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# THE FIELD NATURALIST'S HANDBOOK.

REV. J. G. WOOD AND THEODORE WOOD.

Frank M. Howlett

from Ans Claske.

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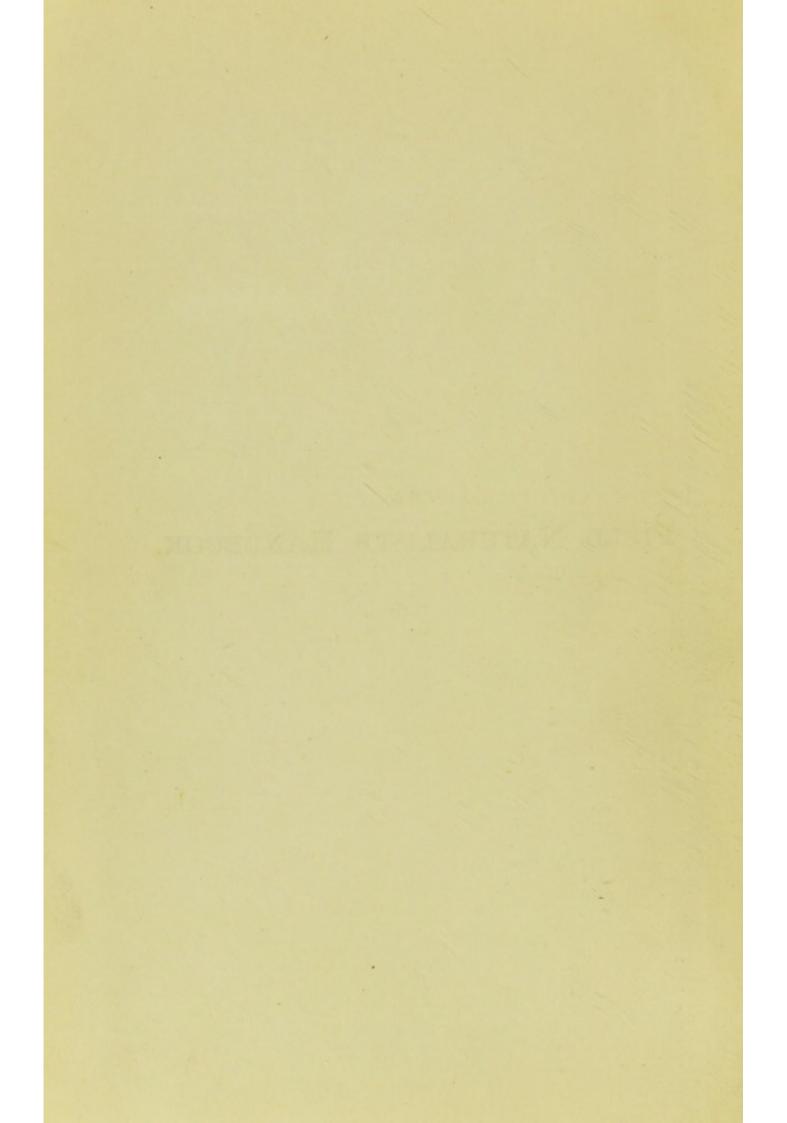


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THE

# FIELD NATURALIST'S HANDBOOK.



#### THE

# FIELD NATURALIST'S HANDBOOK.

BY THE

## REV. J. G. WOOD

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

AND

## THEODORE WOOD.

FOURTH EDITION.

# CASSELL & COMPANY, LIMITED:

LONDON, PARIS, NEW YORK & MELBOURNE.

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## PREFACE.

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young Field Naturalist, and in this Handbook have corrected many existing errors, and given much information hitherto unpublished.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 foodplant 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

#### PREFACE.

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.

# INTRODUCTION.

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 cresthunters 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 desires 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.

5 and 9 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 Jacobaa) were known to every one, and were even more appropriate than the clumsy titles of "Pink Underwing" (Euchelia Jacobaa). Moreover, the substituted

#### INTRODUCTION.

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.

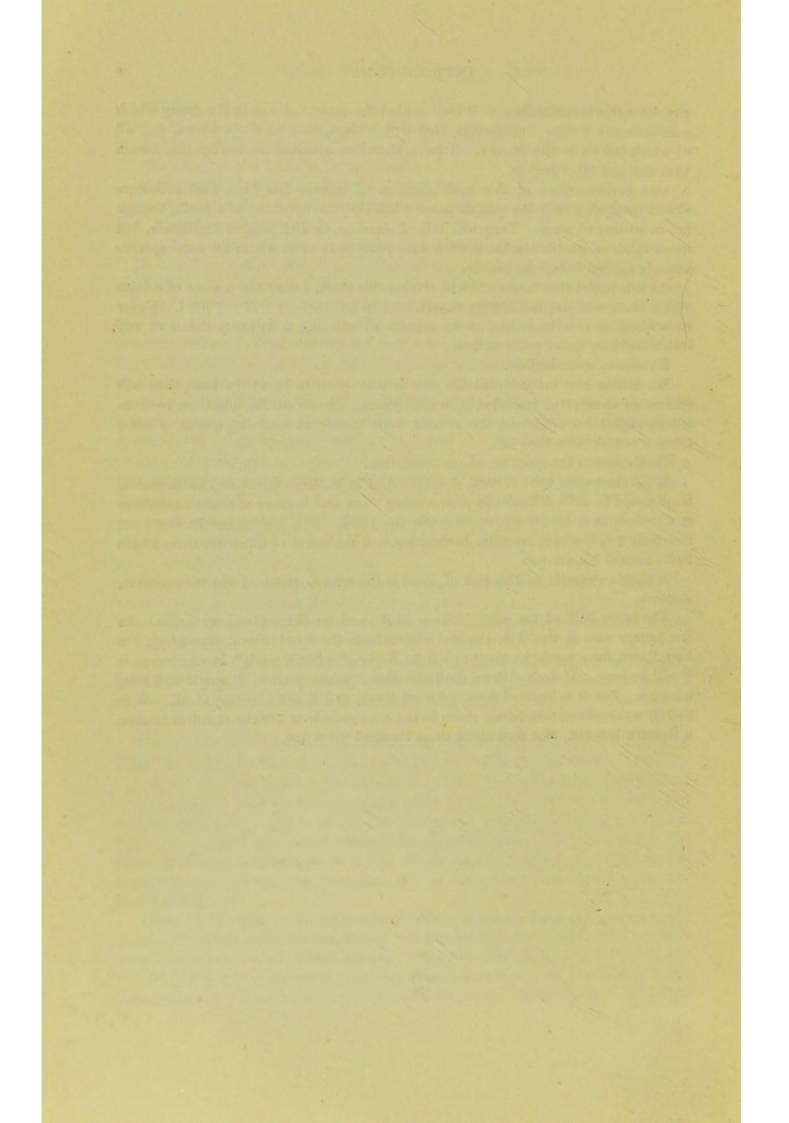
No matter how insignificant the details may seem to be at the time, they will assume an unexpected importance in after years. Nearly all the additions made to entomological knowledge in the present work have been made by means of notes taken a considerable time ago.

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 pupe 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.

Popular Name.	Scientific Name.	Ova.	Larva.	Pupa.	Food-plants.
BUTTERFLIES.					anner I
Brimstone, or Sul-}	Goneptery x rhamni	4, 5	6, 7	8	Buckthorn.
louded Yellow H	Colias Edusa .	9-5	6, 7	8	{ Dutch clover, lucerne trefoils, &c.
Pale do. do H	" Hyale	5	7	8	Clover, melilot, lucerne
Comma H	Vanessa C-album .	5 & 7	5 & 8	6 & 9	{ Nettle, elm, willow, hop, sloe, & currant
shell H	" urticæ .	4,5,&7	5,6,&8	6 & 8	Nettle.
shell H S Large do H	" polychloros	5 & 10	10-5	6, 7	Elm, osier, aspen, will low, and fruit-trees.
Beauty H}	" Antiopa .	5	6, 7	7	S Willow, birch, poplar
Peacock H	" <i>Io</i>	4, 5	6, 7	7	and nettle.
Red Admiral . H	" Atalanta .	5	6, 7	7	Do. 5 Thistles, nettle, ma
Painted Lady . H	" cardui .	5, 6	7-9	7-9	low, and scarlet bear
MOTHS.	and the second second			-	mine a new stand who we
Humming - bird Hawk H Pale Brindled	{ Macroglossa stel- } { latarum	5	8,9	-	Hedge bedstraw.
Pale Brindled	Phigalia pilosaria	_	5,6	9-12	Oak, elm.
Beauty ES Belted Beauty. H	Nyssia zonaria .		5,6	6-9	Sea-reed.
Early Moth	S Hibernia rupica-)	2	5	7-1	Oak, hawthorn, sloe.
Spring Usher . E	, leucophearia	3	5, 6	7-1	Oak, maple.
Winter Moth	(Cheimatobia bru-)	11-3	5, 6	7-12	Oak, and many othe
	{ mata } { Camptogramma }	7	8	9	Spotted persicaria,
Gem H	{ fluviata . } Scotosia dubitata .	4	6	7	l groundsel. Buckthorn.
Silky Tissue . H Red-green Carpet H	Cidaria psittacata.	-	7,8	9	Oak, lime, apple, rose.
Autumn Green?	" miata .	-	8	9	Oak, birch, alder, wi low, poplar.
do H) Scarce Dagger. H	Acronycta auricoma	-	6, 7	7	Oak, birch, bramble.
Ochreous Brown H	{Leucania lithar-}	-	1-5	5, 6	{Plantain, chickweee grasses.
Dark Sword-		4	5-7	-	Roots of lettuce an spinach.
Chestnut H)	Cerastis vaccinii .	_	6, 7	-	Oak, elm, willow, sallow
Dark do H	., spadicea .	_	5, 6	-	{Hawthorn, sloe, an honeysuckle.
Red Headed do. H	1 anotherage )	-	5	-	Low plants.
Large do H	Scopelosoma sa-}	3	5, 6	7, 8	SOak. A cannibal i
Dotted do H	(Dagucamnamuhi-)	3	5-7	1 40	Apple, and low plants.

INSECTS.

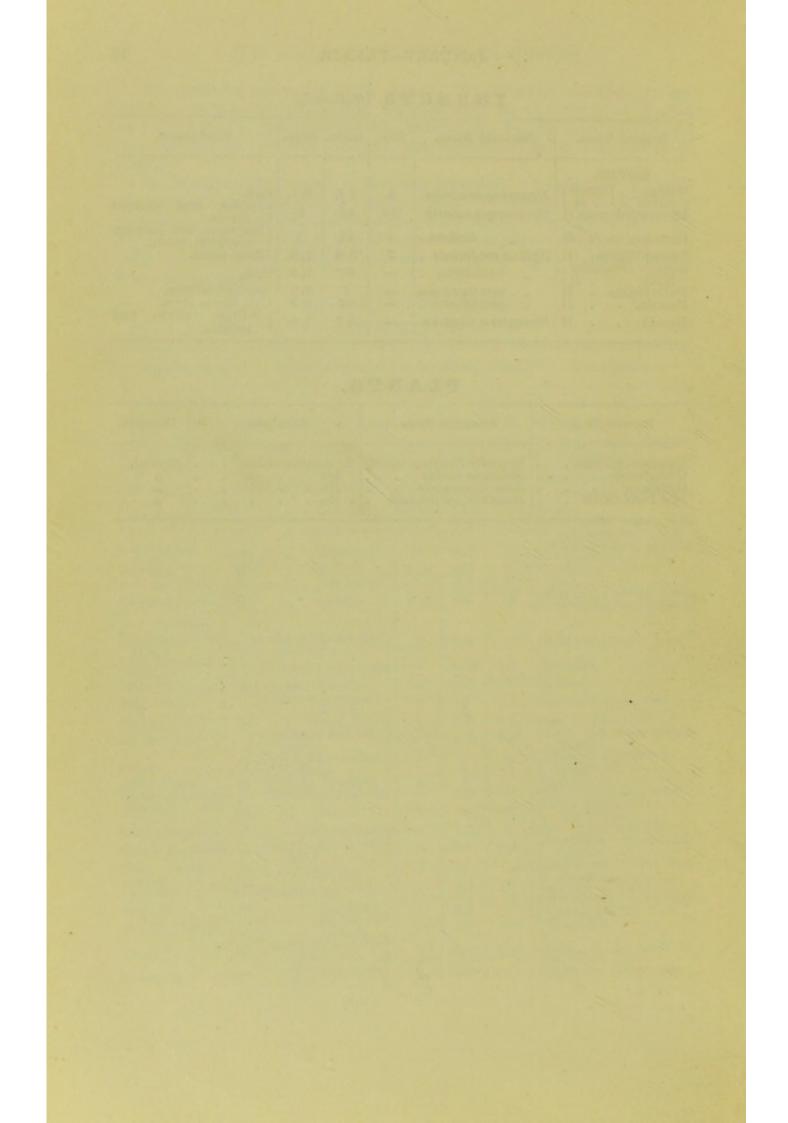
#### JANUARY-PLANTS.

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LIN	SE	C.T.	D	(continued)	•

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

PLANTS.

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



### 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 pupadiggers 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 wardrobe, 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 pupe, 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 pupe 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 pupe 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 pupze 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 pupe, 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 pupe 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 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.

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

INSECTS.

# THE FIELD NATURALIST'S HANDBOOK.

Popular Name.	Scientific Name.	Ova,	Larva.	Pupa,	Food-plants.
MOTHS.					
Pale Brindled ?	Phigalia pilosaria.	_	5, 6	9-11	Oals and also
Belted Beauty	Nyssia zonaria .				Oak and elm.
Small Brindled	" hispidaria .	_	5,6	6-9	Sea-reed,
	(Amphidasis pro-)	-	5, 6	6-1	Oak,
Great Oak do., E	( dromaria . )	-	6, 7	8-2	Oak, elm, birch, and nut.
Engrailed E	{ Tephrosia cre- puscularia . }	-	8, 9	10-1	{Elm, poplar, willow, birch, and alder.
Early Moth	{Hibernia rupica-}	2	5	7-1	Oak, hawthorn, and sloe.
Spring Usher Dotted Border	" leucophearia	3	5, 6	7-1	Oak and maple.
A CONTRACTOR OF A CONTRACTOR O	, progemmaria {Anisopteryx }		5, 6	7-1	Oak, birch, and nut.
	) ascularía . S	-	5, 6	10-1	Oak, elm, lime, haw-
Silky Tissue . H Red-green Carpet H	Scotosia dubitata . Cidaria psittacata.	4	6 7, 8	79	Buckthorn. Oak, lime, apple, & rose.
Autumn Green	" miata .	_	8	9	Oak, birch, poplar, wil-
do		-		0	low, and alder. Plantain, chickweed,
Ochreous Brown H	{Leucania lithar-}	7	1-5	5-6	and grasses.
grass H}	Agrotis suffusa .	4	5-7	7-4	SRoots of lettuce,
grass H) Chestnut H	Cerastis vaccinii	_	6-7	-	( spinach, &c. Oak, elm, willow, sallow.
Dark do H	" spadicea .	_	5, 6	_	J Hawthorn, sloe, and
Red-headed do. H	" erythrocephala		5	_	l honeysuckle. Low plants.
Large do H	Scopelosoma (	3	5, 6	7,8	(Oak. A cannibal in
	{ satellitia . } { Dasycampa rubi- r			1,0	{ confinement.
Dotted do H	ginea }	3	5-7	-	Apple and low plants.
wing H	Hoporina croceago .	4	5, 6	7,8	Oak.
Olive Rustic . H	Dasypolia Templi .	3	4-7	8	Cow parsley.
Red Sword-grass H	Calocampa vetusta.	3,4	4-6	8	Poplar and various low plants.
Common do H	,, exoleta.	4	4-7	8	{ Campion, scabious, rest- { harrow, dock, &c.
awny Pinion. H	Xylina conformis .	3	5, 6	7, 8	Birch and alder.
knot H	" rhizolitha .	-	5-7	7, 8	Oak.
Dark Pinion . H	" semibrunnea	-	7	8,9	Ash and willow.
Pale do H Herald H	, petrificata . Gonoptera libatrix	-	5-7 6, 7	8,9 7,8	Oak, birch, and lime.

# INSECTS (continued).

PLANTS.

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

## MARCH.

#### 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.

Popular Name,	Scientific Name.	Ova,	Larva.	Pupa.	Food-plants,
DUTTEDELTES					Contraction of the local division of the loc
BUTTERFLIES. Brimstone . H	Gonepteryx rhamni	4	6, 7	7	Buckthorn.
Clouded Yellow H	Colias Edusa	5-9	6, 7	8	S Dutch clover, lucerne,
Pale do. do. H	" Hyale	5	7	8	ℓ trefoils, &c. Clover, melilot, lucerne.
Comma H	Vancssa C-album .	5 & 7	5&8	6 & 9	{ Elm, willow, sloe, hop, nettle, and currant.
Small Tortoise- shell H	" urticæ .	4, 5 & 7	5,6&8	6 & 8	Nettle.
Large do H	" polychloros	5 s. 10	s.10& 5	7	Elm, aspen, osier, wil- low, and fruit-trees.
Camberwell Beauty H	" Antiopa .	5	6, 7	7	{Birch, poplar, willow, and nettle.
Peacock H Red Admiral . H	" Io	4, 5		77	Nettle. Do.
Painted Lady . H	" cardui .	6	6-9	7-9	{Thistles, nettle, mal- low, and scarlet bean.
MOTHS.					
Small Eggar	$Eriogaster \ lanestris$	4	5-7	7-1	Hawthorn, sloe.
Kentish Glory	{Endromis versi-}	4	6, 7	8-3	Birch.
Early Thorn	Selenia illunaria .	4 & 7	6 & 9	6 & 9-3	{Ash, willow, oak, haw- thorn, and plum.
Pale Brindled }	Phigalia pilosaria		5, 6	9-11	Oak, elm.
Belted Beauty . J	Nyssia zonaria .	-	5, 6	6-9	Sea-reed.
Small Prindled ?	" hispidaria.	4	5, 6	6-1	Oak.
Beauty 5 Brindled Beauty .	Biston hirtaria .	4	6, 7	9-3	{ Elm, ash, lime, and fruit-trees.
Great Oak do	{Amphidasis pro-}	-	6, 7	8-2	Oak, elm, birch, and nut.
Engrailed	{ Tephrosia cre-}	-	8, 9	10-1	{Elm, poplar, willow, birch, and alder.
Spring Usher	S Hibernia leuco-)	3	5,6	7-1	Oak, maple.
Dotted Border .	( phearia ) ,, progemmaria	-	5, 6	7-1	Oak, birch, and nut.
March Moth	{Anisopteryx as-} cularia . }	-	5, 6	10-1	{Oak, elm, lime, haw- thorn, and apple.
Short Pug	{Eupithecia ab-}	-	6, 7		Oak.
Shoulder Stripe Carpet M	Anticlea badiata .	3	6	7-3	Dog-rose.
Streamer M	,, derivata .	3, 4	6	7-3	{Dog-rose and honey- suckle.
Many-lined	S Phibalapteryx }	-	-	-	
Silky Tissue . H	E polygrammata S Scotosia dubitata .	4	6	7	Buckthorn.
Red-green Carpet H	Cidaria psittacata		6, 7	9	Oak, lime, apple, rose. 6 Oak, birch, poplar, wil-
Autumn Green }	" miata .	-	8	9	¿ low, and alder.
Rannoch Sprawler.	Petasia nubeculosa (Notodonta car-)	4 -	5, 6		Birch.
Birch Prominent .	i melita 5	-	6, 7	83	Do.
Yellow-horned .	{Cymatophora fla- vicornis }	-	6, 7	9	1)0,
Frosted Green	ridens .	4	6, 7	8	Oak. (Plantain, chickweed,
Ochreous Brown H	{Leucania lithar-}	-	1-5	5, 6	and grasses. Bird's-foot trefoil and
	S Xylomiges con-?	-	6-8	9-3	{ other low plants.
Silver Cloud . H	spicillaris .		in the second		CROOTS OF JELLICE.
Silver Cloud . H Dark Sword-grass H	C spicillaris . )	-	5-7	-	{Roots of lettuce, spinach, &c.
	C spicillaris . )		5-7 11-1 & 7, 8		1

INSECTS.

#### MARCH-PLANTS.

INSECTS (continued).

