              | <i>Larus ridibundus</i> .                          | Do. . . . .                      | { Scoulton Mere, Norfolk, near Brigg, Lincolnshire, &c. . } | 3               |
| Kittiwake . . .                                | „ <i>tridactylus</i>                               | Do. . . . .                      | { Ledges of precipices and cliffs }                         | 3               |
| Common Gull . .                                | „ <i>canus</i> . . .                               | Do. . . . .                      | { High rocks. Sometimes marshes }                           | 2-3             |
| Lesser Black-backed do. . }                    | „ <i>fuscus</i> . . .                              | Do. . . . .                      | { Hollows and crevices in rocks }                           | 2-3             |
| Herring do. . .                                | „ <i>argentatus</i> .                              | Do. . . . .                      | { Ledges of rocks and cliffs. . }                           | 3               |
| Great Black-backed do., or Cob. . . . }        | „ <i>marinus</i> . .                               | Do. . . . .                      | Rocky coasts . . .  | 3               |
| Common Skua . .                                | { <i>Lestris cutar-</i><br><i>rhactes</i> . . }    | Do. . . . .                      | { Among heath and moss in a hilly island. Shetlands }       | 2               |
| Richardson's do. .                             | „ <i>Richardsonii</i>                              | Do. . . . .                      | { On ground, in moors and marshes . }                       | 2               |
| Fulmar Petrel . .                              | { <i>Procellaria gla-</i><br><i>cialis</i> . . . } | Do. . . . .                      | Ledges of rocks . .   | 1               |
| Manx Shearwater .                              | <i>Puffinus Anglorum</i>                           | Do. . . . .                      | { Holes, in rocks, mostly in uninhabited islands }          | 1               |
| Storm Petrel, or Mother Carey's Chicken. . . } | { <i>Thalassidroma</i><br><i>procellaria</i> . }   | Do. . . . .                      | Holes in cliffs, &c. .                                      | 1               |



## KILLING, SETTING, AND PRESERVING INSECTS.

It is, of course, necessary to kill the insects, and all entomologists desire to do so as rapidly and painlessly as possible.

As regards the latter point we may make ourselves tolerably easy, for insects cannot, by reason of their nervous structure, suffer pain as if they were human beings. This is shown by the fact that they will eat and discharge other functions of life after suffering from injuries that would kill a human being on the spot. Insects, for example, will eat greedily when the whole of their digestive organs have been removed, and every one knows how indifferent they are to the loss of a limb or two.

Still, though the sense of pain is so inconsiderable, no one would wish to inflict any pain at all if it can be helped, and no real entomologist ever did so. With nearly all soft-bodied insects, such as butterflies, small-bodied moths, &c., instantaneous death is secured by a smart pinch at the lower part of the thorax, where the legs meet.

Insects have no brains, but there is a series of nervous knots, called "ganglia," running along the body, and the great mass of them is aggregated in the thorax, because they have to supply energy to the two pairs of wings and the three pairs of legs. Forceps are better than fingers for this purpose, and if the pinch be neatly made death is instantaneous.

Beetles and other hard-bodied insects are best killed by being plunged into boiling water. Care must be taken that the water is boiling fiercely, and the insects should be flung sharply into it, so as to bring them below the surface.

But of all the troubles to a humane entomologist, a female of one of the large-bodied moths is the worst. She flatly refuses to die before her time on any pretext whatever. Stamping on her and crushing her flat will not kill her. She may be sunk under chloroform and stupefied, the abdomen removed, emptied, and stuffed with poisoned cotton-wool. Poison may be introduced into the shell of her body, and yet she will come to life again, as far as movement is concerned. Whether life, as we understand it, be extinct or not I cannot say, but I think that the movements are only reflectively muscular, like those of an eel when cut into pieces, and having nothing to do with pain or, indeed, sensation of any kind.

A piece of catgut, or a thin strip of leather, if thrown into the fire, will twist about like a scotched snake or a half-crushed worm, though of course there can be no feeling in it; and I am inclined to think that the movements of an insect in which the nervous system has been destroyed, and from which the whole of the vital organs have been removed, and the whole of whose tissues, internal and external, have been saturated with poison, cannot betoken life, much less pain.

A very little benzine applied to the under surface of the abdomen will generally kill a moth instantly, but has the disadvantage of stiffening it so that it can hardly be set. The best plan with an obstinate moth is to set it first, and then apply the benzine to the lower part of the thorax, just where the pin passes through it.



For setting the insects it will be necessary to have setting-boards and pins of various sizes, all of which can be obtained from the dealers.