Popular Name.	Scientific Name.	Ova.	Larva,	Pupa.	Food-plants.
MOTHS.					
Hebrew Character }	{Taniocampa gothica }	4	5-8	7-3	{Oak, sallow, broom, lilac, and dock.
White Letter )	" leucographa	4	6, 7	8-3	Plantain.
Rustic E S Red Quaker . E	" rubricosa .	4	5-7	8-3	Elm and dock.
Clouded Drab. E	" instabilis .	-	5-7	8-3	{Oak, willow, sallow, dock.
Northern do E	" opima	4	5-7	8-3	Willow, sallow, rose.
intermediate . E	" populcti .	4	6, 7	7-3 8-3	Poplar. Oak, elm, and hawthorn.
Common Quaker E Lead - coloured )	" stabilis .	5	5-7	8-3	Willow, sallow, and
Drab ES	" gracilis .	Ð	5-7	0-0	{ low plants.
Blossom Under-}	" miniosa .	4	5, 6	7-2	Oak, birch, hawthorn.
Quaker E	" munda .	-	5, 6	7-3	Oak, elm, and poplar.
Small do E	" cruda	-	5-7	8-3	{Oak, sallow, nut. A can- nibal in confinement.
Chestnut H	Cerastis vaccinii .	-	6, 7	_	Oak, elm, willow, sallow
Dark do H	" spadicea .	-	5, 6	-	{Hawthorn, sloe, and honeysuckle.
Red-headed do. H	" erythrocephala	-	5	-	Low plants.
Large do. do H	{ Scopelosoma sa-}	3	5, 6	7, 8	{Oak. A cannibal in con finement.
Dotted do H	{Dasycamparubi- ginea	3	5-7	-	Apple and low plants.
Orango Upper- } wing H S Olive Rustic . H	Hoporina croceago .	4	5,6	7	Oak.
Wing H S Olive Rustic . H	Dasypolia templi .	3	4-7	8	Cow parsley.
Green-brindled Dot	Valeria oleagina .	-	5, 6	-	Sloe.
Early Grey	$Xylocampa litho-rhiza }$	-	6-8	10-2	Honeysuckle.
Red Sword-grass H	Calocampa vetusta	3, 4	4-6	8	{Poplar and variou plants.
Common do H	,, exoleta	4	4-7	8	{Campion, scabious rest-harrow, dock, &
Tawny Pinion. H	Xylina conformis .	3	5, 6	7,8	Birch and alder.
Grey Shoulder- knot H}	" rhizolitha .	-	5-7	7, 8	Oak.
Dark Pinion . H	semibrunnea	-	7	8, 9	Ash and willow.
Pale do H Orange Under- )	", petrificata.	5	5-7	8, 9	Oak, birch, and lime.
wing ES	Brephos parthenias	-	6-8	9-3	Birch, beech, and oak.
Light do E	" notha	-	6	-	Aspen and sallow.
Herald H	Gonoptera libatrix.	-	6,7	7,8	{ Poplar, willow, sallow &c.

PLANTS.

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

# THE FIELD NATURALIST'S HANDBOOK.

PLANTS (continued).

Popular Name.	Scientific Name.	Localities,	Duration
Yellow Alpine Whit- low Grass	Draba aizoides Viola odorata Stellaria media (Cerastium semidecan-) drum Ulex Europœus Prunus communis Prunus communis Prunus communis Prunus communis Prunus communis (Potentilla Fragari-) astrum Saxifraga oppositifolia (Chrysosplenium al-) Viscum album. Tussilago Farfara. Senecio vulgaris Lamium purpureum , amplexicaule. Primula vulgaris Daphne Mezereum. , Laureola Euphorbia Characias Ulmus campestris , suberosa	<pre>{ Rocks and walls near } { Swansea } Woods and hedge-banks A common weed Waste places and walls. Commons and thickets . Woods and hedges Banks and hedges Banks and hedges Damp places. Rare { Parasitic, chiefly on } { apple Clayey banks A common weed Do Woods and banks</pre>	Duration, Perennial, Annïual, " Shrub, Small tree, Perennial, " " " Annïual, " Perennial, Shrub, Perennial, Shrub, Perennial, "
Cork-barked do. Dutch do. Smooth do. Wych do. Alder Purple Willow Rose do. White Poplar. Hoary do. Aspen Fazel Yew.	" suberosa " major " glabra " montana Alnus glutinosa Salix purpurea ", Helix Populus alba ", canescens ", tremula Corylus avellana Taxus baccata	Hedges Do. Doubtful native Woods	""""""""""""""""""""""""""""""""""""""
Inake-head Iris Spring Crocus. Small Purple do. Golden do. Daffodil Snowdrop Butcher's Broom Two-leaved Squill Yellow Gagea Wood Hairy-Rush. Annual Meadow-grass.	Iris tuberosa Iris tuberosa Crocus vernus "pracox. "aureus. [Narcissus Pseudo-] Narcissus S Galanthus nivalis Ruscus aculeatus Scilla bifolia Gagea lutea Luzula pilosa Poa annua Knappia agrostidea	Not native. Meadows . Suffolk. Not native Meadows . Damp woods . Meadows and thickets . Woods . Do. Doubtful native . (Damp thickets and) (pastures. Local. ) Woods . Waste ground . Sandy sea-side pastures.	Perennial. """"""""""""""""""""""""""""""""""""

## 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-acrown 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.

#### APRIL-INSECTS.

#### INSECTS.

the second se					
Popular Name.	Scientific Name.	Ova.	Larva	Pupa.	Food-plants.
BUTTERFLIES.					(Cabbage, &c., and nas-
Large White . E	Pieris brassicæ .	5 & 8	6 & 9	7 & 9-4	turtium.
Small do	,, rapæ	5 & 8	6 & 9	7 & 9-4	( and nasturtium.
Green-veined do			6 & 9	78:9-4	Rape, and other Cruci-
Orange-tip	{Anthocharis car-}	5	7	7-4	Lady's-smock, treacle- mustard,
Brimstone, or Sul-	Coventerur shanni	4	6, 7	7	Buckthorn.
Clouded Yellow H		9-5	6, 7	8	{ Lucerne, Dutch clover, { trefoils, &c.
Pale do. do H	" Hyale	5	7	8	Melilot, clover, lucerne.
Comma H	Vanessa C-album .	5 80 7	5 & 8	6 & 9	{ Elm, willow, sloe, hop, currant, nettle.
Small Tortoise-	" urticæ .	4,58	75,6828	6 & 8	Nettle.
Large do H	" polychloros	5 s. 10	s.10-5,6	7	{ Elm, aspen, osier, wil- low, and fruit-trees.
Camberwell Beauty H}	" Antiopa .	5	6, 7	7	Birch, poplar, willow,
Peacock H		4, 5	6, 7	7	and nettle. Nettle.
Red Admiral . H	" Atalanta.	5	6, 7	7	Do. ) Thistles, nettle, mal-
Painted Lady . H	" cardui .	5	6-9	7-9	low, and scarlet bean.
Wood Argus . E		5 & 8	6, 7 & 9-3	4 & 7	Grasses.
Small Copper . M	{ Polyommatus Phlaas }	6 & 10	5-8 &	4 & 10	Ragwort, sorrel, dock.
Holly Blue, or } Azure Blue M }	Lycæna argiolus .	5 & 8	6 & 9	7 & 10-4	{ Flowers of holly, buck- thorn, and ivy.
MOTHS.			1 Section		
Spotted Muslin E	Arctia mendica .	-	8	9-4	Sloe, plantain.
Nut-tree Tussock .	Demas coryli	-	6, 7 & s. 10	10	Beech and other trees.
Small Eggar . B	Eriogaster lanestris (Lasiocampailici-)	4	5-7	7-1	Hawthorn, sloe.
Small Lappet	l folia §	-	8	-	Sallow and whortle-
Kentish Glory .	{Endromis versi-}	4	6, 7	8-3	Birch.
	Saturnia carpini .	5	8	10-4	Sallow, hawthorn. bramble, heath, sloe, &c.
	Rumia cratagata .	4 & 9	6 & 9-3	-	Hawthorn, sloe.
Early Thorn	Selenia illunaria .	\$ & 7	6 & 9	6&9-3	{Oak, ash, willow, haw-
Lunar do E	" lunaria .	-	8	8-4	Oak, elm, ash, nut, haw- thorn, sloe.
Purple do E	" illustraria	-	6&9-10	7 & 11-4	JOak, ash, birch, beech,
Scalloped Hazel E	{Odontopera bi-}	_	8, 9	9-4	maple.   Oak, ash, nut, sallow,
Belted Beauty. H	Nyssia zonaria .	_	5, 6	6-9	( sloe. Sea-reed.
Brindled do	Biston hirtaria .	4	6, 7	9-3	{ Elm, ash. lime, and fruit-trees.
Great Oak do	{Amphidasis pro-} dromaria	-	6, 7	8-2	Oak, elm, birch, nut.
Waved Umber E	{Hemerophila ab-} ruptaria	-	6	9-4	Lilac, privet, rose.
Engrailed	{ Tephrosia cre-}	_	8, 9	10-1	(Elm, poplar, willow
Pale Engrailed .	( puscularía ) _, biundularia .	5	6-9	10-1	birch, and alder. Oak, birch, &c.
Birch Mocha . E Grey Carpet	Ephyra pendularia	-	7	8-4	Birch.
Barred Umber. E	Aleucis pictaria . § Numeria pulve-)	-	77	-	Sloe.
ourieu omber. E	l raria 3	-	7, 8	9-4	Sallow, nut, privet.

# INSECTS (continued).

Popular Name.	Scientific Name.	Ova,	Larva.	Pupa.	Food-plants.
MOTHS.					and the second second
Netted Mountain	Fidonia carbonaria	-	7	8-4	Birch, sallow.
Bordered White	" piniaria .	6	8, 9	10-3	Larch and Scotch fir.
March Moth	$An isoptery x \\ ascularia . $	-	5, 6	10-1	{Oak, elm, lime, haw- thorn, apple.
Mottled Grey	{Larentia multi-}	4	6	7-3	Bedstraw.
Swiss Pug	{Eupithecia helve-}	6	9	9-6	Juniper.
Marbled do Burnet do	" irriguata	$^{6}_{6,7}$	6 & 9	7-6 9-6	Oak and sloe. Seeds of pimpernel.
Common do.	" primpinettata " vulgata	5	7 8 9	8-5	f Willow, hawthorn, rag-
Brindled Brown do.	" dodoneata .	5	6, 7	7-5	) wort, golden-rod. Oak.
Short do	" abbreviata .	5	6, 7	7-5	Do. (Flowers of chervil,
Double Striped do	" pumilata .	6-8	6 & ?	8-6	gorse, clematis, &c.
V. do	" coronata .	6	7, 8	8-6	Flowers of bramble, golden-rod, clematis, &c.
Seraphim	{Lobophora hex-}	-	8	-	Poplar, sallow.
Early-striped	" lobulata .	4	8	-	{ Willow, sallow, honey- suckle.
Barred do	", polycommata	4, 5	6 6 & 10	- '	Ash, honeysuckle.
Grey Juniper Carpet		_	6&9	-	Juniper. (Cabbage, horse-radish,
	Melanippe fluctuata Anticlea badiata.	3	6	7-3	i nasturtium, &c. Dog-rose.
Shoulder-stripe do	. derivata .	3, 4	6	7-3	Dog-rose and honey.
Streamer	( Camptogramma )	1			Spotted persicaria,
Gem H	{ fluviata . }	7	8	9	} groundsel.
Autumn Green } Carpet H }	Cidaria miata.	-	8	9	Oak, birch, poplar, will low, and alder.
Water do	" suffumata	-	9, 10	3	Ragwort and hedge bedstraw.
Scalloped Hook-	{ Platypteryx la-}	6	6 & 8,9	- 1	Birch.
Scarce Kitten	Dicranura bicuspis	-	8-10	10-4	Birch, beech, and alder
Rannoch Sprawler. Chocolate Tip.	Petasia nubeculosa Clostera curtula	4 8 7	5,6	68.9-3	Birch. Poplar, sallow.
Birch Prominent .	Notodonta carmelita		6, 7	8-3	Birch.
Great do.	" trepida . " chaonia .	-	8 6-8	9-4 8-4	Oak. Do.
Lunar Marbled E Frosted Green.	Oliver at an barro midano	1	6, 7	8	Do.
Silver Cloud	Xylomiges con- spicillaris .	- 1	6-8	9-3	Birdsfoot trefoil, and other low plants.
Pearly Underwing.	Agrotis saucia	1 -	11-1 & 7, 8	-	Dock, plantain, and other low plants.
Pine Beauty	Trachea piniperda.	1 -	6, 7	8-2	Fir and pine.
Hebrew Character.	Taniocampa gothica	and the second	5-8	7-3	Oak, sallow, broom lilac, and dock.
White Letter Rustic	" leucographa	1	6, 7 5-7	8-3 8-3	Plantain. Elm and dock.
Red Quaker Clouded Drab	,, rubricosa . ,, instabilis .		5-7	8-3	Oak, willow, sallow
Northern do	. opima	1 4	5-7	8-3	Willow, sallow, rose.
Intermediate	. populeti .	, 4	6, 7 5-7	7-3 8-3	Poplar. Oak, elm, and hawthorn
Common Quaker . Lead-coloured Drab	" stabilis . " gracilis .	1 5	5-7	8-3	Willow, sallow, and low plants.
Blossom Under-	miniora	1.	5, 6	7-3	Oak, birch, hawthorn.
wing Twin - spotted	manda		5, 6	7-3	Oak, elm, poplar.
Quaker }		-			(Oak, sallow, nut. A can
Small do	" cruda	- 1	5-7	8-3	a nibal in confinement

#### APRIL-PLANTS.

Food-plants. Scientific Name. Ova. Larva, Pupa. Popular Name. MOTHS. Oak, elm, willow, sallow. 6, 7 Chestnut . . H Cerastis vaccinii . --Hawthorn, sloe, and honeysuckle. · H spadicea. 5, 6 Dark do. . --,, {Scopelosoma sa-} tellitia. . } Oak. A cannibal in confinement. 3 5, 6 7,8 Large do. . . H Do. Orange Upper- ? wing . . H Olive Rustic . H 7 Hoporina croceago 4 5, 6 H 4-7 8 Cow parsley. Dasypolia templi . 3 Green-brindled Dot Valeria oleagina Phlogophora me-5, 6 Sloe. Broom, and many low plants. -11-4 Angle-shades . ----ticulosa Xylocampa litho-Honeysuckle. Early Grey . 6-8 10-3 \_ . rhiza . . Poplar, and various low plants. Campion, scabious, rest-harrow, dock, &c. 4-6 8 Red Sword-grass H Calocampa vetusta 3, 4 Common do. . H 4-7 8 4 exoleta ,, Tawny Pinion. H 7,8 5, 6 Xylina conformis . 3 Birch and alder. Grey Shoulder-) knot . . H J Dark Pinion . H Pale do. . . H Mullein . . . " rhizolitha . 5-7 7,8 Oak. -" semibrunnea 7 8, 9 Ash and willow. 5-7 6, 7 8, 9 Oak, birch, and lime. Mulleins and figworts. " petrificata . Cucullia verbasci . 5 ----Chamomile, and flowers " chamomilla 84 Chamomile Shark S 5, 6, 8, 8 of feverfew. Orange Underwing Brephos partheians 6-8 9-3 Birch, beech, oak. ----Pale do. do. . . , notha Aspen, sallow. -6 -. Nettle, hop, and low . . Plusia gamma. Silver Y . 4 & 7-9 . ----plants. Poplar, willow, sallow, Herald . . H Gonoptera libatrix 7,8 6, 7 8cc. ι

INSECTS (continued).

PLANTS.

Popular Name.	Scientific Name,	Localities.	Duration.
Wood Anemone, or }	Anemone nemorosa .	Woods	Perennial
Pasque-flower	pulsatilla .	{ High chalky pastures. }	,,
Lesser Celandine	Ranunculus Ficaria .	} Scarce	
Wood Crowfoot	" auricomus.	Woods	**
Freen Hellebore	Helleborus viridis	Do	
foot	" fætidus	Do	,,
		(Limestone pastures in)	
Perfoliate Penny Cress	Thlaspi perfoliatum .	Oxfordshire and Gloucestershire.	Annual.
		(Rare	
shepherd's Purse		A common weed	,,
Rock Hutchinsia Danish Scurvy Grass	Hutchinsia Petræa . Cochlearia Danica .	Limestone rocks. Local Cliffs and hedges near sea	"
Vernal Whitlow Grass	Draba Verna	Walls and dry banks .	"
Yellow Alpine do. do	aizoides	f Rocks and walls near {	Perennial
Coral-root	Dentaria bulbifera.	Woods. Rare	
arge-flowered Bitter ?	Cardamine amara.	(River banks, Not com-)	"
Cress		1 mon 5	
Barly Winter Cress . Barlic-mustard, Jack-)	Barbarea præcox	Damp waste places	Biennial.
by - the - hedge, or }	Alliaria officinalis	Hedges, &c	Annual.

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#### PLANTS (continued).

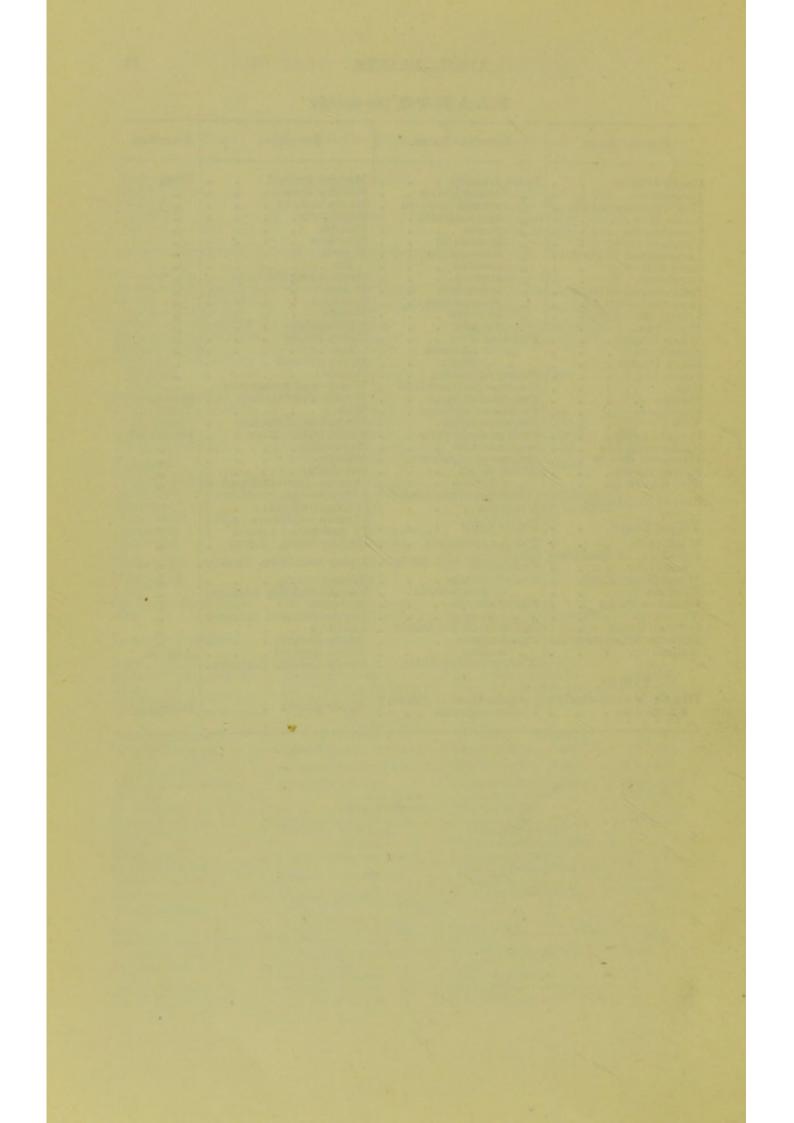
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Popular Name.	Scientific Name.	Localities.	Duration.
Wall-flower	Chciranthus Cheiri.	Walls	Biennial.
Hairy Violet	Viola hirta	Chalk and limestone soil	Perennial.
Sweet do	,, odorata	Woods and hedge-banks	.,
Marsh do	" palustris	Bogs and marshy ground	"
Dog do	" canina	Woods and hedge-banks (Old walls near Nor-)	"
Jagged Chickweed .	Holosteum  umbellatum .	wich and Bury St.	Annual.
Common do	Stellaria media	A common weed	
Broad-leaved Mouse-ear	Cerastium vulgatum .	Fields and roadsides .	"
Little, or Five-sta-}	" semidecandrum	Waste places and walls .	1 Hoge
mened Mouse-ear } Dove's-foot Crane's-bill	Geranium molle		"
Furze, Gorse, or Whin.	Ulex Europœus	Fields and waste places. Commons and thickets	Shrub.
Spring Vetch	Vicia lathyroides .	Dry places	Annual.
Sloe, or Blackthorn;)			
Bullace, or Wild	Prunus communis	Woods and hedges	Small tree.
Spring Cinquefoil	Potentilla verna	Dry pastures	Perennial.
Strawberry-leaved do	", Fragariastrum	Banks and hedges	m
Wild Pear Gooseberry	Pyrus communis Ribes grossularia	Woods and hedges Hedges and thickets	Tree. Shrub.
Purple Saxifrage	Saxifraga oppositifolia	Mountain summits .	Perennial.
Golden do	5 Chryosplenium alter- )	Damp places. Rare .	
Chervil, or Cow Parsley	Anthriscus sylvestris	Hedge-banks	and the second second
Moschatel	Adoxa moschatellina .	Woods and hedge-banks	.,,
Mistletoe.	Viscum album	Parasitic, chiefly on apple	"
Corn Salad	Fedia olitoria	A common weed	Annual.
Dandelion	Leontodon Taraxacum.	Do	Perennial.
Colt's-foot	Tussilago Farfara	Clayey banks	,,
Butter-bur	Petasites vulgaris	River banks and wet meadows	,,
Groundsel	Senecio vulgaris	A common weed	Annual.
Daisy	Bellis perennis	Pastures	Perennial.
Mediterranean Heath .	Erica mediterranca .	West of Ireland	Shrub.
Ash	Fraxinus excelsior	Woods and hedgerows .	Tree.
Lesser Periwinkle	Vinca minor	Thickets and woods, especially in the West	Perennial.
Spring Gentian	Gentiana verna	Mountains. Rare	
Early Forget-me-not .	Myosotis collina	Dry fields and walls .	Annual.
Toothwort	Lathraa Squamaria .	Parasitic on tree-roots .	Perennial
Ivy-leaved Speedwell .	Veronica hederifolia .	A common weed	Annual.
Germander Chickweed	" agrestis " Buxbaumii .	Do	"
Vernal Speedwell	verna	Dry fields. Scarce	
Yellow Fig-wort	Scrophularia vernalis .	Shady places. Local .	Biennial.
Yellow Bugle, or)	Ajuga Chamæpitys	Chalky fields. Local .	Annual.
Ground-pine . 5	Lamium album	Hedges and waysides .	Perennial.
White Dead-nettle . Red do.	,, purpureum .	A common weed	Annual.
Henbit do.	", amplexicaule .	Waste places	
Ground Ivy :	Glechoma hederacea .	Hedge-banks	Perennial.
Primrose	Primula vulgaris	Woods and banks Thickets and pastures .	"
Oxlip	", elatior	A common weed	Annual.
Knot-grass Crow-berry, or Crake-	Polygonum aviculare .	(Bogs and mountainous )	Shrub.
berry	Empetrum nigrum	i heaths	
Mercury	Mercurialis perennis .	Woods and thickets .	Perennial.
Wood Spurge	{Euphorbia amygda-}	Woods	
	<i>Buxus sempervirens</i>	Chalk hills. Very local .	Shrub.
Box . Spring Water Starwort	Callitriche verna	Pools	Annual.
Common Elm	Ulmus Campestris	Woods and hedges	Tree.
White Birch	Betula alba	Woods	"
Alder	Alnus glutinosa • •	Damp ground Damp fields	
Purple Willow Green-leaved Osier	Salix purpurea	Meadows and osier-beds	
Green-leaved Osler .			

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#### APRIL-PLANTS.

PLANTS (continued).

Popular Name.	Scientific Name.	Localities.	Duration.
Crack Willow	Salix fragilis	Marshy ground	Tree.
Bedford do	" Russelliana	Marshy woods	
Rosemary-leaved do	" rosmarinifolia .	Damp ground	37
Little Tree do	" angustifolia	Highlands	
Creeping do	" fusca	Heaths	
Common Osier	" viminalis	Marshes	
Long-leaved Willow .	" acuminata		22
Grey Sallow	" cinerea	Do	
Great do	" caprea	Hedges and thickets .	
Dark-leaved Willow .	, nigricans	Woods	,,
Damson-leaved do	" damascena	Scotland	,,,
Laurel-leaved do	, laurina	Woods	
Woolly do	" lanata	Highlands . Damp woods	**
White Poplar	Populus alba	Damp woods	
Aspen	., tremula	Do	"
Black Poplar	, nigra	Damp ground	"
Beech	Fagus sylvatica	Woods	"
Oak	0 1 1 1	Woods and hedge-rows .	"
Hazel	Corylus avellana	Woods and thickets .	Shrub.
Hornbeam		Woods	Tree.
Yew	111	Woods on chalk soil	1100.
Spider Orchis	A 1 10	Chalk hills. Rare	Perennial.
Snake-head Iris	Iris tuberosa	Not native.	
Butcher's Broom	Ruscus aculcatus	Woods	"
Spring Squill	Scilla verna	1 21 11 21 21	"
Two-leaved do.	., bifolia	Woods. Doubtful native	"
	(Ornithogalum umhel.)	( Meadow and pastures. )	"
Star of Bethlehem .	{ latum }	Naturalised.	**
	The second s	Damp thickets and	
Yellow Gagea	Gagea lutea	pastures. Local.	,,
Wild Tulip	Tulipa sylvestris	Chalky fields. Local .	
Fritillary, or Snake's- )			>>
head Lily	Fritillaria Meleagris .	Damp meadows. Scarce	,,
Wood Hairy-Rush	Luzula pilosa	Woods	
Field do	" campestris .	Heaths and dry pastures	**
Glaucous Sedge	Carex stricta	Marshes	"
Vernal do.	" præcox	Dry heaths and pastures	,,
Fox-tail Grass	Alopecurus pratensis .	Pastures	,,
Bulbous Meadow-grass	Poa bulbosa	Sandy ground	"
Annual do.	, annua	Waste ground	Annial
	Knappia agrostidea	Waste ground	
	Truth Pres all oscarees .	bandy sea-side pastures.	,,
FERNS.		the second s	
Black Maidenhair)	(Asplenium Adian)		
Black Maidenhair }	Asplenium Adian-	Shady places	Perennial.



## MAY.

#### GENERAL HINTS.

PALINGS 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 pupze 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 sake of safety.

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

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.

Popular Name.		Scientific Name.	Ova.	Larva.	Pupa.	Food-plants.
BUTTERFLIE Swallowtail	S. E	Papilio Machaon .	6	6-8	8-4	{ Wild carrot, fennel, and } marsh milk-parsley.
Wood White .		{Leucophasia si-}	5,6&8	6 & 9,10	7 & 9-4	Bird's-foot trefoil, and tufted vetch.
Blackveined do.		Pieris cratægi .	6	8-4	5	Hawthorn, sloe, and fruit trees.
Large do		" brassicæ .	5 & 8	6 & 9	7 & 9-4	Cabbage, &c., and nas- turtium.
Small do		" rapæ	5 & 8	6 & 9	7 & 94	Turnip, cabbage, &c.,
Greenveined do.		" napi	5 & 8	6 & 9	7 & 9-4	Rape, and other cruci-
Bath do		" Daplidice .	5 & 8	6 & 9	7 & 9-4	Weld and wild migno-
Orange Tip .		{Anthocharis car-} { damines . }	5	7	7-4	Lady's-smock, treacle- mustard.
Brimstone or Su	1-}	Gonepteryx rhamni	4	6, 7	7	Buckthorn.
Pearl - bordered Fritillary	1	{ Argynnis Euph- rosyne . }	6	7-4	4	Dog and other violets.

INSECTS.

#### MAY-INSECTS.

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INSECTS (continued).

Popular Name,	Scientific Name.	Ova.	Larva.	Pupa.	Food-plants.
BUTTERFLIES.					and the second
Small Pearl - bor- ) dered Fritillary	Argynnis Selene .	6	7-5	5	Dog and other violets.
Greasy Fritillary .	Melitæa Artemis .	6	8-4	4	{Plantain, devil's - bit scabious.
Hanville do	" Cinxia .	6	7-5	5	Narrow-leaved plantain.
shell H	Vanessa polychloros	5, s. 10	s.10-5,6	7	Elm, aspen, osier, wil- low, and fruit trees.
Beauty H	" Antiopa .	5	6, 7	7	{ Birch, poplar, willow, and nettle.
Peacock H Red Admiral . H	" Atalanta :	4, 5	6, 7 6, 7	77	Nettle. Do.
Painted Lady . H	,, - Atatanta .	6	6-9	7-9	f Thistles, nettle, mallow
Wall	Satyrus Megæra .	5 & 8	6,7&9-1		and scarlet bean. Grasses.
Small Heath	{Canonympha Pamphilus. }	5-7	5,6 & 8	4 & 7	Do.
Brown Argus .	Lycana Agestis .	5 & 8 5 & 9	7,809-4	4 & 7 5 & 8	Hemlock stork's bill.
Common Blue . E	" Alexis . " Adonis .	5 & 10	4 & 8 5 & 7, 8	5 8 8	Bird's-foot trefoil, &c. Tufted horse-shoe vetch
ford Blue . E	" Alsus	6	7-3	4	Kidney vetch.
folly or Azure do. Juke of Burgun- )	" Argiolus .	5 & 8		7&10-4	( thorn, ivy.
dy Ef	Nemeobius Lucina.	6	7-9	8-5	Primrose. Wild raspberry, bram
Frizzled Skipper .	Syrichthus Alveolus	5	6	= = = =	} ble, silver weed.
Dingy do	Thanaos Tages . Hesperia sylvanus.	5 & 8 5 & 7	$7 & 94 \\ 5 & 7$	5 & 8	Bird's-foot trefoil. Grasses.
MOTHS.	·		0.0	0.5	( Poplar, willow, sallow
	Smerinthus ocellatus	5	8, 9 8	9-5 9-5	{ apple.
ime do M	", populi . ", tiliæ .	-	8	9-5	Poplar, sallow, willow. Elm, lime, beech.
do M	{Chærocampa porcellus . }	- ,	8, 9	10-5	{ Bedstraws and willow herbs.
Humming - bird Hawk E	{ Macroglossa stel- } { latarum . }	5	8, 9	-	Hedge bedstraw.
Broad - bordered Bee Hawk	" fuciformis .	6	7, 8	9-5	Scabious, honeysuckle
do.	" bombyliformis	-	7,8	-	Scabious.
Apple do	Sesia Myopæformis	-	4, 5	5	{ In stems of apple, pear plum, hawthorn.
Birch do E Yellow Belted do	" culiciformis . " cynipiformis.	=	4 4, 5	55	In birch and alder. In bark of oak, &c.
Alder do	" sphegiformis.		4	5	In young shoots of alder
Hornet do E Livid Swift	, apiformis . Hepialus lupulinus	6, 7	9-4 8-5	55	In stems of poplar. In roots of dead nettle,
Scarce Forester . Least Black )	Procris Geryon .	-	5	5, 6	Sun Cistus.
Arches E	Nola cristulalis .	-	5	5	Oak.
Red-necked do.	Lithosia aureola . ,, rubricollis	=	9-5 8-10	3	Lichens on larch & oak. Lichens on larch, &c.
Wood Tiger . E	Chelonia plantaginis	-	8-4	5	Plantain, violets, &c. § Nettle, plantain, dock
Ruby do	Arctia fuliginosa .	-	4 & 8	5 & 8	and grasses.
Spotted Muslin . Buff Ermine	" mendica . " lubricipeda.	=	8	9-4 9-5	Sloe, plantain. Plantain and nettle.
White do	" menthastri .	-	8	9-5	{ Nettle, and variou plants.
Hop Dog	Orgyja pudibunda	5, 6	8, 9	9-4	JOak, beech, nut, haw
Fox Moth	Bombux Rubi	-	9-5	-	{ thorn, hop. Heath and bramble.
Small Lappet	{Lasiocampa ili- cifolia .}	-	8	-	Sallow & whortleberry.
Emperor	Calumia annial	5	8	10-4	Sallow, hawthorn bramble, heath, sloe
Little Thorn	Epione advenaria .	5,6	8	-	C &c. Dogwood and wild rose

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## INSECTS (continued).

			Start and starters		and a set of the second s
Popular Name,	Scientific Name.	Ova.	Larva,	Pupa,	Food-plants.
MOTHS.					
Brimstone	Rumia cratægata .	4 & 9	6 & 9-3	-	Hawthorn, sloe.
Spotted Yellow .	Venilia maculata . (Eurymene dolo-)	-	9	-	Nettle.
Scorched Wing .	{ braria }	-	8, 9	10-5	{Oak, beech, birch, and aspen.
Lunar Thorn	Selenia lunaria .	-	8	8-4	Oak, elm, ash, nut, hawthorn, sloe, &c.
Purple do	" illustraria.	-	6&9,10	7&11-4	Oak, ash, birch, beech,
Scalloped Hazel .	{Odontopera bi-} dentata . }	-	8, 9	9-4	Oak, ash, nut, sallow, sloe.
Brindled Beauty B	Biston hirtaria .	4, 5	6, 7	9-3	Elm, ash, lime, and fruit trees.
Pepper	Amphidasis be-	-	8-10	10-4	Oak, elm, birch, beech, alder, hawthorn.
Waved Umber .	J Hemerophila ab-	-	6	9-4	Lilac, privet, and rose.
Ringed Beauty .	Boarmia cinctaria	6	9	-	Heath.
Square Spot En-	{ Tephrosia conso- } naria	5, 6	7-9	10-4	Oak, beech, birch.
Pale Engrailed	, biundularia	5	6-9	10-3	Oak, birch, &c.
Grey Birch	" punctulata .	-	8, 9	10-4	Birch and alder.
SmallGrassEmerald Little Emerald E	Nemoria viridata . Iodis lactearia	6	8 9	9-4 10-5	Hawthorn, bramble. Oak, birch.
False Mocha . M	Ephyra porata .	-	9	9-4	Oak.
Maiden's Blush M	" punctaria .	6	7-9	8-4	Do.
Clay Treble-lines M	" trilinearia.	-	8-10	9-4	Beech.
Mocha M Dingy do M	" omicronaria " orbicularia	=	8-10 8	I	Maple, beech. Sallow, alder.
Birch do	" pendularia.	_	7	8-4	Birch.
Purple Bordered   Gold	Hyria auroraria .	-	8-5	5, 6	Plantain.
Small Yellow Wave	Asthena luteata .	-	8-10		Maple.
Small White do	" candidata.	-	4	10.6	Hornbeam.
Blomer's do Lace Border	Acidalia ornata .	7	8, 9 7 s4	10-6	Wych elm. Marjoram, thyme.
Cream Wave . E	, remutata	-	8-4	-	Low plants.
Common White do.	Cabera pusaria .	-	7-9	-	Oak, birch, nut, alder,
Round-winged do	" rotundaria	-	9	10-5	Birch, sallow.
Dingy White do Clouded Silver .	,, exanthemaria Corycia temerata .	6	10 7, 8	9-4	Sallow and alder. Sloe, wild cherry, buck-
			7	_	Sallow, wild cherry,
SpottedPinionWave			9	_	} buckthorn. Sallow.
Peacock Tawny-barredAngle	Macaria notata . liturata .		9	10-4	Larch, Scotch fir.
Latticed Heath	Strenia clathrata .	-	10-4	-	Lucerne, sainfoin.
Brown Silver Line	Panagra petraria.	5	6	9-4	Bracken. Sallow, nut, privet.
Barred Umber . Grey Scalloped ) Bar E	Numeria pulveraria Scodiona Belgiaria	6, 7	7, 8 8-4	5	Heath.
Bar. E Netted Mountain	Fidonia carbonaria	-	7	8-4	Birch, sallow.
Common Heath M	" atomaria.	-	7-4	-	Knapweeds and trefoils.
Bordered White .	piniaria .	$\frac{6}{7}$	8,9	10-3 10-5	Larch and Scotch fir. Cypress spurge.
Drab Looper M	Minoa euphorbiata Sterrha sacraria	8	8, 9 6 & 9		Dock, chamomile.
Beile M Purple Bar	Lythria purpuraria		8?	-	Dock, knotgrass.
Rest Harrow . E	Aplasta ononaria .		4 & 9	-	Rest harrow. Trefoils and wild carrot,
Yellow Belle . M	Aspilates citraria .	5 & 8	7 & 10 5, 6, 7	8 9-4	Spindle.
Scorched Carpet . Clouded Border .	Ligdia adustata . [Lomaspilis mar-]	-	6&9		Sallow, willow, poplar.
	} ginata Pachycnemia		9-5	_	Heath.
Horse-Chestnut . Mottled Green ?	hippocastanaria Larentia pectini-	1			(Alder and hedge bed-
Carpet }	l taria J	-	8, 9	-	) straw.
Grass Rivulet	Emmelesia albulata	6	8,9	10-4	Seeds of yellow rattle.

## MAY-INSECTS.

INSECTS (continued).

MOTHS. Pretty Pinion {Emmelesia blan-} diata } Netted Pug Eupithecia venosata 5	Ova.	Larva.	Pupa.	Food-plants.
Pretty Pinion { <i>Emmélesia blan-</i> } Netted Pug <i>Eupithecia venosata</i> 5	-	0		
Netted Pug Eupithecia venosata 5	-	0		
		0	-	Eyebright.
Pinion Spotted do consignata . 5	6 8 6	7	8-5	Seed-capsules of blad- der campion & white
	5, 6	6	9-4	C campion. Oak, nut, and fruit trees.
Beautiful do ,, linariata .	6	8	9-4	Flowers of yellow toad- flax.
Red do " pulchellata .	6	7	9-4	Flowers of foxglove.
	5, 6	8, 9	9-5	Flowers and seeds of yarrow, ragwort, gol- den-rod, angelica, &c.
Lead do E " plumbeolata	5	7, 8	7-5	Flowers of yellow cow-
Dwarf do " pygmæata .	6	6, 7	5, 6	JFlowers of greater
Swiss do helveticata .	6	9	9-6	( stitchwort. Juniper.
Beech do " satyrata . 5	5, 6	9	9-6	Scabious and bedstraws.
	5, 6	8-10	9-5	Heath, nettle, golden- rod, &c.
Larch do ,, lariciata . 6 Golden Rod do ,, virgaureata.	6,7	8,9	9-6 9-6	Larch and spruce fir. Flowers of golden rod.
	6, 7	9	9-6	Flowers and seeds of wild angelica and
Suman do musillata	5, 6	6, 7	7-5	( cow parsfey. Spruce fir.
Marbled do irriguata .	6	6	7-6	Oak and sloe.
Burnet do , <i>pimpinellata</i> (	6,7	6 & 9	9-6 10-4	Seeds of pimpernels.
	5,6	8,9	7-5	Ash. Juniper and Scotch fir.
Narrow-winged do. ,, nanata	7	8, 9	9-5	Flowers of heath.
Common do ,, vulgata .	5	7-9	8-5	Willow, hawthorn, rag- wort, golden-rod.
Currant do ,, assimilata . 6 Brindled Brown do. ,, dodoneata .	6, 7 5	9, 10 6, 7	9-6 7-5	wort, golden-rod. Hop and black currant. Oak.
Mottled do ,, exiguata .	6	9, 10	9-6	Ash, alder, hawthorn, black currant, sallow, &c.
Double Striped do. , pumilata .	6-8	6 &	8-6	{Flowers of chervil, gorse, clematis, &c.
∇. do ,, coronata .	6	7, 8	8-6	Flowers of bramble, golden-rod, clematis, &c.
Small Seraphim . Lobophora sexalata	-	9	10-5	Willow and sallow.
Seraphim ,, hexapterata Brindle - barred , ,, viretata .	-	8 7, 8	9-5	Poplar, sallow. (Privet and herb Chris-
Grey Juniper Carpet Thera simulata .	-	6 & 10	-	{ topher. Juniper.
March Highflyer . Ypsipetes ruberata	-	6	4	Alder, sallow, bilberry.
May do , impluviata Purple Barred Melanthia coullata	-	8,9	3, 4	Sallow, alder. Bedstraws.
Carpet Melanthia ocellata Beautiful do	6	7,8	8-5	
(Malaminna mua)	5	8,9	9-5	Bramble and raspberry.
cellata . S	7	8,9	10-5	Clematis.
Common do , subtristata Silver Ground do , montanata Bedstraw do , galiata	6-8	6 & 9 10-3 7 & 9	$6 & 9-4 \\ 4 \\ 8 & 9-4$	Hedge bedstraw. Primrose. Smooth heath bedstraw.
Garden do " fluctuata .		6,7 & 9		{ Cabbage, horse-radish, nasturtium, &c.
Streamer Anticlea derivata .	3, 4	6	7-3	f Dog-rose and honey-
Barberry Carpet berberata.	_	6 & 9	-	arberry.
Flame do [ Coremia propug-)	_	9	_	Primrose.
Red Twin-spot do. , ferrugata . 5	8.0	7 8-0	and the second	f Bedstraws, chickweed,
Red Twin-spot do. , <i>ferrugata</i> 5 Dark-barred Twin- spot do } , <i>unidentata</i> 5	5 & 8	7 & 9 8	4	and ground ivy. Bedstraws.