Gilt pins are by far the best. They cost one shilling per ounce in addition to the ordinary price, but they are more than worth it. Black pins are also sold, but I do not think much of them. The object of gilding the pins is to prevent the formation of verdigris, which destroys so many insects.

Do not try to make your own setting-boards, as they will cost more than if you bought them. The tools for setting are simple and few. A pair of long-nosed pliers will be necessary, as the pins are very slender and bend if pressed on the head. Indeed, I never could see any use in a head on an entomological pin.

Half-a-dozen fine needles with the heads stuck into lucifer matches will be found useful, and so will a stout darning-needle fastened into the handle of a camel's-hair brush. Stiff cards will be needed cut into strips of various lengths, together with a supply of ordinary pins.

In pinning an insect be careful to put the pin exactly in the centre of the thorax. It should lean a little forwards, so that the point should come out between the second and third pairs of legs. If set quite upright, or leaning in the least backwards, the insect, when placed in the cabinet, will tilt its tail upwards, and look very awkward.

In setting the insect the fine needles will be found very useful in drawing the wings into their place, and keeping them there while the braces are applied. They should be placed just under the "costal" nervure—*i.e.*, the strong nervure on the upper edge of the wing, and will leave no mark unless very carelessly handled.

One brace for each pair of wings will suffice for most insects, but some of the larger hawk-moths will require a second brace on each side. They should be placed diagonally, crossing the wings so that the lower ends nearly meet below the abdomen, and the upper ends should come beyond the middle of the upper wings. The pins should not be too close to the wings, lest they should be dented, and they should lean rather backwards.

Write on the brace the date on which the insect was set, so that you may know when to take it off. The length of time varies according to the size of the insect, the temperature, and the state of the atmosphere, and must be left to the judgment of the setter. If you make a mistake at all make it in the right direction, and leave the insects on the setting-boards longer than is necessary.

If they are taken off the boards too soon they "spring," *i.e.*, the wings return towards the position assumed when at rest. A sprung moth is most difficult to re-set, even when relaxed, and is always liable to spring again unless the wings are fixed with cement. Ten days of ordinary weather will serve for a butterfly or a slender-made moth; but for a large thick-bodied female moth six weeks will not be too much.

The collector must therefore be prepared to provide himself with a considerable number of setting-boards. Insects take up very much more space on the board than they do in the cabinet, and if many are set equivalent space must be provided. However, with fair treatment the boards ought to last for a number of years. My parrot ate one of my setting-boards, and began upon another, but such an attack was of course abnormal.

Most collectors think that when they have set, dried, and transferred their insects they have done their duty by them. I do not. All insects are liable to the attacks of various foes, of which mites, clothes-moths, grease, and mould are the worst. It



is to keep off the living enemies that cabinets are saturated with camphor, turpentine, carbolic acid, &c., neither of which odours are agreeable. But by taking a little more trouble at first the collector need fear none of these foes, nor will his cabinets or boxes have the least evil scent.

The late Charles Waterton was, I believe, the first to discover, and certainly the first to point out that none of these evil-smelling remedies are necessary, and that the poisonous arsenical soap which the professional taxidermists still insist on using ought to be abandoned as dangerous and ineffective. It will preserve the skin into which it is rubbed, but has no effect on the fur or feathers, so that the hair or plumage may be eaten by the moths, while the skin remains intact.

Corrosive sublimate is his agent for rendering specimens impervious to insect and vegetable foes, and when applied according to his system I have found it to be infallible.

Formerly it used to be a rather costly remedy, but now that methylated spirit is so cheap the cost is comparatively trifling. Pounded corrosive sublimate should be dissolved in spirits of wine, and the bottle must be repeatedly shaken, so as to ensure that none of the poison is deposited at the bottom.

The proportions which Waterton used are thus given by him:—"I put a good large tea-spoonful of well-pounded corrosive sublimate into a wine-bottle full of alcohol. I let it stand over night, and the next morning draw it off into a clean bottle. When I apply it to black substances and perceive that it leaves little white particles on them, I then make it weaker by adding alcohol. A black feather dipped in the solution, and then dried, will be a very good test of the state of the solution."

When your insects are quite dry dip them completely into the solution, and hold them there for a second or two. Take them out, and drain all the superfluous moisture back into the vessel. Then dry them as fast as possible in a current of air, to prevent delicate hairs and fibres from being matted together. Waving them backwards and forwards is perhaps the best plan; and if it be done in the sunshine or in front of a hot fire the insects will be soon dry.

Insects thus treated will be absolutely secure from mites, clothes-moths, or mould. This last is a kind of fungus, and as all vegetable life is destroyed by corrosive sublimate, no mould can make its appearance on an insect so treated, even though it be kept in a damp atmosphere.