#### THE FIELD NATURALIST'S HANDBOOK.

#### Popular Name. Scientific Name. Ova. Larva, Pupa, Food-plants. MOTHS. potted persicaria, groundsel, &c. § Camptogramma J Spotted H 7 8 9 Gem . . fluviata Phibalapteryx Oblique Striped 7 8 9 8&104 White water bedstraw. - E lignata . Carpet Waved ) Small vitalbata Clematis. \_ Umber . ... . Barberry. Oak, birch, poplar, willow, and alder. Tissue 6, 7 Scotosia certata Green Autumn Cidaria miata 8 9 . HS Carpet Broken Bar 6 8, 9 Lime, sloe, and nut. corylata \*\* Birch, hawthorn, sal-low, and strawberry. 78:10-4 7 8:5 Marbled Carpet 5 & 8 russata \*\* Ragwort and hedge 3 suffumata 9, 10 Water do .. bedstraw. ... Willow herbs, and en-chanter's nightshade. 7 & 10-6 Small Phoenix. silaceata . 7 & 9 . \*\* Sloe, currant, goose-Phœnix . 7-4 5.6 6 prunata . ... berry. Yellow bedstraw. 5 & 8 5,6&97&10-5 **Oblique** Striped Eubolia lineolata . . Perforated St. John's Treble Barred . 7 & 10-4 Anaitis plagiata wort. 7-9 9-4 Broom. Chevron . Chesias obliguaria Platypteryx la-6 & s. 6 Birch. Scalloped Hook Tip certula. 8, 9 5, 6 Oak, birch, and lime. Scarce do. E sicula \_ \_\_\_\_ Birch, oak, popl willow, and alder. poplar, 7 & 10 Pebble do. falcula ., 6 & 9 Oak, birch. Oak do. hamula . .. Beech. 6 7 & 9-10 Beech do. . unguicula . ., Hawthorn, sloe, moun-5.6827 6 & 7 Cilix spinula . tain ash. Birch, beech, and alder. Goose Egg . 10-5 8-10 Scarce Kitten . Dicranura bicuspis Sallow, willow, poplar. 6 6-9 9-5 furcula bifida . Common do. Poplar. Willow, poplar, sallow. { Lime, elm, willow, sal-low, oak, beech, nut. Poplar, sallow. Poplar, willow, sallow. \*\* 7-9 7, 8 9-5 Broad Barred do. 6 \*\* 8-5 6 Puss . vinula . ., 6 7-9 10-5 Buff Tip . Pygæra bucephala. 5 & 8.9 6 & 9-3 Clostera curtula 4 807 Chocolate Tip . reclusa 7 & 9 Small do. do. Poplar. Gluphisia crenata . 8 Dusky Prominent . -Willow, sallow, birch, poplar. Oak, beech, birch, 7 & 9 7 & 10-6 Ptilodontis palpina Pale do. Oak, beech, birch, alder, aspen, maple, sallow, nut, &c. Sycamore and maple. 10-5 7 & 9 Notodonta camelina 6 &-Cock's Comb do. 10-5 8, 9 cucullina Maple do. . ... 6 & 9 7-9 7, 8 7-9 Poplar, willow, sallow. 7 & 10-5 Swallow do. dictæa ,, dictaoides Birch. 10-5 6 Small Swallow do. . ,, Birch, alder, and nut. Poplar and birch. 10-5 dromedarius 6 Iron do. ., trilophus Dark do. Poplar, willow, sallow, alder. ... 6 & 9 7 & 10-5 Pebble do. ziczac . ,, 9-5 Oak. 8 trepida. Great do. -. ,, 8-5 6-8 Do. Lunar Marbled chaonia . . \*\* Oak and birch. 7-9 10-5 6 dodonea Marbled Brown . ... § Bramble and rasp-10-56, 7 8, 9 Thyatira batis $\mathbf{E}$ Peach Blossom . berry. Cymatophora 3 10-5 Birch. 8.9 Lesser Satin Carpet duplaris 7-9 9-5 Poplar. ocularis Poplar, elm, lime, haw-thorn, and pear. Figure of 80 . 8, 9 10-5Acronycta Psi. 6, 7 Grey Dagger . . Birch, poplar, sallow, 10-5 7-9 leporina 5, 6 . alder. Miller . \*\* Sycamore, oak, maple, horse - chestbirch, 10-58, 9 7 aceris . . Sycamore . . ... nut. Poplar. 9-4 6-8 megacephala Poplar Grey . ...

#### INSECTS (continued).

## MAY-INSECTS.

INSECTS (continued).

Popular Name.	Scientific Name.	Ova	Larva.	Pupa.	Food-plants.
MOTHS. Alder.	Acronycta alni .	-	7-9	9-4	Alder, willow, oak, lime, elm, nut, beech, birch, &c.
Coronet	" ligustri	6, 7	8, 9	10-5	Ash and privet.
Knot Grass	" rumicis	6	6-8	9-1	Bramble, plantain, knotgrass.
Sweet Gale	, myricæ.	-	8, 9	-	Sweetgale, sallow, birch.
Flame Wainscot . Bordered Brindle E	Meliana flammea . Xylophasia rurea .	=	4	4.5	Grasses.
Silver Cloud	S Xylomiges con-	_	6-8	9-3	(Bird's-foot trefoil, and
Bordered Gothic E	Neuria saponariæ.	_	7,8		{ other low plants. Campions.
Feathered Ear .	Pachetra leucophæa	=	10-4	5, 6	Grasses.
Large Nutmeg .	Mamestra albícolon	-	7,8 5,6 &	9-4	Orache and goosefoot.
Cabbage	" brassicæ	-	8, 9	9-4&7	{ Cabbage, dock, goost- foot, &c. (Wheat in summer,
Rustic Shoulder-}	Apamea basilinea .	-	8-3	4, 5	various plants after hibernation.
Uniform Rustic E	unanimis.	7, 8	9-4	4-6	Grasses.
Triple Lines	{Grammesia tri-}	-	4, 5	5, 6	Great plantain.
Gold Line	Hydrilla palustris	-	7, 8	-	{ Plantain and other low plants.
Mottled Beauty .	$\left\{ \begin{array}{c} Caradrina \ cubi- \\ cularis. \end{array} \right\}$	8	9-4	5-7	Grasses, &c.
Brown Feathered ) Rustic E	Rusina tenebrosa .		9-3	4-6	Violets, knotgrass, &c.
Dart E	Agrotis puta	8	9-12	-	{ Dandelion, knotgrass, lettuce, &c.
Great Yellow Underwing . E	Triphæna pronuba	7	8-4, 5	5-7	Dock, &c.
Setaceous Hebrew { Character	Noctua C-nigrum .	-	4 & 10	-	{Pea - stems and low plants.
Small Square Spot.	m" rubi . :	-	6, 7	-	Low plants.
HebrewCharacter B	{ Tæniocampa }	4	5-8	7-3	{Oak, sallow, broom, lilac, and dock.
Red Quaker . B	" rubricosa.	4	5-7	8-3	Elm and dock.
Clouded Drab B	" instabilis .	4	5-7	8-3	{Oak, willow, sallow, dock.
Northern Drab B Intermediate B	" opima .	4	5-7	8-3	Willow, sallow, rose.
Towny Shoons	J Dianthacia car-i	4	6, 7 7, 8 s.	7-3	Poplar.
	l pophaga.	6	9, 10	10-4	Seeds of campions.
Lychnis	" capsincola .	6 6	7-9 7, 8	8-5	Do. Do.
Scarce Coronet		-	7	-	Seeds of garden pinks.
Angle Shades	{ Phlogophora me- ticulosa	-	11-4	-	Broom, and many low plants.
Small do	Euplexia lucipara .	6	8, 9	-	Bracken, male fern, sallow, nettle, plan- tain, &c.
Dark Brocade	Hadena adusta 🛛 .	7	7-9	4	Sallow, hawthorn, and low plants.
Shears : : :	" dentina	-	5, 6	-	Roots of dandelion.
Dingy Broondo	" chenopodii	6	7-9	9-5	Goosefoot. J Plantain, knotgrass,
Broom Moth	" suasa .	-	7,8	-	lettuce, &c.
Pale - shouldered	" pisi	-	8-10	10-5	Bracken, broom, &c. J Sallow, broom, honey-
Brocade 5	" thalassina	-	7, 8	8-5	( suckle, knotgrass, &c.
Light do	" contigua .	-	8, 9	-	Oak, birch, nut, &c.
Light do	" genistæ .	-	7-9	-	{ campion, &c.
Northern do	,, rectilinea .	6	8-3	-	Sallow, bramble, bil- berry.
Purple Cloud	{ Cloantha perspi- { cillaris	-	7, 8	-	Perforated St. John's- wort.
Mullein	Cucullia verbasci	5	6,7	9-4	Mulleins and figworts.

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Popular Name.	Scientific Name.	Ova,	Larva.	Pupa.	Food-plants.
MOTHS					1 A A A A A A A A A A A A A A A A A A A
Water Betony	{Cucullia scro- phulariæ . }	5	6, 7	-	Mulleins and figworts.
Starwort	" asteris	-	8, 9	9-5	Golden-rod, sea star wort, and china aster.
Chamomile Shark .	" chamomillæ.	-	5,6 & 8	7&9-4	Chamomile and flower
Bordered Sallow E	{Heliothis mar-}	-	7, 8	9-6	Rest-harrow, henbane knotgrass.
Scotch Yellow }	Anarta cordigera .		8	-	Bilberry, whortleberry.
Beautiful do. do	" myrtilli .	_	7-10	_	Heath.
Dwarf do. do	Heliodes arbuti .		6.7	-	f Forget-me-not, and
Four Spot	Acontia luctuosa .	6	7	-	field chickweed.
Rosy Marbled	Erastria venustula	-	8	9-5	Flowers of trailing tor mentil.
Silver Y	Plusia gamma .	_	4827-9	_	Nettle, hop, and lov plants.
Scarce do	., ni		-	_	( plants
Alchymist	{Catephia alchy-}	-	8	-	Oak.
Lunar Double Stripe	) mista	-	7	_	Do.
Mother Shipton .	Euclidia mi	-	5	-	Melilot.
Burnet Companion.	Phytometra anea .	-	5 8, 9	10-5	Clover. Milkwort.

INSECTS (continued).

PLANTS.

Popular Name.	Scientific Name.	Localities.	Duration.
Clematis, or Travel-}	Clematis vitaļba	Limestone and chalk soil	Perennial.
Wood Anemone, or }	Anemone nemorosa .	Woods (High chalky pastures.)	"
Pasque-flower	" pulsatilla .	Scarce	"
Water Crowfoot	Ranunculus aquatilis .	Streams, ditches, &c	"
Ivy-leaved do	", hederaceus.	Do	,, 1
Lesser Celandine Wood Crowfoot	". Ficaria . auricomus.	Banks, &c.	"
Bulbous Buttercup .	", bulbosus .	Meadows	
Small-flowered Crow- )	manniflonus	Fields and waste places.	Annual.
foot	Myosurus minimus .	Gravelly or chalky	,,
Marsh Marigold	Caltha palustris	Marshes and sides of streams, &c.	Perennial
Baneberry, or Herb	Actaea spicata	Mountain woods. Rare	"
Entire-leaved Peony .	Pæonia corallina	{ Steep Holmes Island, } in the Severn	"
Barrenwort	Epimedium alpinum .	Mountain woods in Scotland. Rare.	
Greater Celandine.	Chelidonium majus .	Waste places .	Annual.
Ramping Fumitory .	Fumaria capreolata .	Hedges and corn-fields .	
Common do	" officinalis .	Fields and waste places. (Limestone pastures in)	"
Perfoliate Penny Cress	Thlaspi perfoliatum .	Oxfordshire and Gloucestershire	"
Shepherd's Purse	Capsella Bursa-pastoris	A common weed	"
Teesdalia.	Teesdalia nudicaulis .	Dry banks. Scarce	
Common Scurvy Grass	Cochlearia officinalis .	Sea-shores	

## MAY-PLANTS.

PLANTS (continued).

		the second se	
Popular Name.	Scientific Name.	Localities.	Duration.
English Scurvy Grass .	Cochlearia Anglica .	Sea-shores	Annual.
Danish do. do.	Danica .	Cliffs and hedges near sea	.,,
Vernal Whitlow Grass	Draba verna	Walls and dry banks .	,,
Speedwell-leaved do. do.	" muralis	{ Limestone mountains. } { Not common . }	
Coral-root	Dentaria bulbifera	Woods. Rare	Perennial.
Large-flowered Bitter	Cardamine amara.	Banks of rivers, &c	29
Cuckoo - flower, or	" pratensis .	Meadows	"
Ladies' Smock . Narrow-leaved Bitter	" impatiens .	{Damp rocks in Scot- land and North of}	Annual.
Cress ) Smooth Tower Mustard	Turnitie alabaa	( England. Rare . ) Banks, chiefly in Nor- )	
	Turritis glabra	} folk and Suffolk . ∫	" Demonsiol
Common Winter Cress	Barbarea vulgaris.	Damp waste ground .	Perennial. Biennial.
Early do. do	,, præcox Sisymbrium thalianum	Dry banks and walls	Annual.
Garlic Mustard, Jack- by - the - hedge, or Sauce-alone.	Alliaria officinalis .	Hedges, &c	
Hoary Shrubby Stock .	Matthiola incana	Shore of Isle of Wight .	Perennial.
Wild Mustard, or }	Sinapis arvensis	(A common weed in)	Annual.
Cherlock f	Sincipio di Conoro I I	Corn-fields, &c (Mountain rocks in)	
Hoary Rock Rose	$Helian themum\ canum$ .	Wales and North of England	Perennial.
Hairy Violet	Viola hirta	Chalk and limestone soil	,,
Marsh do	" palustris	Bogs and marshy ground	"
Dog do	,, canina	Woods and hedge-banks Cultivated fields	Annual.
Red Robin, or Campion	Lychnis diurna	Hedges and banks	Perennial.
Evening Campion	Sagina apetala	Do	Annual.
Annual Pearl-wort .		Dry places	Annual.
Sea do	" maritima	of Ben Nevis	,,
Upright Moenchia	Mænchia erecta	Sandy places	.,
Wood Starwort	Stellaria nemorum	Damp woods	Perennial.
Chickweed	,, media	A common weed	Annual.
Satin-flower, or Ad-	,, Holostea	Hedge-banks	Perennial.
Three-nerved Sandwort		Moist woods	Annual.
Thyme-leaved do	,, serpyllifolia.	Dry banks and walls .	Perennial.
Spring, or Vernal do Alpine do	,, serpyllifolia . ,, verna ,, rubella	Mountain pastures Mountains. Very rare .	
Broad-leaved Mouse-ear	Cerastium vulgatum .	Fields and road-sides .	Annual.
Narrow-leaved do	" viscosum .	Do	Perennial.
Four-cleft do	,, tetandrum . Acer campestre	Walls near sea	Annual.
Common Maple Sycamore, or Greater )		Woods and hedges	Tree.
Maple f	" Pseudo-platanus	Do	"
Dusky Crane's-bill .	Geranium phœum	{Woods and thickets. }	Perennial.
Herb Robert	" Robertianum	Road-sides and hedges .	Annual.
Dove's-foot Crane's-	" molle	Fields and waste places.	,,
Small-flowered do	" pusillum . " dissectum .	Do	"
Sea Stork's-bill	Erodium maritimum .	(Sandy sea-shores, and)	" Perennial.
		at Dartmoor. Scarce	rerennial.
Wood Sorrel Spindle Tree	Oxalis Acetosella	Woods and shady places	Shrub.
Common Buckthorn	Euonymus Europæus . Rhamnus catharticus .	Hedges, &c	12.00
Alder do	Frangula .	Do	"
		Commons and thickets .	
Furze, Gorse, or Whin.	Ulex Europæus	Commons and thickets .	**
Furze, Gorse, or Whin. Green-weed, or Petty	Genista Anglica	Heaths and moors	

Popular Name.	Scientific Name.	Localities.	Duration.
Broom	Cytisus scoparius	Woods and heaths	Shrub.
Spotted Medick	Medicago maculata .	Fields .	Annual
White or Dutch } Clover, or Trefoil }	Trifolium repens	Meadows	Perenntal.
Purple do.			a ca chiman.
Subterraneous Trefoil .	,, pratense	Dry banks and fields	Annual.
Wood Bitter Vetch .	Vicia orobus	Rocky woods in North .	Perennial.
Spring do		Dry places.	Annual.
Bush do	" sepium	(Woods and shady)	Perennial.
Bitter Vetch	0 1 1 1	hedges }	Perenniai.
Horse-shoe Vetch .	Orobus tuberosus Hippocrepis comosa .	Woods .	,,
Sloe, or Blackthorn;)	hippocrepis comosa .	Chalky banks	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Bullace, or Wild	Prunus communis	Woods and hedges	Small tree.
Bird Cherry	" Padus	Do	Contraction of the local division of the loc
Wild Cherry	" avium	Do	Tree."
Red do.	,, Cerasus	Do	Shrub.
Spring Cinquefoil	Potentilla verna	Dry pastures	Perennial.
Strawberry-leaved do.	"tridentata "Fragariastrum	Mountains. Very rare .	,,
Wood Strawberry.	Fragaria vesca	Banks and hedges Woods and thickets .	"
Raspberry	Rubus Idœus	Rocky woods	Shrub.
Field Lady's Mantle, or Parsley Piert .	Alchemilla arvensis .	A common weed	Annual.
Burnet Rose	Rosa spinosissima	Waste places	Shrub.
Wild Pear	Pyrus communis	Woods and hedges	Tree.
Crab Apple	" Malus .	Do	
Wild Service Tree Mountain Ash,)	" torminalis	Do	"
Quicken, Rowan, or Fowler's Tree	" aucuparia	Mountainous woods .	.,
Medlar	Mespilus Germanica .	Hedges	
Hawthorn, White-		Thickets and hedges .	"
thorn, or May .	Cratægus Oxyacantha .		
White Bryony	Bryonia dioïca	Hedges	Perennial.
Four-leaved All-seed .	{Polycarpon tetra- phyllum . }	South coast. Not com-	Annual.
Mossy Tillea	Tillæa muscosa	Sandy wastes	
Red Currant	Ribes rubrum	Woods in the North	Shrub.
Rock do	petræum	Do	,,
Acid Mountain do.	" spicatum	Yorkshire mountains .	"
Tasteless Mountain }	" alpinum	Mountain woods	
do	" grossularia	Woods and thickets .	
Meadow Saxifrage	Saxifraga granulata .	Meadows	Perennial.
Rue-leaved do	" tridactylites	Walls and dry places .	Annual.
Moss do	" muscoides .	Highland mountains .	Perennial.
Palmate do	. cæspitosa .	Mountains	,,
Broad-flowered do	" platypetala.	Do	,,,
Ladies' Cushion Long-stalked Saxifrage	", hypnoides . ", elongella .	Do	"
Geranium-leaved do	nedatifida	Scotch mountains	
Opposite-leaved Gol- )	{ Chrysosplenium op-}	Damp places	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Marsh Pennywort, or	( positifolium . ) Hydrocotyle vulgaris .	Do	
White-rot )		Woods	
Wood Sanicle Honewort	Sanicula Europæa. Trinia glaberrima.	Limestone rocks	
Masterwort	PeucedanumOstruthium	(Damp nastures, Doubt-)	,,
Knotted Hedge Parsley	Torilis nodosa	Fields and banks	Annual.
Chervil, or Cow Parsley	Anthriscus sylvestris .	Hedge-banks	Perennial.
Common Chervil	vulgaris .	Banks and road-sides .	Annual.
Sweet Cicely	Myrrhis odorata	North of England	Perennial.
A DATA AND A	Smyrnium Olusatrum .	{ Sea - side and waste }	Biennial.
Alexanders			

## MAY-PLANTS.

PLANTS (continued).

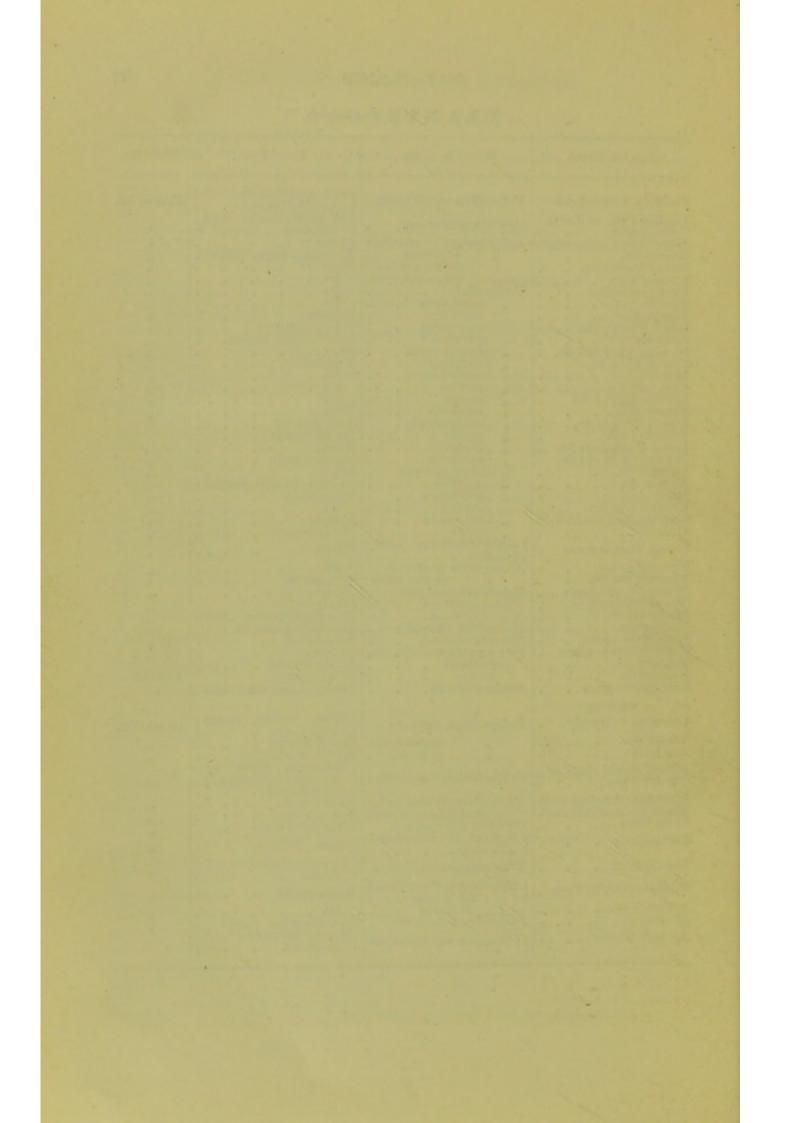
Popular Name.	Scientific Name.	Localities.	Duration.
Perfoliate Honeysuckle	Lonicera Caprifolium .	Woods. Rare	Shrub.
Linnœa	Linnœa Borealis	Northern pine woods .	Perennial.
Goosegrass, or Cleavers	Galium Aparine	Hedge-banks A common weed	Annual.
Corn Salad	Fedia olitoria	(Damp meadows, Not)	
or Salsify	Tragopogon porrifolius	native	Biennial.
Dandelion	Leontodon Taraxacum.	A common weed	Perennial.
Mouse-ear Hawkweed.	Hieracium Pilosella .	Dry places	,,
Butter-bur	Petasites vulgaris	{River-banks and wet}	
		A common weed	Annual.
Groundsel Field Fleawort	Senecio vulgaris Cineraria campestris .	Fields	Perennial.
	(Doronicum plantagi-)	(Damp woods. Doubt-)	
Greater Leopard's-bane	1 neum 5	fulnative J	**
Daisy	Bellis perennis	Pastures	**
Golden Milfoil	Achillea tomentosa .	{Dry hill pastures.}	.,,
Bilberry, or Whortle- )		{ Scarce )	
berry	Vaccinium Myrtillus .	Heaths	Shrub.
Bog Whortleberry .	uliginosum .	Northern bogs	,,
Cowberry	Vitis Idea .	Dry heaths	10005
Black Bearberry	Arctostaphyllos alpina.	Dry mountain heaths .	Perennial.
Red do	Ham Aguitalium	Stony heaths Woods and thickets .	Tree."
Holly Lesser Periwinkle.	Ilex Aquifolium Vinca minor	Thickets. Not common	Perennial.
Greater do	major	Hedges	
Jacob's Ladder	Polemonium cæruleum.	Bushy places. Rare .	
Lungwort	Pulmonaria officinalis.	Woods	,,
Narrow-leaved do	, angustifolia	Do. Rare	Annual.
Corn Gromwell	Lithospermum arvense . maritimum	Fields	Perennial.
Sea do	Myosotis arvensis	Dry places.	Annual.
Early do	" collina	Dry fields and walls .	
Changeable do	" versicolor	Dry places	.,
Evergreen Alkanet .	Anchusa sempervirens .	Waste ground. Local .	Perennial.
Comfrey	Symphytum officinale .	Watery places	.,,
Broom Rape Tooth-wort	Orobanche major . Lathræa Squamaria :	Roots of broom and furze Parasitic on tree-roots .	"
Common Speedwell	Veronica officinalis .	Dry places	**
Mountain do	" montana	Shady woods. Scarce .	.,,
Germander do	" Chamædrys .	Banks	
Ivy-leaved do.	" hederifolia .	A common weed	Annual.
Germander Chickweed Grey Speedwell	" agrestis	Do	,,
diey spectiven	" polita : . Buxbaumii :	Do	"
Wall do	, arvensis .	A common weed	**
Vernal do	" verna	Dry fields. Rare	,,,
Trifid do	, triphyllos .	Sandy fields. Rare .	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Yellow Figwort	Scrophularia vernalis .	Shady places. Local .	Biennial.
Yellow do., or Ground )	Ajuga reptans	Woods	Perennial.
Pine	" Chamapitys .	Chalky fields. Local .	Annual.
Weasel-snout	Galcobdolon luteum .	Hedges and thickets .	Perennial.
White Dead-nettle .	Lamium album	Hedges and way-sides .	,,
Spotted do	", maculatum .	Hedge-banks. Rare .	
Red do	" purpureum .	A common weed	Annual.
Henbit do.	", incisum ", amplexicaule .	Waste places	"
Ground Ivy	Glechoma hederacea .	Hedge-banks	Perennial.
Large - flowered But- )	Pinguicula grandiflora	Marshes, Rare	-
terwort S			"
Primrose	Primula vulgaris	Woods and banks	**
Cowslip	Lysimachia nemorum :	Meadows	**
		(Ditch-hanksandshady)	"
Moneywort	,, Nummularia	( places )	,,
Scarlet Pimpernel	Anagallis arvensis.	A common weed	Annual.

Popular Name.	Scientific Name.	Localities.	Duration.
White Goosefoot	Chenopodium album .	A common weed	Annual.
Knot-grass	Polygonum aviculare .	Do	
Sorrel	Rumex acetosa Thesium linophyllum .	Meadows	Perennial
Asarabacca	Asarum Europæum .	Chalky pastures Mountain woods. Rare	"
Crowberry, or Crake-)	Empetrum nigrum.		**
berry 5		Bogs	**
Mercury Irish Spurge	Mercurialis perennis . Euphorbia hiberna .	Woods and thickets .	**
Wood do.	amvadaloides	Woods : : : :	,,
Spring Water Starwort	Callitriche verna	Pools	Annual
Sallow Thorn	Hippophae rhamnoides	(Sand-hills and cliffs on)	Shrub.
Sweet Gale	Myrica gale	East coast	
White Birch	Betula alba	Woods	Tree.
Dwarf do	12 (2 22 (2	Highland mountains .	
Smooth Willow	Salix triandra	Wet woods and osier beds	.,
Almond do		River-sides	,,
Crack do.	farmerilia	Do	"
Crack do.	", Russelliana	Marshy ground Marshy woods	"
White do	,, alba	Woods and wet places .	"
Creeping do	" fusca	Heaths	
Common Osier	" viminalis	Marshes	
Round-eared Sallow . Great do	,, aurita	Thickets and hedges	,
Green Mountain do.	da dana andara	Scotch mountains	
Dark Rock Willow .	" petræa	Scotland	"
Laurel-leaved do	., laurina	Woods	,,,
Tea-leaved do	" radicans	Scotland	
Apple-leaved do	" hastata	Mountains	"
Beech	Fagus sylvatica Castanea vulgaris	Woods	39
Oak	Quercus pedunculata .	Woods and hedgerows .	"
Hornbeam	Carpinus betulus	Woods	"
Scotch Fir, or Pine .	Pinus sylvestris	Northern forests	
Juniper	Juniperus communis .	Hills and heathy downs	Shrub.
Herb Paris Water Thyme	Paris quadrifolia Eudorea Canadensis .	Woods. Scarce	
Green-winged Orchis .	Orchis Morio	Meadows	**
Early do	" mascula	Do. Chalky hills	
Brown-winged do	" fusca	Chalky hills	**
Man do	" militaris	Do	"
Monkey do Marsh do	", tephrosanthos . ", latifolia .	Do	"
Late Spider do.	Ophrys arachnites .	Chalk hills. Rare	"
Spider do	, aranifera	Do. Do	
Fly do	muscifera	Chalk hills	"
Bird's Nest	Listera Nidus-Avis .	Parasitic on roots of beech	"
Narrow-leaved Helle-	Epipactis ensifolia .	Woods. Rare	,,
Red do.	rubra	Mountain woods. Rare	
Snake-head Iris	Iris tuberosa	Not native	"
Pheasant's-eye Nar-	Narcissus poeticus	Heaths and pastures .	.,
cissus )	biflorus	Sandy fields	
Pale do	Leucojum astivum	Marshes	"
Lily of the Valley .	Convallaria majalis .	Hill woods	
Wild Hyacinth, or	Hyacinthus non-scriptus	Woods and thickets .	.,
Hare-bell		Naturalised	
Grape Hyacinth	Muscari racemosum . Allium ursinum	Woods and hedge-banks	
Ramsons	[Ornithogalum umbel-]	(Meadows and pas-)	
Star of Bethlehem	latum . }	i tures. Naturalised	
Drooping do	nutans	Naturalised	"
Great Hairy-rush	Luzula sylvatica	Woods and hills	,,
Wood do.	" pilosa Fosteri	Woods · · · ·	
	" Fosteri	Heaths and dry pastures	**

## MAY-PLANTS.

PLANTS (continued):

Popular Name.	Scientific Name.	Localities.	Duration.
Sea-side Arrow-grass .	Triglochin maritimum .	Salt marshes and )	Perennial.
		]}_muddy shores	rerennan
Cuckoo Pint, or Lords ) and Ladies	Arum maculatum	{Hedges, banks, and thickets	,,
Hare's-tail Cotton-grass	Eriophorum vaginatum		
Alpino do	a landau a san	Manuskain ham Dans	**
Broad-leaved do	, polystachion .	Mountain bogs.       Rare         Bogs       Do.         Do.       Do.         Do.       Do.         Do.       Do.         Do.       Do.         Do.       Do.         Do.       Do.         Damp pastures.       Damp shady places.         Bogs       .         Marshes       Do.         Do.       .         Do.       .         Damp woods       .         Dry do.       .         Dry do.       .         Dry heaths and pastures         River-sides       .         Do.       .         Marshes       .         Do.       .         Dry do.       .         Do.       .         Marshes       .         Do.       .         Do.       .         Marshes       . <td>"</td>	"
Common do	" angustifolium	Bogs	.,
Creeping Sedge	Carex dioica	Do	,,
Marsh do	" puticaris	Do	"
Great Prickly do	" muricata	Damn nastures	"
Grev do.	, divulsa .	Damp shady places	,,
Smaller Panicled do	" teretiuscula	Bogs	"
Star-headed do	" stellulata	Marshes	
Bog do	" cæspitosa	Do	
Glaucous do	" stricta	Do	,,
Siender-spiked do	" acuta	Do	,,
Dwarf Silvery do	" clandesting	Near Bristol	"
Pendulous do.	, pendula	Damp woods	,,
Loose Pendulous do.	strigosa.	Woods	,,
Pendulous Wood do	" sylvatica	Damp woods	" "
Starved do	" depauperata .	Dry do	
Vernal do	" præcox	Dry heaths and pastures	,,
Groat Divor do	" paludosa	River-sides	,,
Short-spiked Bladdordo	" riparia	Do	,,
Hairy do.	hista	Damp places	"
Trend Vernal	(Anthoxanthum odo-)	Damp places	"
diama .	I ratum		"
Fox-tail grass	Alopecurus pratensis .	Do. Wet places Do.	
Floating do. do.	geniculatus.	Wet places	,,
Wood Melic-grass .	Catabrosa aquatica .	Do	,,
Mountain de	Melica uniflora	Shady woods . Mountain woods. Rare	"
Holy-grass		Mountain pastures	"
Blue Moor-grass	17 7	Mountaing	"
Reed Meadow-grass	Poa aquatica	Ditches Sandy ground Waste ground Pastures and road-sides	"
Bulbous do.	" bulbosa	Sandy ground	
Annual do.	", annua	Waste ground	Annual.
Soft Brome-grass	Bromus mollis	Pastures and road-sides.	,,
FERNS.			
Common Polypody .	Polypodium vulgare	{Mossy banks, damp}	Peronnial
Welsh do.			
Alpine do	" cambricum	Shady banks	"
	" alpestre .	Scotch mountains (Mountain rocks, es-)	"
Alpine Shield Fern, or } Holly Fern	Polystichum Lonchitis .	pecially in Scotland	
		and Ireland )	"
Iaidenhair Spleenwort	Asplenium Trichomanes	Shady rocks	
Black Maidenhair do	", Adiantum-nigrum	Shady places	"
scale Fern	Ceterach officinarum	Limestone rocks	,,
faidenhair	{Adiantum Capillus-}	Rocks. Local	
			"
Bristle Fern	Trichomancs brevisetum	{Damp rocks in Ireland. }	,,
unbridge Film Fern .	{ Hymenophyllum Tun- }		
	bridgense .	Damp rocks	,,
Vilson's do	Wilsoni .	Do	
Ioonwort	Botrychium lunaria .	Hill pastures. Local .	
Adverte have some	0.11.1	[ Damp meadows and ]	
Adder's-tongue	Ophioglossum vulgatum	pastures	.,,



## JUNE.

#### GENERAL HINTS.

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

Very little to be done with pupze; 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 syrings 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-

D

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.

		10000			
Popular Name.	Scientific Name.	Ova.	Larva.	Pupa.	Food-plants.
BUTTERFLIES. Swallow Tail	Papilio Machaon .	6	6-8	8-5	{ Wild carrot, fennel, and
Black-veined White	Pieris cratagi.	6	8-5	6	Hawthorn, sloe, and fruit trees.
Large do	" brassicæ .	5 & 8	6&9	78:9-4	Cabbage, &c., and nas-
Small do	" rapæ	5 & 8	6 & 9	7&9-4	Turnip, cabbage, &c., and nasturtium.
Green-veined do	" napi	5 & 8	6 & 9	78:9-4	Rape, and other cruci-
Orange Tip	$Anthocharis car- \\ damines . $	5	7	7-5	Lady's-smock, treacle- mustard.
Silver-washed Fri-	Argynnis Paphia .	7	8-6	6	Dog and other violets, wild raspberry, nettle.
Dark Green do	" Aglaia .	7, 8	8-6	6	Dog and other violets, and wild heartsease.
Niobe do	" Niobe " Adippe .	7, 8 7, 8	8-5 8-6	6 6	Do. do. Do. do.
Pearl Bordered do.	", Euphrosyne	6	7-5	4, 5	Dog and other violets.
Small Pearl Bor-}	" Selene	6	7-5	5	Do. (Plantain, devil's-bit
Greasy do	Melitæa Artemis .	6	8-4	4	¿ scabious.
Glanville do	" Cinxia .	6	7-5 8-5	5	Narrow-leaved plantain ) Do., foxglove, wild gen
Wood do	" Athalia .	7	1000	6&9	} mander. { Elm, willow, sloe, hop
Comma E Small Tortoise-?	Vanessa C-album .	1	5&8		{ currant, nettle.
shell ES	and the second se		5,6 & 8 8-5	6&8	Nettle. Honeysuckle.
White Admiral .	Limenitis Sibylla .		8-5	-	Annual meadow-grass sheep's fescue-grass
Mountain Ringlet .	Erebia Epiphron .	1			( &c.
Meadow Brown . Ringlet	Satyrus Janira . ,, hyperanthus	77	8-5 8-6	6	Grasses, &c. Do.
Large Heath	{Cononympha Davus	6	8-5	6	White beak rush.
Small do	, Pamphilus	5	5,6&8	4&7	Grasses. (Bramble, broom, birel
Green Hair-streak .	Thecla rubi	5	7 & 10	8-4	greenwood, creepin willow,
White Letter do	" W-album .	7-4 7-3	5, 6 5, 6	6 6	Wych elm, elm. Sloe.
Black do	Polyommatus	6 & 10	5-8 82	4 & 10	Ragwort, dock, sorrel.
Small Copper Scotch Argus	Lycana Artaxerxes	6	9-5	5, 6	Sun cistus.
Brown do	" Agestis .	6 & 8 5 & 9	7&94	4&7 5&8	Hemlock, stork's-bill. Bird's-foot trefoil, &c.
Clifton do	Adonis .	10	5827-8	5 & 8	Tufted horse - she vetch, &c.
Mazarine do	Acie	6	7	4	Flower-heads of thrift. Kidney-vetch.

INSECTS.

INSECTS (continued).

Popular Name.	Scientific Name,	Ova.	Larva.	Pupa.	Food-plants.
BUTTERFLIES.		-			
Large Blue Duke of Burgundy .	Lycæna Arion Nemeobius Lucina .	6 6	7-4? 7-9	8-5	Thyme. Primrose.
Spotted Skipper .	Hesperia paniscus.	6	9	-	Plantain and dog's-tail
Large do	", sylvanus.	7829	5 8 7	5,682	grass. 8 Grasses.
MOTHS.	Smerinthus ocel-	-		1 45	(Doplan millom collow
Eyed Hawk	latus.	5, 6	8	9-5	Poplar, willow, sallow, apple.
Poplar do.	,, populi	5 5, 6	8, 9 8, 9	9-5 9-5	Poplar, sallow, willow. Elm, lime, beech.
Privet do	Sphinx ligustri .	6, 7	8,9	10-5	Privet, lilac, ash, lau-
Spotted Elephant }		_	8, 9	-	Cypress spurge and sea
do	, galii .	-	8-10	_	( spurge. Bedstraws.
Small Elephant do.	{Chærocampa porcellus }	-	8, 9	10-5	Bedstraws and willow herbs.
Large Elephant do.	" elpenor	6, 7	8, 9	10-5	Do. do.
Oleander do Broad Bordered Bee Hawk .	{Macroglossa fu- ciformis }	6	9 7, 8	9-5	Oleander. Scabious, honeysuckle,
Narrow Bordered	, bombyliformis	6	7,8	-	{ bedstraw. Scabious.
do	Sesia myopæformis	_	4, 5	5	∫ In stems of apple, pear,
Birch do	" culiciformis .	-	4	5	l plum, and hawthorn. In birch and alder.
Willow do	" formicæformis	-	4, 5	5	In withy stems. In roots of dock and
Ruby do	" chrysidiformis	-	5, 6	-	a sorrel.
Ichneumon do	{ ,, ichneumoni- formis . }	-	6, 7	-	In stems of stinking hellebore.
Yellow Belted do Thrift do	,, cynipiformis . ,, muscæformis .	=	4, 5	5 5	In bark of oak, &c. In stems of sea thrift.
Currant do	" tipuliformis .	-	10-4	5	In stems of currant.
Orange do	" andreniformis " scoliæformis .	=	4	=	In birch.
Alder do	" sphegiformis .	-	4	5	In young shoots of alder.
Dusky do.	" asiliformis .	-	4	5	In roots of ash and poplar.
Fan Loonard	j Macrogaster	7	9-4	5	In stems of poplar.
the second s	( arundinis . )		4	5, 6	In stems of reed. (In stems of elm, ash,
Wood do	Zeuzera Æsculi .	7	8-5	6	{ horse-chestnut, pear, oak, &c.
Goat	Cossus ligniperda .	7	9, 10	11-5	In trunks of oak, ash, (e elm, willow, &c.
Golden Swift . E Livid do	Hepialus hectus . ,, lupulinus	6 6, 7	8-5 8-5	6	In roots of bracken.
Northern do	" velleda .	6, 7	8-5	55	In roots of dead nettle. In roots of bracken.
Ghost do	" humuli .	6, 7	8-4	5, 6	In roots of nettle, dead
Tinsel Festoon	Limacodes asellus . ., testudo .	6, 7 6	8, 9 9	10-6 10-6	) nettle, burdock, &c. Oak, poplar, beech. Oak.
Green Forester .	Procris statices .	_	5	6	Sorrel, and narrow-
Scarce do. Blue-green do. M	" geryon .	-	5	5, 6	leaved bitter-cress. Sun cistus.
Irish Burnet	Zygæna nubigena .	6	5	6 5, 6	Great knapweed. Thyme.
Trefoil do. New Forest do. E	,, trifolii .	6	7-5	6	Trefoil and vetch.
Five Spot do.	" loniceræ .	6	5 7-5	6 6	Do. Clover and grasses,
Six Spot do	", filipendulæ	6	7-5		Crowfoot, trefoil, &c.
Handmaid .	Syntomis phegea . Naclia ancilla .	7, 8	9-5	6	Scabious, plantain, dandelion.
Ribbon Bar	Nola cucullatella	=	4, 5	5	Lichens. Hawthorn, sloe, apple,
Least Black Arches	" cristulalis .	- 1	5	5	Oak.