The most troublesome of all insects are the large-bodied moths, especially the females. I have already shown that they refuse to die or to dry like other insects, and they are equally tiresome when they are placed in the cabinet, from their liability to grease, mites, mould, and wrinkles. Judicious use of the corrosive sublimate will, however, render the collector independent of all these foes; and though the process will occupy some time and require much patience, it will save a very great amount of anxiety, worry, and trouble in the long run.

The best plan is as follows:—

With a pair of fine scissors separate the abdomen from the thorax, and "set" the latter as usual.

Wrap several layers of tissue-paper round the abdomen so as to preserve the delicate feathering, enlarge the aperture made by the scissors, and take out all the contents. This is easily done with a pair of forceps, and a needle fixed into a handle, made red-hot, and then bent at the end into a hook.

Fill the empty shell rather tightly with cotton-wool, so as to preserve the



original shape, but making it a little too large, so as to allow for the contraction of the skin as it dries. Let it remain for a fortnight or so; dip both parts of the moth into the solution, dry them, join them with coaguline, and no one would suspect that anything had been done to the insect.

It is a good plan to set one specimen in the natural attitude of repose, and if you breed an insect, to preserve the empty pupa-shell.

Birds' eggs need a few words. No one ever thinks now-a-days of making a hole at each end of an egg, thus destroying the beautiful contour, but even in late years I see that a large hole at the side and a very small one at the end are recommended. Now, I see no object in the second hole, and have been accustomed to use only one, which is made in the middle of one side.

Small and delicate eggs, such as those of the gold-crest, bottle-tit, &c., must be protected by having a few layers of tissue-paper rolled round them and steeped in gum. The paper can be soaked off when the egg is finished.

The hole being carefully made, a needle should be introduced, and the yolk thoroughly taken up. Water should then be injected into the hole by a pointed glass tube, and when all the contents of the egg are washed out, a little of the poison should be injected in the same way. Unless this precaution be taken, the membrane, which is always left inside the egg, will become putrid, exhale a most noisome odour, and spoil the colour of the shell.

When quite dry, the eggs should be fastened on stout white cardboard by a little patch of coaguline just by the hole. The egg will then appear as perfect as if it had never been touched.

When eggs are "hard set," and at the same time valuable, they can be emptied by cutting out a tolerably large door, if it may be so called, and extracting the contents piecemeal. The door can then be replaced, and the egg fastened as mentioned above.

I have mentioned the relaxing pan.

This is useful when insects have either not been set at all, or have been badly set. It is simply a shallow pan, such as a large flower-pot saucer, with about one-third of an inch of silver sand in it. The sand should be kept damp—not wet—and the insects placed on the sand. A cover is laid on the top to prevent evaporation, and in twenty-four hours or so the insect will be nearly as flexible as when newly killed.

As re-set insects are liable to "spring," the bases of the wings should be touched with coaguline at their junction with the under surface of the thorax. If the pins have to be changed, push the new pin well through the body, touch it with coaguline, and draw it back again. Unless this is done, the insect will be loose on the pin.

Plants are preserved for the cabinet in a very simple manner. They are laid out on sheets of absorbent paper, covered with more paper, and subjected to a moderate pressure until dry. It will mostly be found necessary to change the paper more than once, and there should be always several layers of paper between the plants.

Special papers and presses are made for the purpose, and, of course, are the best, but there is really no necessity for them, and common blotting-paper and a few flat boards are all that is required for practical purposes.

When quite dry, the plants are laid out on sheets of stiff white paper, and fastened down by little strips of paper placed over them at intervals. This is the usual plan; but if the collector has, as he ought to have, a delicate touch, he will be



able to dispense with the paper strips, and substitute minute drops of the ever-useful coaguline. Much care must be taken of the specimens, which, like insects, are very liable to the attacks of various foes.

It will add much to the beauty of an herbarium if all the sheets of paper be uniform in shape and size.

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## CABINETS AND STORE-BOXES.

UNLESS the collector have the purse of Fortunatus, or something very like it, he will before long find himself sadly incommoded in the preservation of his specimens, which, whether zoological or botanical, are fragile, and liable to the attacks of a variety of foes, such as mites, clothes-moths, dermestes, mould, &c.; and when either of these foes has obtained admittance to the collection its extirpation is exceedingly difficult, and many specimens will be irretrievably injured.

Light is almost as much to be feared as mites or moths, so much does it alter the colour, especially when it is brilliant and delicate. The plumage of birds suffers almost as much from light as does that of the Lepidoptera, and in the British Museum many of the specimens exhibited in the glass cases have entirely lost the bright colouring of the living bird, and, except by their form, are almost unrecognisable.

Cabinets are undoubtedly the best storehouses, but they are horribly expensive. A cabinet, for example, which only contains the British Lepidoptera cannot have less than forty drawers, even for a few examples of each species. As the price of entomological cabinets is a guinea per drawer, the reader will see that if he intends to collect all the orders of British insects only, at least three such cabinets will be wanted.

Now, provided that each specimen has been preserved, as already recommended, the air-tight and mite-excluding drawers are not needed, all that is wanted being darkness, dryness, and stillness.

For insects, the ordinary double store-boxes will be sufficient. These, covered with cloth to resemble books, cost about 8s. each—*i.e.*, just one-fifth as much as a cabinet.

But if the collector will not mind taking a little trouble, he will be able to reduce even this expense materially. Cork is the expensive part of a store-box, and if the collector has his boxes floored with any soft, well-seasoned wood, he can manage without cork. An oblong wooden drawer or box will answer well enough, but it will be necessary to have a "pricker"—*i.e.*, a darning-needle fastened into a handle—wherewith to make the holes for the pins. And it will be also necessary to hold the pins (of course, with the pliers or forceps) under and not above the insects. All my store-boxes were of simple wood, and I managed well enough with it.

I lay great stress upon the proper seasoning of the wood, as unseasoned wood will not only shrink, and leave ugly gaps, which admit dust, but will stain the paper and disfigure the appearance of the collection.

As to the labels, do not take the trouble of writing them. Printed labels look infinitely better than written, and can be bought at so cheap a rate that it is a pity to waste useful time in writing them. Do not paste or gum the labels on to the



drawers, as they will often have to be shifted. Pin them, but let the pins be very short, so as not to interfere with those which belong to the insects.

Lines will be absolutely necessary in order to preserve uniformity of appearance, and whether they be black, red, or blue signifies little. Ordinary pencil marks are quite sufficient if they be lightly made. You will have to rule the lines for yourself, as they will vary according to the size of the insect. Presuming that all the boxes or drawers are uniform in size, the best way is to have a special ruler which exactly fits the interior, and then the lines will be parallel without requiring any troublesome measurements.

Some collectors are extremely fastidious, making the lines very fine, and erasing them after they have marked the pin-hole, but I do not think that the absence of lines is any great improvement.

Take care not to allow either cabinets or boxes to touch the walls, especially if they be external. Even when a wall is warm and dry it will be better to allow a current of air to circulate between it and the collection. Botanical specimens, by the way, are even more liable to injury by damp than are the insects, and they should be continually inspected, and exposed to a dry atmosphere so as to air them.

Of course, the drawers or store-boxes will be boldly labelled, so that any insect can be found without searching through a number of drawers.

A very practical difficulty must be faced by every collector. He knows that a certain number of insects will require a certain amount of space, so that forty drawers, or twenty store-boxes, will be needed to contain the British Lepidoptera alone.

If he can afford it, the best plan is to procure the requisite drawers or boxes, rule and ticket them on the model of some first-rate collection, such as that of the British Museum, leaving blank spaces for the insects according to their size and rarity—*e.g.*, in the butterflies, a large space must be reserved for Swallow-tails, Atalantas, &c., while a very small space will do for the Large Copper.

Such a plan forms a wonderful inducement to hard work to the collector, as every blank space is a standing reproach to him, and the satisfaction which he enjoys at filling it up will repay him for any amount of hard work.

Still, even if he uses store-boxes instead of cabinets, and dispenses with cork, the twenty boxes cannot cost less than £8, if they be strongly made of seasoned wood.

If, then, such a purchase cannot be made at once, the best plan is not to attempt any arrangement at first, but to purchase a few boxes at a time, until the requisite number have been collected. They will not need papering at first, but when the collector has succeeded in procuring his complete set of boxes he can paper and arrange them successively, being sure to begin with box No. 1. The additional seasoning of the boxes will do no harm.

One advantage of proceeding in this way is, that if the collector does at last succeed in setting up a genuine cabinet, he will find that his store-boxes will not be wasted, but will be exceedingly useful as receptacles for the many duplicates which are sure to accumulate in course of time.

For birds' eggs very much less care is required, any ordinary chiffonier, which can be purchased at any second-hand furniture shop, answering well enough if fitted up with sliding shelves. Any working joiner can put in the shelves, which, of course, must be set at different distances from each other, according to the size of the egg.



There is no necessity to have the shelves fitted with compartments, as I presume the eggs to be fixed on cardboard, as already recommended, and the cardboard to be attached to the shelves with short pins. The shelves should slide easily in grooves, which should be rather deep, as otherwise they are apt to tilt as they are drawn out, and smash the eggs.

Botanical specimens can be arranged on shelves in like manner.

THE END.





A. Rudge







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