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Popular Name.	Scientific Name,	Ova.	Larva.	Pupa.	Food-plants.
MOTHS.					Automation of the
Scarce Dotted Bar . Small Dew Lackey.	Nola strigula Setina irrorella :	=	5 5	6 5, 6	Oak. Ground lichens near sea.
Rose Wing	Calligenia miniata	7	8-5	5, 6	Lichens on oaks, also withered oak, alder, and sallow.
Four-spotted Foot-	Lithosia mesomella	-	8-5	5, 6	Heath and lichens.
Orange do	" aureola .	-	9-5	-	Lichens on larch and
	" deplana .	-	6	6	Lichens on oak, beech, yew, and spruce fir.
Dun do	" luridcola . " griscola .	=	8-5 8-6	5, 6 6	Lichens. Lichens on poplar.
Straw do	" stramineola	-	8-6	6, 7	{ Lichens on oak, sloe, { &c.
Red Necked do	., rubricollis .	-	8-10	3, 4	Lichens on larch, &c.
Feathered do	Eulepia grammica	-	5	-	{Heath, mugwort, {fescue-grass.
Cinnabar E	Callimorpha Ja-		5	-	Ragwort, groundsel.
Scarlet Tiger	(Euthemonia rus-	6	8-5	5, 6	Houndstongue. Plantain, dandelion
Clouded Buff	i sula	6	9-5	-	l heath, &c.
Wood Tiger	( gunus .	6	8-4	5	Plantain, violets, &c.
Cream Spot do	A State of the second sec	7	8-5	5,6 5&8	Chickweed, furze.
Ruby do	mandiag	-	4&8	9-4	and grasses. Sloe, plantain.
Spotted Muslin . Buff Ermine	Indusionada	=	8	9-4	Plantain and nettle.
White do			8	9-4	1 plants.
Water do			8	10-4	Willow herb. (Willow, hawthorn
Gipsy E	and the second s	. 8-3	5	6	Sloe, sweet gale. Oak, beech, nut, haw
Hop Dog	. Orgyia pudibunda	5, 6	8, 9	9-4	thorn, hop. Sallow, broom, heath
Dark Tussock .	, " fascelina	and the second	9-5	5,6	1) flowers of furze, &c
Whittlesea Ermine		. 7,8	8	6	Reed and sedge.
	. " gonostigmu	2 6,7	9-5 6,7 s. 10		l sloe, nut, &c. Beech, and other trees.
Nut-tree Tussock Fox	. Demas Coryli . Bombyx rubi .	: 6	9-5	5	Heath and bramble. (Hawthorn, broom
Oak Eggar .	, roboris	. 7,8	9-6	6, 7	bramble, heath, &c.
Lappet	· { Lasiocampa quercifolia .	} 6	9-5	5, 6	Bramble, willow, sa low, sloe, &c.
Bordered Beauty	. Epione vespertarie	a 7-4	5,6	6	Nut. Dogwood and wild rose
Little Thorn . Brimstone	Rumia cratagata	. 4829	68:9-3	3-5	Hawthorn, sloe. Nettle.
Spotted Yellow Orange Moth .	<ul> <li>Venilia maculata</li> <li>Angerona prunari</li> </ul>		9 10-4	5	Beech, sloe, sallow broom, plum, &c.
Pale Emerald .	( Metrocampa	} 7,8	9-5	6	Oak, birch, beech, horn
Barred Red .	: margaritata Ellopia fasciaria	1 20.2	9-4	5, 6	Scotch fir.
	B Eurymene dolo-		8, 9	10-5	Oak, beech, birch, an
Lilac Beauty .	Pericallia syrin-	6, 7	9-6	6	Lilac, privet, elde
	3 Sclenia lunaria	. 5,6	8	8-4	Oak, elm, ash, nu hawthorn, sloe, &c.
Pepper · ·	· { Amphidasis be- tularia	} 5,6	8-10	10-4	Oak, elm, birch, beecl alder, hawthorn.
	(Hemerophila ab-	5,6	6	9-4	Lilac, privet, and rose.
Widower	Cleora viduaria	1 -	-		
widower	. ottoria siana in				

INSECTS (continued).

INSECTS (continued).

- Popular Name.	Scientific Name,	Ova.	Larva.	Pupa.	Food-plants.
· MOUTO					
MOTHS. Brussels Lace	Cleora lichenaria .		9-5	5.6	Lichens.
		-	- 100 States	5,6	f Birch, sloe, bramble,
Mottled Beauty .	Boarmia repandata	7	9-1	5, 6	} plum, spindle, &c.
Willow do E	" rhomboidaria	7	9-4	5, 6	Oak, birch, lilac, elder,
	" perfumaria .	7	9-6	6	Lilac, clematis, ivy.
Ringed do:	" cinctaria .	7	9	= 0	Heath.
Square Spot En-)	" roboraria .	7	9-5	5, 6	Oak,
grailed f	" consortaria .	7	8		Do,
Brindled White	{ Tephrosia exter-}	-	8, 9	10-5	Oak, birch, beech.
Grey Birch	punctulata	_	8,9	10-4	Birch and alder.
Obscure Birch	{Boletobia fuli-}	6	7	-	Fungi.
Course Descenta	] ginaria . Pseudoterpna cy-			-	(Broom, and needle
Grass Emerald .	tisaria.	-	5, 6	6	greenwood.
Large do	Geometra papi-	7	10-5	6	Birch, beech, nut, &c.
Small Grass do	Nemoria viridata .	6	8	9-4	Hawthorn, bramble.
Little do	Iodis lactearia	6	9	10-5	Oak, birch,
Blotched do	{Phorodesma ba-} jularia }	6, 7	7-5	5	Oak.
Dark do	(Hemithea thy-)	-	5	5.6	Oals hawthown
False Mocha . B	(miaria )		100000	5, 6	Oak, hawthorn.
Maiden's Blush	Ephyra porata . ,, punctaria .	6	9 7-9	9-4 8-4	Oak. Do.
Clay Treble-lines .	" trilinearia .	-	8-10	9-4	Beech.
Mocha · · ·	" omicronaria	-	8-10	-	Maple, beech.
Dingy do	" orbicularia.	-	8	8-4	Sallow, alder.
Purple - bordered	,, pendularia.	-	7		Birch.
Gold	Hyria auroraria .	6, 7	8-5	5, 6	Plantain,
Small Yellow Wave Small White do.	Asthena luteata .	Ξ	8-10	5	Maple.
Waved Carpet	" sylvata .	=	8	-	Hornbeam. Alder.
Blomer's Wave .	" Blomeraria		8,9	10-6	Wych elm.
Dingy Shell	{Eupisteria hepa-}	-	8,9	10-5	Alder.
Welsh Wave	Venusia Cambri-				
	caria	-	8, 9	-	Mountain ash.
Brown do	Acidalia ochrata .	-	-	-	
Tawny Red Wave .		-	-	-	∫ Knotgrass, trefoils, les-
	" rubricata .	7	8-5	5	{ ser meadow-rue, &c.
Single Dotted do	" scutulata .	7	8-5	5	{ Chervil, dandelion,
Treble Brown-	hindata		-		( knotgrass.
spotted do 5	" bisetata .	7	8-5	5	Dandelion, knotgrass.
Small Bordered do.	" trigeminata.	6776	7-5	5	Knotgrass.
London do	" contiguaria. " herbariata .	7	8-5	5	Crowberry, knotgrass.
Bone do.	accounter	ĥ	10-5 8-4	5 4, 5	Tansy? Dandelion.
Dark Cream do	" interjectaria	7	8-5	5	Do.
Silky do	" holosericata	777	7-5	5	Sun cistus, knotgrass.
Small Dusky do	" incanata .	7	9-5	6	∫ Groundsel, dandelion,
Ringed do.	" circellata .	7	8	_	knotgrass. Knotgrass.
Lace Border	" ornata .	7	7-4	4, 5	Marjoram, thyme, mint.
Mullein Wave	" promutata .	_	7,8-5	5, 6	(Creeping cinquefoil.
					{ yarrow, mugwort.
Cream do.	" straminata.	7	7-5	5, 6	Knotgrass.
			-	24	10
Satin do	" mancuniata	-	7	7	Do.
Satin do	" subsericeata	7	7	-	Do.
Satin do	mahaamlaaata				

IN	SE	CTS	S (continued).	
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Popular Name.	Scientific Name.	Ova.	Larva.	Pupa.	Food-plants.
MOTHS.					
moky Wave	Acidalia fumata . ,, emutaria .	6, 7 7	8-5 7-5	5 5, 6	Heath. Couchgrass.
iband do	" aversata .	7	9-5	5	{Nut, primrose, goos berry, wood avens,
lain do E ortland Ribbon do.	" inornata . " degeneraria	77	8-5 8-4	6 5	Low plants. Knotgrass.
mall Scallop . E	" emarginata	7	7	-	f Convolvulus and be
lood Vein	Timandra amataria	7	9-5	5, 6	} straws. Dock, knotgrass.
ommon White	Cabera pusaria .	-	7-9	-	{Oak, birch, nut, alde and sallow.
ingy White do	,, exanthemaria	-	10	10-5	Sallow and alder.
louded Silver .	Corycia temerata .	6	7, 8	9-4	Sloe, wild cherr buckthorn.
Wave	" taminata .	-	7	-	Sallow, wild cherr buckthorn.
harp Angled Pea-	Macaria alternata	-	9	-	Sallow, sloe.
eacock	" notata . " liturata .	Ξ	9	10-4	Sallow. Larch, Scotch fir.
atticed Heath .	Strenia clathrata .	-	10-4	5	Lucerne, sainfoin.
rown Silver Line . arred Umber .	Panagra petraria. Numeria pulveraria	5	6 7, 8	9-4	Bracken. Sallow, nut, privet.
rey Scalloped Bar	Scodiona belgiaria	6, 7	8-4	5	Heath.
ommon Heath .	Fidonia atomaria . " piniaria .	6	7-5 8, 9	5 10-3	Knapweeds and trefoi Larch and Scotch fir.
annoch Looper .	" pinetaria .	7-3	4, 5	5	Bilberry.
rosted Yellow .	,, conspicuata Minoa euphorbiata	77	8, 9 8, 9	9-5 10-5	Broom. Cypress spurge.
lack-veined	Scoria dealbata .	6	9-5	5, 6	Grasses.
Belle	Sterrha sacraria . Lythria purpuraria	8	6 & 9	I	Dock, chamomile. Dock, knotgrass.
test Harrow	Aplasta ononaria .	-	4 & 9	-	Rest-harrow.
rass Wave	{ Aspilates strigil- } { laria	6	8-5	5	Broom, heath.
fagpie, or Cur-}	{Abraxas grossu-}	-	5	6	{Currant, goosebern
louded do		5,6	9 6, 7	9-4	Wych elm. Spindle.
corched Carpet .	Larentia didymata		4, 5	5	Cowslip, rough cherv
ebruary do	" cæsiata .	7	9-5	5	Bilberry, whortleber
triped Twin Spot )	" salicata .	-	-	-	Bedstraw.
do B) Beech Green Carpet	" olivata .	8	10-4	5, 6	Hedge bedstraw.
fottled Green do	, pectinitaria	-	8, 9	-	Alder and hedge be
tivulet	{Emmelesia affi-}	-	8	-	Seeds of campions.
mall do	,, alchemillata	-	8,9	104	Do. Seeds of yellow rattle
rass do	" albulata .	6	8	10-4 7-5	J Seed-capsules of wh
andy do	" decolorata . " tæniata .	0	8		Campion.
Barred do	" unifasciata.	8	9, 10	10-6	Wood chickweed.
feath do Pretty Pinion	", ericetata :	Ξ	9	=	Eyebright. (Seed-capsules of bla
Netted Pug	Eupithecia venosata	5, 6	7	8-5	der campion & wh
Pinion-spotted do	" consignata.	5, 6	6	9-4	Oak, nut, and fruit tre (Flowers of yellow tos
Beautiful do	" linariata .	6	8	9-4	i flax.
Red do	" pulchellata	6	7	9-4	Flowers of foxglove. (Flowers and seeds
ime Speck do	" centaureata	5, 6	8, 9	9-5	yarrow, ragwort, g
Valerian do	valerianata	5, 6	7	7-5	Flower of valerian,

INSECTS (continued).

		1990 (1990 (1990) 1990 (1990 (1990)		89.13 F	
Popular Name.	Scientific Name.	Ova,	Larva.	Pupa.	Food-plants.
MOTHS. Small Brindled Pug	{Eupithecia }	5, 6	8, 9	8-5	Gentian and harebell.
	( suoumorata)			1.2.5	flowers of yellow cow-
Lead do	" plumbeolata	5	7,8	7-5	{ wheat.
Haworth's do	" isogrammata	5, 6	7,8	8-5	Flower-buds of clematis. (Flowers of greater
Dwarf do	" pygmæata .	6	6, 7	7-5	{ stitchwort.
Beech do. <sup>1</sup> · · · Pauper do. · ·	" satyrata .	5, 6	9	9-6	Scabious and bedstraws.
Grey do	" castigata .	5, 6	8-10	9-4	{Heath, nettle, golden- rod, &c.
Triple Spotted do	" trisignata .	6, 7	9	9-6	Flowers and seeds of wild angelica.
Larch do	" lariciata .	6, 7	.7	9-6	Larch and spruce fir.
Golden Rod do. B	" virgaureata	6	8, 9	9-6	Flowers of golden-rod. (Flowers and seeds of
White Spotted do	" albipunctata	6, 7	9	9-6	wild angelica and cow-parsley.
Marbled do	" irriguata .	6	6	7-6 9-4	Oak and sloe. Ash.
Ash do	" fraxinata . " extensaria .	8	8, 9	9-1	ASII.
Ochreous do	" indigata .	5, 6 7	7	7-5	Juniper and Scotch fir.
Narrow Winged do.	" nanata .		8,9	9-6	Flowers of heath. Flowers and seeds of
Plain do	" subnotata .	6, 7	8,9	9-6	{ goosefoot and orache.
Harebell do	" campanulata	7	8, 9	9-7	Harebell, &c. (Flowers and seeds of
Wormwood do	" absynthiata	7	9, 10	9-7	agwort, mugwort golden-rod, yarrow
Small Wormwood )	" minutata .	6, 7	8, 9	9-7	Scabious, and flowers
Slender do	" tenuiata .	6, 7	3, 4	5-7	Sallow-catkins.
Brindled Brown do.	" dodoneata .	5	6, 7	7-5	Oak. (Ash, alder, hawthorn
Mottled do	" exiguata .	6	9, 10	9-6	black currant, sallow &c.
Large Cloaked do.	" togata	6	8	9-6	In buds and shoots of spruce fir.
Green do	" rectangulata	7	4, 5	5, 6	Buds and flowers of apple and crab.
Manchester do	,, debiliata .	7	4, 5	6, 7	Whortleberry.
Broom Scallop . Small Seraphim .	Collix sparsata . Lobophora sexalata	-	8,9	10-5	Great loosestrife. Willow and sallow.
Brindle Barred	., viretata.	1	7,8	9-5	f Privet and herb Chris
Yellow		6 & 8	7 & 3-5		topher Larch, Scotch fir.
Marsh Highflyer .	Ypsipetes ruberata	-	9	4	Alder, sallow, bilberry.
July do E	" elutata .	7	10-5	6	Sallow, nut, alder, bil berry.
Purple Barred }	Melanthia ocellata	6	7,8	8-5	Bedstraws.
Beautiful do	", albicillata	5, 6	8, 9	8-5	Bramble and raspberry
Argent-and-Sable . Small do	Melanippe hastata	6, 7 6	8 8, 9	9-6 11-5	Birch and sweet gale. Hedge bedstraw.
Bordered Chalk )	,, procellata .	7	8,9	10-5	Clematis.
Carpet	amanaulata	6.7	7.8	-	Chickweed.
Silver Ground do	" montanata	6-8	10-3	4, 5	Primrose.
Bedstraw Chalk do. Royal Mantle .	Anticlea sinuata .	6	7 & 9 8, 9	8 & 9-5	Smooth heath bedstraw.
Rosy Carpet	" rubidata .	6, 7	8, 9	10-5	Bedstraws.
Red Barred do	Coremia munitala. "propugnata".	6	10-3	4,5	Groundsel. Primrose.
Red Twin Spot do.	Commente	5 & 8	7 & 9		f Bedstraws, chickweed,
Dark Barred Twin )		0000	1123	-	( and ground ivy.
_Spot do f	" unidentata .	-	8 4, 5, & 8	4	Bedstraws. { Hawthorn, white dead { nettle, knapweeds, &c
Large do E	" quadrifasciata				

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## INSECTS (continued).

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Popular Name.	Scientific Name.	Ova.	Larva.	Pupa.	Food-plants.
MOTHS.	(Count				
Yellow Shell	{Camptogramma bilineata . Phibalapteryx	-	4	-	{ Dock, chickweed, and grasses.
Fern	tersata.	-	9	-	Clematis.
Oblique Striped }	" lignata .	7 & 9	8 & 9-4	9 & 5, 6	White water bedstraw.
SmallWaved Umber		7,8	6 & 10	-	Clematis.
Brown Scallop . Buckthorn Umber .	Scotosia vetulata . ,, rhamnata	7-3	6 5, 6	6, 7 6	Buckthorn, birch.
Tissue	" certata .	-	6, 7	-	Barberry.
Short Cloak Carpet	Cidaria picata .	7	9, 10 8	9-5	Poplar, sallow. Chickweed.
Broken Bar	" corylata .	6	8, 9	-	Lime, sloe, and nut.
Marbled Carpet .	" russata .	5 & 8	7 & 10-4	all the second	Birch, hawthorn, sal- low, and strawberry.
Small Phœnix .	" silaceata .	-	7 & 9	7 & 10-4	Willow herbs and en-
Phoenix	" prunata .	7-4	5, 6	6	Sloe, currant, and gooseberry.
Moth 5	" fulvata .	7	5	6	Dog-rose.
Spinach	,, dotata Eubolia mensuraria	8-4	4, 5	5	Black and red currant. Grasses.
Lead Belle	" palumbaria	-	5	6	Broom, heath, clover,
Oblique Striped .	" lineolata .	5 & 8	4-6 & 9	1000	( greenwood, &c. Yellow bedstraw.
reble Barred .	Anaitis plagiata .	-	7 & 10-4		f Perforated St. John's.
Dive Drab	Lithostege griseata Chesias obliguaria	6	7 7-9	8-4	Seed-pods of flixweed. Broom.
himney Sweep .	{ Tanagra chæro-} { phyllata . }	7-2	5	6	Chervil and earth nut.
scalloped Hook Tip	Platypteryx la-	6 & 9	6 & 9	-	Birch.
Scarce do	" sicula . " hamula .		5, 6 6 & 9	-	Oak, birch, and lime.
Beech do.	" unguicula	6 & 8	7 & 9,10	=	Oak, birch. Beech.
Hoose Egg	Cilix spinula	-	5-7	6, 7	{ Hawthorn, sloe, moun- tain ash.
Kitten	Dicranura furcula	6	7-9	9-5	Sallow, willow, poplar.
Broad Barred do	" bifida . " vinula.	6	7-9 7, 8	9-4 8-5	Poplar. Willow, poplar, sallow.
obster	Stauropus fagi .	7	8, 9	10-5	Beech, oak, birch, nut
Buff Tip	Pygæra bucephala.	5, 6	7-9	10-5	Lime, elm, willow, sal- low, oak, beech, nut.
Dusky Prominent .	Gluphisia crenata.		8	-	Poplar. (Willow, sallow, birch,
Pale do	Ptilodontis palpina	-	7 & 9	10-6	{ poplar.
Swallow do Small Swallow do.	Notodonta dictæa . dictæoides .	6	6 & 9 7-9	7 & 10-5 10-5	Poplar, willow, sallow. Birch.
ron do	" dromedarius	6 & 8	7 & 8, 9	10-5	Birch, alder, nut.
Dark do	,, trilophus . ,, trepida .	=	7-9	9-4	Poplar and birch. Oak.
Iarbled Brown .	" dodonea .	6	7-9	10-5	Oak and birch.
Buff Arches . E Peach Blossom .	Thyatira derasa . batis .	=	8, 9 8, 9	10-5 10-5	Bramble and hawthorn. Bramble and raspberry.
esser Satin Carpet	{ Cymatophoradu-	6, 7	8, 9	10-5	Birch.
atin Carpet	l plaris . ) " fluctuosa .	6,7	9, 10	10-5	Do.
Poplar Lutestring . Figure of 80	" O?'	Ξ	6-8 7-9	9, 10 9, 10	Poplar. Do.
carce Marvel de ) Jour E }	, ocutaris . Diphthera orion .	6	7-9	10-5	Oak, birch.
Dark Dagger	Acronycta tridens .	7	8-10	10-5	Willow, sallow, haw- thorn, mountain ash,
	and the second se		A REAL PROPERTY.	and the second second	( sloe, &c. ) Poplar, elm, lime, haw

INSECTS (continued).

Popular Name.	Scientific Name.	Ova.	Larva.	Pupa.	Food-plants.
MOTHS.					∫ Birch, poplar, sallow,
Miller	Acronycta leporina	5, 6	7-9	10-5	alder.
Sycamore	" aceris	7	8, 9	10	Sycamore, maple, birch, horse-chestnut, oak.
Poplar Grey	" megacephala.	6	6-8	9-4	Poplar.
Streaked	" strigosa	6	7-9	10-5	Hawthorn. (Alder, willow, oak,
Alder	" alni	-	7-9	8-4	{ lime, elm, nut, beech, birch, &c.
Coronet	" ligustri	6, 7	8, 9	10-5	Ash and privet. (Bramble, plantain,
Knot Grass	" rumicis	6	6-8	9-4	Buckbean, sallow
Light do	,, menyanthidis	6	6-8	-	{ bramble, heath, swee gale, &c.
Sweet-gale	Simyra venosa :	6, 7	8, 9 8, 9	Ξ	Sweet-gale, sallow, birch Reed grass.
Powdered Wainscot Bright Eye	Leucania conigera.	6	3-5	5	Grasses.
Double Line	" turca	-	2, 3	4, 5	Do.
Ochreous Brown .	" lithargyria .	-	1-5	5, 6	{ Plantain, chickweed grasses, &c.
Obscure Wainscot .	" obsoleta	7	8, 9	-	Reed.
Shore do	" littoralis .	7	8-5	5	Sea-reed.
Striped do	" pudorina .	-	3, 4	4, 5	Grasses and reed. Sorrel and cock's-foo
Shoulder Striped do.	" comma	6	8-4	5, 6	{ grass.
Pure do	" <i>L-album</i> . " straminea :	Ξ	2-4	5, 6	Grasses and reed. { Sedge and cock's-foo
Smoky do	" impura	7	10-4	5, 6	grass.
Common do	" pallens . " phragmitidis	8, 9 7	10-4 8-5	5, 6 5, 6	Grasses. Reed.
Pale do	Tapinostola Bondii Elymi.	=	5	6	Sea lyme grass.
Flame do	Meliana flammea .	-			
Silky do	Senta ulvæ	Ξ	9-4	5, 6	Reed.
Twin Spot do E	Nonagria despecta ,, concolor .	=		-	
Mere Wainscot .	Hellmanni	-	6		Roots of reed.
Clouded Dart Bordered Brindle .	Axulia putris Xylophasia rurea .	7	8	10-5 4, 5	Low plants. Grasses.
Light Arches	Little and an	1	5, 6	6	{ Roots of grass and low } plants.
Reddish Light )	" lithoxylea " sublustris	-	0,0	-	} plants.
Arches	" polyodon.	-	4, 5	6, 7	Low plants.
Clouded Brindle .	,, hepatica.	-	8-4	5	Chickweed, grasses, &c
Bird's Wing Bordered Gothie .	Dipterygia pinastri Neuria saponariæ.	=	8,9	10-5	Dock, sorrel, &c. Campions.
Feathered Ear	Pachetra leucophaa	=	7,8	5,6	Grasses.
Dusky Nutmeg .	Mamestra abjecta .	-	5	6	At roots of couch grass.
Nutmeg	" anceps . " albicolon .	-	12-2 7, 8	9-4	Orache and geograficat
Dusky Brocade E	", furva .	Ξ	6	0-±	Orache and goosefoot. Grasses.
Cabbage	" brassicæ .	-	5, 6 & 8, 9	9-4	{ Cabbage, dock, goose { foot, &c.
Dot	" persicariæ	7	8, 9	-	Spotted persicaria, &c. (Wheat in summer
Rustic Shoulder }	Apamea basilinea .	-	8-3	4, 5	{ various plants after hibernation.
Union Rustic	" connexa	-	-	-	
Brown Pinion Uniform Rustic	" gemina " unanimis :	7	8-4 9-4	5 4-6	Grasses. Do.
Double Lobed	", ophiogramma	=		-10	
Common Rustic .	., oculea	-	4, 5	5-7	Grasses.
Marbled Minor	Miana strigilis . ,, fasciuncula	Ξ	3, 4	=	Do.
Rosy do.	,, literosa .	-	5,6		Slender foxtail grass.

#### Scientific Name. Popular Name. Ova. Larva, Pupa. Food-plants. MOTHS. In stems of fescue grass Cloaked Minor Miana furuncula . 4-6 5, 6 \_ and slender foxtail grass. Wood do. . E arcuosa 5 6 Turfy hair grass. (Photedes capti-) Least do. . -\_ . . uncula. Grammesia tri-Triple Lines 4, 5 5, 6 Great plantain. linea Plantains, and other low plants. Hydrilla palustris. Gold Line . 7.8 -. Dingy -. . ginosa . Caradrina Mor-(Orpine, sallow, bramble, Bordered Rustic 7,8 9, 10 5, 6 pheus dock, teazle, &c. Powdered do. . blanda 5, 6 Chickweed. 4 Mottled Beauty Brown Feathered cubicularis 8 9-4 5-7 Grasses, &c. ... Rusina tenebrosa . 9-34-6 Violets, knotgrass, &c. Rustic Roots of grasses. { Dandelion, knotgrass, { lettuce, &c. 10-5 Archer's Dart . Agrotis valligera 5, 6 E Shuttle Shaped do .. puta. 8 9-12 -... 6 7-4 Turnip . Roots of turnip segetum . ... Roots of cabbage, tur-Heart and Dart 6 9-5 5, 6 exclamationis Goosefoot. ... Heart and Club E corticea . 6 8-4 5, 6 ., Light Feathered cinerea . 94 5, 6 Roots of low plants. ,, Rustic Cloud Dart 8-10 6 Houndstongue on coast. ripæ. ,, Heather. Thistles, dandelion, &c. porphyrea ravida True Lover's Knot . Stout Dart 7 5, 6 8-5 33 4, 5 6 -... ٠ pyrophila Heath, grasses, &c. Dotted Rustic . -... sallow, (Birch, Broad Bordered) oak, grasses, &c. Sallow buds, broom, Yellow Under-Triphæna fimbria . 9 10-4 5-7 wing Lesser Yellow do. . orbona . 7 8-5 5-7 ... Large Yellow do. . pronuba 7 8-5 5-7 ,, 5, 6 7 8-5 Double Dart . Noctua augur. 5-7 Flame Shoulder 6 7-4 plecta . . Setaceous Hebrew ) Pea-stems, 4 & 10 C-nigrum \_ -. Character ... plants. Double Square Spot Purple Clay triangulum. 4, 5 4, 5 6 Sallow, bramble. ... 5, 6 Sallow. brunnea \_ 99 . Sallow, foxglove, violet, &c. 7 5, 6 7-5 Ingrailed do. . festiva . .. Confluent do. 5, 6 conflua. 7 8-5 Moss campion. .. Dahlii . Low plants. 9-5 5, 6 Barred Chestnut \_ . ., Do. Do. Small Square Spot . Dotted Clay . Dingy Shears . E Heart Moth . 6,74,5 rubi 99 ٠ 5, 6 6 baja Orthosia upsilon 5,6 Willow, poplar. Ē . Oak. Dicycla Oo \_ \_ (Dianthæcia irre-) 8 \_ Marbled Shears ish catchfly. gularis Tawny do. Mottled do.

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Lychnis

Campion

Coronet

Marbled do.

Ranunculus

Scarce do.

White Spotted

Northern Grey

Dwarf Shears .

Broad Barred White

#### INSECTS (continued).

nettle, and low plants. Dock, &c. Sallow, hawthorn, and low plants Low plants. and low Viper's bugloss, Span-7, 8 Seeds of campions. 6 10-4 carpophaga Campions. capsophila. 6 8-4 6 7-9 8-5 Seeds of do. capsincola . 7, 8 Do. 6 cucubali Do. 6 7 albimacula Do. conspersa . 7-9 Seeds of garden pinks. 7 compta s Bladder and sea cam-8-5 6 7.8 cæsia . pions. Barrettii --. (Flowersandseed-heads of sow-thistle and 7,8 Hecatera dysodea . lettuce. Sow-thistle and wild 9-5 7,8 serena lettuce.

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INSECTS (continued).

Popular Name.	Scientific Name,	Ova.	Larva.	Pupa.	Food-plants.
MOTHS. Angle Shades	{ Phlogophora me-} ticulosa . }	-	11-4	_	Broom, and many low
Small do	Euplexia lucipara.	6	8, 9	-	Bracken, male fern, sal- low, nettle, plantain, &c.
Green Arches	Aplecta herbida .	-	8-4	5, 6	Dock, and other low
Great Brocade .	" occulta : " nebulosa :	Ξ	4, 5 10-5	6 6	Plantain, primrose. Birch, sallow, hawthorn.
Grey Arches Silvery do	" tincta	Ξ	10-5 8-4	6 5, 6	Birch and grasses. Various low plants.
Brown do Dark Brocade	,, advena . Hadena adusta .	7	7-9	4	Sallow, hawthorn, and low plants.
Glaucous Shears .	" glauca .	_	7, 8	9-5	Birch, sallow, bilberry, heath.
Common do	" dentina	_	5, 6	-	Roots of dandelion.
Nutmeg	" chenopodii	6	7-9	10-5	Goosefoot. (Spotted persicaria,
Orache . : .	" atriplicis .	-	8, 9	-	{ goosefoot, dock, &c.
Dingy Brocade .	" suasa .	-	7-9	-	Plantain, knotgrass, lettuce, &c.
Bright Line	" oleracea .	-	8, 9	10-4	Elm, nettle, dock, cab
Broom Moth	" pisi	-	8-10	10-5	Bracken, broom, &c. (Sallow, broom, honey
Pale Shouldered Brocade	" thalassina	-	7,8	8-5	i suckle, knotgrass, &c
Beautiful do	" contigua .	-	8, 9	-	Oak, birch, nut, &c. (Broom, chickweed
light do	" genistæ .	-	7-9	-	Broom, chickweed campion, &c.
Northern do	" rectilinea.	6	8-3	-	Sallow, bramble, bil berry.
Striped Lychnis .	Cucullia lychnitis .	-	7-9	9-5	Seeds of white and dark mulleins.
Starwort	" asteris	-	8, 9	9-5	Golden - rod, sea star wort, and China aster
Wormwood do.	" gnaphalii . " absynthii .	6	7, 8 8, 9	9-5 9-5	Golden-rod. Wormwood.
Chamomile do	" chamomillæ	-	5, 6 s. 8	7 & 9-3	{ Chamomile and flowers
Common do	" umbratica .	6, 7	7-9	9-5	Sow-thistle and lettuce.
Bordered Sallow .	Heliothismarginata		7,8	9-6	(Rest-harrow, henbane
Bordered Straw .	" peltigera.		7,8	-	l knotgrass. Rest-harrow, henbane.
Marbled Clover .	" dipsacea .	-	8, 9	10-5	{ Toadflax and Spanish catchfly.
White Bordered White	Anarta melanopa .	-	-	-	_
wing ) Scotch do. do	" cordigera.	-	8	_	Bilberry, whortleberry.
Beautiful do. do	" myrtilli .	-	7-10 s. 3, 4	-	Heath.
Owarf do. do B	Heliodes arbuti .	6	6, 7	-	{ Forget-me-not and field chickweed.
Spotted Sulphur .	{Agrophila sul- phuralis . }	_	6-8	_	Small convolvulus.
Four Spot	Acontia luctuosa .	6	6-8	-	Do.
Rosy Marbled	Erastria venustula	-	8	9-5	{ Flowers of trailing tor mentil.
Marbled White Spot	fuscula .	-	8,9	-	Lavender grass.
Silver Barred	Banksia argentula. Hydrelia unca	6, 7	87,8	9-6	Grasses. Sedges.
Purple Marbled .	Micra ostrina	-	-	-	Low plants.
Small do	" parva · · · · paula · · ·	=	=	=	Thistle stems.
Spectacle	Abrostola urtica .	Ξ	8, 9	10-5	Nettle,
	,, triplasia		8,9	10-5	Nettle, hop. J Thistle, nettle, dead
Burnished Brass .	Plusia chrysitis .	6, 7	7-4	5	a nettle, burdock.

Popular Name.	Scientific Name.	Ova,	Larva,	Pupa.	Food-plants.
MOTHS. Golden Y	Plusia iota	-	4-6	6	Honeysuckle, nettle, dead nettle, ground- sel.
Beautiful do	" V-aureum .	-	5	6	Nettle.
Silver Y	" gamma	-	4-9	-	{ Nettle, hop, and low plants.
Scarce do	" ni	-	-	-	
Northern do Dark Gothic	, interrogationis Mania typica	-	5,6	5	Nettle.
	(Toxocampa pas-)	7, 8	9-4	Ð	Dock and low plants.
Black Neck	tinum	-	5		Tufted vetch.
Lunar Double Stripe			7	_	Oak.
Mother Shipton .	Euclidia mi	-	5	-	Melilot.
Burnet Companion.	,, glyphica.	-	5	-	Clover.
Small Purple Barred	Phytometra ænea.	-	8,9	10-5	Milkwort,

## INSECTS (continued).

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

## JUNE-PLANTS.

PLANTS (continued).

Popular Name.	Scientific Name,	Localities.	Duration.
Scarlet Horned Poppy .	Glaucium phæniceum .	{Sandy shores, Doubt-}	Annual.
Greater Celandine .	Chelidonium majus .	Waste places	Perennial.
Climbing Corydalis .	Corydalis claviculata .	Bushy places	Annual.
Yellow do	Fumaria capreolata :	Old walls. Rare Hedges and corn-fields .	Perennial. Annual.
Common do	, officinalis .	Fields and waste places	**
Alpine Penny Cress .	Thlaspi alpestre	{ Mountainous lime- stone pastures in }	Perennial.
Shepherd's Purse	CapsellaBursa-Pastoris	( North of England ) A common weed	Annual.
l'eesdalia	Teesdalia nudicaulis .	Dry banks. Scarce	
Narrow - leaved Pep- )	Lepidium ruderale .	Waste places near sea .	
perwort ) Hairy do	" Smithii	Hedges	Perennial.
English Scurvy Grass .	Cochlearia Anglica .	Sea-shore	Annual.
Danish do.	Danica .	) Cliffs and hedges near )	
		1 sea	n."
Freat Water Radish . Swisted Whitlow Grass	Armoracia amphibia . Draba incana .	River-banks	Perennial. Biennial.
Rock Draba	rupestris	Highland mountains	Perennial.
Purple Sea Rocket .	Cakile maritima	Sandy sea-shores	Annual.
ea Kale	Crambe maritima	Sea-coast	Perennial.
Vart Cress, or Swine's	Senebiera Coronopus .	A common weed	Annual.
lesser do.	" didyma	Do	
Varrow-leaved Bitter )		(Damp rocks in North)	"
Cress	Cardamine impatiens .	of England and Scot-	,,
Lairy do	himanta	( land )	
lairy Rock Cress	Arabis hirsuta .	A common weed	Biennial.
lower Mustard	1 2 2 2 3 2 7 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	(Banks, chiefly in Nor-)	
	Turritis glabra	1 folk and Suffolk	Annual.
Common Winter Cress Carly do.	Barbarea vulgaris .	Damp waste ground .	Perennial.
ommon Water Cress .	Nasturtium officinale :	Do Streams and ponds	Biennial. Perennial.
creeping Yellow do	" sylvestre .	Watery places	
nnual do. do.	" terrestre .	Do	Annual.
Cress	" amphibium	Ditches and wet places .	Perennial.
Iedge Mustard	Sisymbrium officinale .	{ Waste places and road- }	Annual.
hale Cress or Wall)		l sides f	minuter.
Cress	" thalianum	Dry banks and walls .	,,
arlic Mustard, Jack-)			
by - the - hedge, or }	Alliaria officinalis .	Hedges, &c	.,
Sauce-alone . ) Iare's ear Treacle-}		(Constat Trans Constant	
mustard.	Erysimum orientale .	{ Coast of Essex, Sussex, } and Suffolk }	
loary Shrubby Stock .	Matthiola incana	Shore of Isle of Wight .	Perennial.
reat Sea Stock	., sinuata.	Sandy sea-shores	Biennial.
ea Cabbage	Brassica campestris .	Borders of fields	Annual.
ca cabbage	" oleracea	(Sandy sea - shore on)	Biennial.
sle of Man do	, monensis	{ North-west Coast of }	Perennial.
Vild Mustard, or Cher- )		(Britain )	
lock	Sinapis arvensis	{A common weed in } cornfields, &c.	Annual.
Vhite do.	" alba	Waste ground	,,
ommon do.	_ ,,_ nigra	Do	
hrubby Mignonette .	Reseda fruticulosa .	(Mountain rocks in)	Perennial.
loary Rock Rose	Helianthemum canum .	Wales and North of England	"
potted Annual do. do. Pog Violet	Viola canina	Sandy pastures. Rare .	Annual.
	and the second se	Woods and hedge-banks	Perennial.
ansy, or Heartsease	tricolor .		
ansy, or Heartsease . ellow Mountain ) Violet, or Mountain }	,, tricolor	Cultivated fields	Annual.

Popular Name.	Scientific Name,	Localities.	Duration.
Common Milkwort .	Polygala vulgaris	Heaths and dry pastures	Perennial.
Moss Campion	Silene acaulis	Summits of mountains .	
Bladder do	" inflata	Corn-fields and pastures (Sea-shore, and moun-)	"
Sea do	" maritima	tain streams	"
English Catchfly	" Anglica	Dry fields	Annual.
Variegated do	" quinquevulnera.	Sandy fields. Rare .	,,
Nottingham do	" nutans	{Limestone and chalk }	Perennial.
Ragged Robin	Lychnis Flos-Cuculi .	Damp places	,,
German Catchfly	" viscaria	{Dry mountain rocks.}	
Red Robin, or Cam-	,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	{ Local }	
pion )	" diurna	Hedges and banks	**
Mountain Campion .	" alpina	Clova mountains, Angus	,,
Evening Campion .	" vespertina .	Do	"
Corn-Cockle Procumbent Pearlword	Agrostemma Githago .	Corn-fields	"
Annual do.	" apetala	Dry places	Annual.
Sea dò	an and the a	(Sea-shore, and summit)	
		Corn-fields	"
Spurrey	Spergula arvensis	Highland mountains .	Perennial.
Wood Starwort	Stellaria nemorum .	Damp woods	and the second second second
Chickweed	,, media	A common weed	Annual.
Greater Stitchwort, Satin - flower, or Adder's Meat	" Holostea	Hedge-banks	Perennial.
Lesser do	" graminea .	Dry heathy places	
Marsh do	" glauca	Marshy places. Local .	
Bog do	" uliginosa .	Do. Highland mountains	Annual. Perennial.
Alpine do	" cerastoides .	(Damp places on moun-)	I cremman.
Many-stalked do	" scapigera .	{ tains	
Three-nerved Sandwor	Arenaria trinervis .	Damp woods Dry banks and walls .	Annual.
Thyme-leaved do Spring or Vernal do	., serpyllifolia . verna	Mountain pastures	Perennial
Alpine do.	", rubella	Mountains. Very rare .	
Fine-leaved do	" tenuifolia .	Walls and sandy places .	Annual.
Level-topped do	, fastigiata . marina .	Scotch mountains Sandy sea-shores	,,,
Sea do		Fields and road-sides .	"
Narrow-leaved do.	, viscosum .	Do	Perennial.
Field Chickweed	" arvense .	Gravelly and chalky	**
Broad - leaved Moun- )	and the second sec		and a start of the
tain Chickweed .	,, enciporenne .	Mountains	"
Mossy Cyphel	Cherleria sedoides	Highland mountains .	,,
Perennial Flax	Linum perenne	Chalky fields	,,
Narrow-leaved do	,, angustifolium .	tures	
Little, or Cathartic do.	" catharticum .	Dry pastures	Annual.
Common Mallow	Malva sylvestris	{Road-sides and waste }	Perennial.
Dwarf do	. rotundifolia .	Do	Annual.
Hairy Marsh do.	Althæa hirsuta	Cobham, Kent	m
Small-leaved Lime Tree	Tilia parvifolia	Woods	Tree.
Hairy St. John's Wort .	Hypericum hirsutum .	Chalk soil	Perennial.
Trailing do	humifusum	Sandy and peaty places	Treë.
Common Maple	Acer campestre	Woods and hedges	
Crimson Crane's-bill.	Geranium sanguineum	Sian rocks	Perennial.
Dusky do	" phœum	1 Rare	"
Knotty do	" nodosum .	{Hertfordshire and Cumberland	,,
TTrad la	oulpatioum	Woods and meadows .	,,
Wood do	" pratense .	Damp pastures	

## JUNE-PLANTS.

Popular Name.	Scientific Name.	Localities.	Duration.
Pyrenean Crane's-bill .	Geranium pyrenaicum .	{Road-sides and mea-}	Perennial.
	Debautiquation	dows. Local . ) Road-sides and hedges .	Annual.
Herb Robert	Junidam	Walls and stony places .	,,,
Dove's-foot do.	, molle	Fields and waste places	
Round-leaved do	, rotundifolium	Do	,,
Small-flowered do	" pusillum	Do	**
Jagged do	" dissectum .	Do	"
Long-stalked do	Erodium cicutarium .	Do. Scarce	"
Stork's-bill Musk do	and a star in the start as the	Hilly pastures	"
		(Sandy sea-shores, and )	"
Seado	" maritimum .	) at Dartmoor, Scarce	Perennial.
Wood Sorrel	Oxalis Acetosella	Woods and shady places	,,
Yellow do. do	corniculata.' .	{Damp places in West }	Annual.
		) of England. Rare f	
Bladder Nut	Staphylea pinnata .	Doubtful native Commons and thickets .	Shrub.
Furze, Gorse, or Whin Green-weed, or Petty	Ulex Europœus		"
Whin	Genista Anglica	Heaths and moors	**
Broom	Cytisus scoparius	Woods and heaths	
Rest Harrow	Ononis spinosa	Heaths and dry commons	Perennial.
Black Medick, or Non- )	Medicago lupulina .	Pastures	Annual.
such	menercuyo emparima .	1 astures	minual.
Lucerne, or Purple	" sativa	Fields. Not native .	Perennial
Medick		Fields	Annual.
Sickle Medick	Medicago falcata . :	Do.	Perennial.
Yellow Melilot	Melilotus officinalis	Waste places	Annual.
White or Dutch )			
Clover, or Trefoil	Trifolium repens	Meadows	Perennial.
Purple do.	" pratense	Do	
Teazle-headed Trefoil .	" maritimum .	Salt marshes	Annual.
Rough do	" scabrum	Dry fields	"
Knotted do	" striatum	Sandy fields	"
Subterraneous do.	any ht annuar any ma	Dry banks and fields	"
Hop do	, procumbens .	Dry pastures	"
Great Bird's-foot do	Lotus major	Bushy places	Perennial.
Little do. do	" angustissimus .	South Coast. Rare .	Annual.
Lady's Fingers, Kid-)	1. 12 . The second s	Destauration	
ney Vetch, or }	Anthyllis vulneraria .	Dry pastures	Perennial.
Hairy Mountain Oxy-	and the second s	{Drymountain pastures }	
tropis	Oxytropis uralensis .	in Scotland	**
Sweet Milk Vetch .	Astragalus glycyphyllus		
Wood-bitter Vetch .	Vicia Orobus	Rocky woods in the North	
Common do	" sativa	Fields. Doubtful native	Annual.
Yellow do	" lutea	Sea-coast	Perennial.
Bush do Hairy do., or Tare	" sepium	Woods and shady hedges	
Smooth do. do.	,, hirsuta	Fields and hedges	Annual.
		(Sandy and gravelly)	"
Yellow Vetchling .	Lathyrus Aphaca	fields. Rare	.,
Crimson do	" Nissolia	Grassy places	
Blue Marsh do	" palustris .	Boggy meadows	Perennial.
Bitter Vetch	Orobus tuberosus	Woods	,,
Black do.	niger	Rocks in the Highlands	.,
Horse-shoe Vetch	Ornithopus perpusillus	Sandy heaths	"
Sainfoin	Hippocrepis comosa Onobrychis sativa	Chalky banks	"
Meadow-sweet	Spiræa ulmaria	Damp meadows	"
Mountain Avens	Dryas octopetala	Mountain pastures .	"
Common do., or Herb {	Geum urbanum	Hedges and thickets .	, "
Bennet 5	active to containe		"
Water Avens	., rivale	{Damp meadows and }	
W GUCI LEVEIIS			
Silver Weed, or Goose- )	Potentilla Anserina	{ marshes }	"

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Popular Name.	Scientific Name.	Localities.	Duration.
Creeping Cinquefoil .	Potentilla reptans	Meadows and way-sides	Perennial
Hoary do	" argentea .	[]Pastures and commons ]	
Shrubby do	" fruticosa .	Mountain thickets	"
Strawberry-flowered do.		(Rocks in Wales, Very)	"
		1 rare	**
Alpine do Saw-leaved do	" alpestris . " opaca	Mountains. Do. Rare	"
White rock do	" alba	Mountains.	**
Trifid do	", tridentata .	Do. Very rare	
Common Tormentil . Trailing do	Tormentilla officinalis . reptans .	Woods and banks	"
Wood Strawberry	Fragaria vesca	Woods and thickets .	"
Raspberry	Rubus Idæus	Rocky woods	Shrub.
Dewberry	" cæsius	{ Thickets and borders } of fields	"
Stone Bramble	,, saxatilis	Stony, mountainous	Perennial.
Cloudberry	" Chamæmorus .	Mountain moors	
Common Lady's Mantle	Alchemilla vulgaris .	Hilly pastures	
Field do	, arvensis . Sanguisorba officinalis .	A common weed Damp meadows	Annual.
Burnet Rose	Rosa spinosissima .	Waste places	Perennial. Shrub.
Soft-leaved do	" mollis	Mountain thickets	,,
Sweet-briar	,, rubiginosa	Bushy places Hedges and bushy places	,,
Dog Rose Trailing do. do	,, canina	Woods and hedges	"
White Beam Tree	Pyrus Aria	Woods	
Mare's-tail	Hippuris vulgaris.	Stagnant water	Perennial.
White Bryony Water Blinks	Bryonia dioica Montia fontana	Hedges	Annual.
Four-leaved All-seed .	{Polycarpon tetra-}	South coast	,,
Mossy Tillœa	Tillœa muscosa	Sandy wastes	
Wall Pennywort	Cotyledon Umbilicus . Sedum villosum	Damp rocks and walls .	Perennial.
Hairy Stonecrop Common do., or Wall		Damprocks	
Pepper	,, acre	Walls and rocks	"
Rose Root	Rhodiola rosea	Mountains and sea-cliffs.	.,
Kidney-leaved Saxi-	Saxifraga geum	South of Ireland	
Hairy do	" hirsuta	Do	
London Pride, or	" umbrosa .	Mountains	,,
None-so-pretty . ) Starry Saxifrage	stellaris	Do	
	" aizoides .	(Boggy places on)	"
Yellow Mountain do		1 mountains f	
Meadow do	" granulata .	Meadows Mountain rocks	"
Rue-leaved do.	" tridactylites.	Walls and dry places .	Annual.
Moss do	" muscoides .	Highland mountains .	Perennial.
Palmate do Hairy do	, cæspitosa . hirta .	Mountains.	"
Broad-flowered do.	". platypetala .	Do	"
Ladies' Cushion	. hypnoides .	Do	
Opposite-leaved Gol-	{ Chrysosplenium alternifolium . }	Damp places. Scarce .	"
Marsh Pennywort, or }	Hydrocotyle vulgaris .	Damp places	"
Wood Sanicule )	Sanicula Europæa	Woods	"
Wild Celery, or }	Apium graveolens	Marshes	Biennial.
Smallage )	Petroselinum sativum .	Old walls	
Parsley Honewort	Trinia glaberrima	Limestone rocks	Perennial.
Pepper Saxifrage	Silaus pratensis	Damp meadows	"
Spignel, Meu, or Bald }	Meum Athamanticum .	Mountain pastures	"
Money )	(Peucedanum Ostru-)	J Damp pastures. }	-
Masterwort	thium I	[ Doubtful native ]	"

## JUNE-PLANTS.

P	L	A	N	T	S	(conti	inued)	).

Popular Name,	Scientific Name,	Localities.	Duration.
Small Hartwort	Tordylium officinale .	Corn-fields. Doubtful	Annual.
Great do	Caucalis Daucoides :	Do. do	9' 94
Great do	latifolia	Corn-fields	
Knotted Hedge Parsley Venus's Comb, or	Torilis nodosa		**
Shepherd's Needle	Scandix Pecten-Veneris	A common weed	,,
Garden Chervil	Anthriscus Cerefolium .	Waste ground	D. " (1)
Yellow-seeded do	Chærophyllum aureum.	Fields. Scarce	Perennial.
Broad-leaved do Sweet Cicely	Myrrhis odorata	Near Guthrie, Forfar . North of England	**
Hemlock	Conium maculatum .	Hedge-banks	Biennial.
Alexanders	Smyrnium Olusatrum .	[Sea-side and waste]	1000
		{ ground }	Annual.
Coriander	Coriandrum sativum . Cornus sanguinea .	Fields and waste places. Hedges	Shrub.
Cornel Tree, or Dogwood Dwarf do.	,, suecica	Mountain pastures .	Perennial.
Elder	Sambucus nigra	Woods and hedges	Tree.
Meal Tree	Viburnum Lantana .	Hedges and thickets .	Shrub.
Guelder Rose	Lonicera Caprifolium :	Woods	"
Perfoliate Honeysuckle Common do., or Wood- {			"
bine	", Periclymenum	Do	,,
Upright do	. Xylosteum .	Thickets in Sussex	- "
Linnœa	Linnœa Borealis	Northern pine woods .	Perennial
Crosswort . Smooth Heath Bed-	Galium cruciatum	Hedges and thickets .	,,
straw	" saxatile	Heaths	"
Upright do	" erectum	Hedges	Annual.
Rough-fruited do Smooth-fruited Corn do.	" saccharatum . " spurium	Corn-fields. Rare	and the second se
Wall do.	" anglicum	Walls	
Goosegrass, or Cleavers	" Aparine	Hedge-banks	
Field Madder	Sherardia arvensis .	Fields	,,
Field Woodruff	Asperula arvensis	Near Davenport	"
Red Valerian	Centranthus rubra .	{ walls ∫	Perennial.
Marsh do	Valeriana dioica	Damp meadows	"
Corn Salad	Fedia olitoria	Damp places	Annual.
Lamb's Lettuce	" dentata	Corn-fields	
Small Scabious	Scabiosa columbaria .	Pastures	Perennial.
Yellow Goat's Beard .	Tragopogon pratensis .	Do	Biennial.
Purple do., or Salsify .	" porrifolius.	{Damp meadows. Not }	,,
Ox Tongue	Helminthia echioides .	Hedge-banks	Annual.
Sow Thistle	Sonchus oleraceus	A common weed	,,
Hawk Weed Wall }	Prenanthes hieracifolia	Near Forfar	
Lettuce f			" Demonsiol
Dandelion	Leontodon Taraxacum . Apargia hispida	A common weed Dry pastures and heaths	Perennial.
Mouse-ear Hawk Weed	Hieracium Pilosella .	Dry places.	"
Orange do. do	aurantiacum	Northern woods	
Smooth Hawk's Beard.	Crepis tectorum	Walls and dry places .	Annual.
Rough do	"Biennis	Dry pastures	Biennial.
Stinking do Long-rooted Cat's Ear	Borkhausia fætida . Hypochæris radicata .	Chalky fields	Perennial.
Dwarf Nipplewort .	Lapsana pusilla	Sandy fields	Annual.
Slender-flowered Thistle	Carduus tenuislorus .	Waste places	
Carline do.	Carlina vulgaris	Dry pastures	Biennial.
Nodding Bur Marigold	Bidens cernua	Ditches	Annual.
	Antennaria dioica Gnaphalium Germa-	Dry heaths	Pérennial.
Common Cudweed .	nicum	Dry ground	Annual.
Groundsel	Senecio vulgaris	A common weed	
Incloceant Decement	" squalidus	Walls and waste places .	
Inelegant Ragwort . Great do., or Bird's)	" of account		,,

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## PLANTS (continued).

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

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## JUNE-PLANTS.

PL	AN	TS (	continuea	).
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Popular Name.	Scientific Name.	Localities.	Duration.
Yellow Rattle Yellow Cow Wheat .	Rhinanthus Crista-galli Melampyrum pratense.	Meadows	Annual.
Marsh Red Rattle, or Lousewort	Pedicularis palustris .	Marshes	Perennial.
Dwarf do	sylvatica .	Dampmeadows and bogs	Di
Foxglove Snapdragon	Digitalis purpurea . Antirrhinum majus .	Woods and hedge-banks Old walls. Not native .	Biennial. Perennial.
Ivy-leaved do., or Toad Flax	Linaria Cymbalaria 🔒	Do. Do	,,
Sharp-leaved Fluel-	" Elatine	Dry fields	Annual.
Common Toad Flax, or )	" vulgaris	Hedges	Perennial.
Butter and Eggs 5 Small do.	minor	Chalky fields. Local .	Annual.
Cornish Moneywort . White Mullein	Sibthorpia Europæa . Verbascum Lychnitis .	Damp places. Local . Chalky places. Local .	Perennial. Biennial.
Dark do	nigrum .	Hedge-banks	Perennial.
Gipsywort	Lycopus Europæus . Salvia pratensis	Ditches and pool-sides . Hedge-banks. Rare .	,,
Wild do	. verbenaca	Do., and dry fields	"
Wild Thyme	Thymus Serpyllum .	Heaths and hedge-banks	"
Wall Germander	Teucrium Chamædrys . Ajuga reptans	Old walls. Naturalised . Woods	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Pyramidal do	" pyramidalis .	Highland pastures	**
Mountain do	alpina	Mountains. Rare	
Bee Nettle Weasel Snout	Galeopsis versicolor . Galeobdolon luteum .	Corn-fields. Hedges and thickets	Annual. Perennial.
White Dead Nettle .	Lamium album	Hedges and way-sides .	,,
Spotted do	,, maculatum .	Hedge-banks. Rare .	,,
Cut-leaved do.	,, purpureum .	A common weed Fields	Annual.
Henbit do	., amplexicaule .	Waste places	"
Ground Ivy	Glechoma hederacea . ( Melittis Melissophyl-)	Hedge-banks (Woods in southern)	Perennial.
Bastard Balm	1 lum	counties (	,,
Self Heal	Prunella vulgaris .	Fields	"
Skull Cap Butterwort	Scutellaria galericulata Pinguicula vulgaris	Wet places	"
Alpine do	, alpina .	Mountain do.	"
Pale do Intermediate Bladder-)	", lusitanica .	Bogs. Local	,,
wort	Utricularia intermedia	Water. Rare	"
Small do	minor .	Pools on moors	,,
	Hottonia palustris.	Clear water ( Damp places on moun- )	"
Bird's-eye Primrose .	Primula farinosa	tains	"
Sea Milkwort	Glaux maritima	Sea-shores and salt-	.,,
Chickweed Winter-)	Trientalis Europæa .	Heaths. Rare	
Wood Pimpernel	Lysimachia nemorum .	Woods (Ditch-banks and shady)	"
Money-wort	" nummularia	l places	"
Scarlet Pimpernel Chaff Weed	Anagallis arvensis Centunculus minimus .	A common weed Damp places	Annual.
Brook Weed	Samolus Valerandi	Do	Perennial.
Sea Thrift	Armeria maritima.	Sea cliffs	
Hoary do.	Plantago major	A common weed	"
Ribwort do	" lanceolata	(A common weed in)	"
Sea do.	" maritima .	Muddy sea-coasts	"
Buck's-horn do.	, coronopus .	Dry places.	Annual.
Shore Weed	Littorella lacustris . Beta maritima	Margins of pools	Perennial.
Wild Spinach.	(Chenopodium Bonus)	Muddy sea-shores	"
	l Henricus j	Waste places	,,
White Goosefoot Ristort, or Snake Weed	Polyaonum Bistorta	A common weed	Annual.
		sump meauows	Perennial.

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PLANTS (continued).

Popular Name.	Scientific Name,	Localities,	Duration,
Knotgrass	Polygonum aviculare .	A common weed	Annual.
Black Bindweed, or Climbing Buck-	" convolvulus	Do	"
wheat ) Curled Dock	Rumex crispus	Do	Perennial.
Meadow do	. pratensis	Meadows. Rare	"
Sorrel		Meadows	"
Sheep's do Mountain do		Heaths	
Flax-leaved Toad Flax.	Oxyria reniformis Thesium linophyllum .	Chalky pastures	"
Crowberry, or Crake-			Shrub.
berry f	Empetrum nigrum .	Bogs	and the second second
Broad-leaved Spurge .	Euphorbia platyphylla	Fields	Annual.
Irish do	" hiberna	Thickets	Perennial.
Hairy do	Cumaricoiae	Thickets, Local	"
Cypress do Petty do	", Peplus	A common weed	Annual.
Wood do	, amygaatotaes	Woods	Perennial.
Spring Water Star-)	Callitriche verna	Pools	Annual.
wort )			
Stalked do. do	" pedunculata . " autumnalis .	Do	**
Roman Nettle	Urtica pilulifera	Waste ground	"
Small do.	, urens	Do	
Common do	dioica	Way-sides and fields .	Perennial.
Pellitory	Parietaria officinalis .	Old walls	"
Smooth Willow	Salix triandra	Wet woods and osier-	Tree.
Sweet do	" pentandra	River-banks	,,
Net-leaved do.	reticulata	Scotch mountains	17
Green Mountain Sallow	Andersoniana .	Do	,,
Bilberry-leaved Willow		Highlands	"
Whortle-leaved do	", myrsinites ", herbacea	Do	Shrub.
Dwarf do	Di una anticataria	Northern forests	Tree.
Dwarf Juniper .	Juniperus nana	Mountains	Shrub.
Black Bryony	Tamus communis	Thickets	and the second se
Herb Paris	Paris quadrifolia	Woods	and the second
Water Thyme	Eudorea Canadensis . Orchis Morio	Canals	
Green-winged Orchis . Early do.	manaula	Do	1000
Dwarf Dark-winged do.	. ustulata	Chalky pastures	,,
Marsh do.	, latifolia	Marshes	"
Spotted do	", maculata	Heaths	100
Fragrant do	Gymnadenia conopsea . Habenaria viridis .	Hill pastures	"
Small White do.	albida	Mountains.	
Butterfly do.	chlorantha .	Damp meadows	
Green Man do.	Aceras anthropophora.	Chalk hills	"
Bee do	Ophrys apifera	Do	"
and the second s	", arachnites ". muscifera	Chalk hills.	
Fly do	Listera ovata	Woods	,
Tway Blade	Nidus-avis .	J Parasitic on roots of	,,,
Bird's Nest		beech	
White Helleborine	. Epipactis grandiflora .	Woods on chalk . Woods. Rare .	
Narrow-leaved do.	, ensifolia	Mountain woods. Rare	
Red do	Iris fætidissima	Dectures and thickets	
Stinking Iris . Narrow-leaved Solo-			
mon's Seal	[ Concentration and concentration		
Solomon's Seal .	. " multiflora .		
Angular do	. " Polygonatum	Do. Rare · ·	• • • •
Wild Hyacinth, Blue-	(Hyacinthus non-	Woods and thickets	,
bell, or Harebell	$\int \int scriptus \cdot \cdot \cdot$	Not native.	
		and the second sec	30
Rose-coloured Garlic	Allium ambiguum . Schænoprasum.		

# JUNE-PLANTS.

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# PLANTS (continued).

Popular Name.	Scientific Name,	Localities,	Duration,
Furk's-cap Lily	Lilium Martagon	Woods. Not native .	Perennial
Sharp-flowered Rush .	Juncus acutiflorus	Damp ground	,,
Small-jointed do	" uliginosus	Damp heaths	"
Moss do	" squarrosus	N	,,,
Great Hairy Rush	Luzula sylvatica	Woods and hills	,,
Narrow-leaved do	Fosteri	Woods	,,
Flowering do	Butomus umbellatus .	Ponds and slow streams	,,
	(Actinocarpus Dama-)		
Star Fruit	l sonium s	Pools	"
Sea-side Arrow Grass .	Triglochin maritimum .	1 muddy shores . )	"
vy-leaved Duckweed .	Lemna trisulca	Ditches and ponds	Annual.
Small do	" minor	Do	,,
Thick-leaved do	", gibba	Do	33
Freat do	polyrhiza	Ponds	D "
Curled Pondweed	Potamogeton crispus .	Pools and ditches	Perennial
Flat-stalked do		Ditches	,,
lose-leaved do	, densus .		
ea Ruppia	Ruppia maritima	Salt ditches	,,
reeping Spike Rush .	Eleocharis palustris .	Ditches and bogs	,,
Many-stalked do	. Eleogiton fluitans .	Marshes	,,
loating Water Rush .	Eleogiton fluitans	Pools	,,
Hare's-tail Cotton Grass	Eriophorum vaginatum		.,
Prickly Sedge	Carex Davalliana		
lea do	,, pulicaris	Bogs	,,
urved do	,, incurva	Sea-shores	
ea do.	", arenaria	Sandy shores	,,
oft Brown do	" intermedia	Marshes	,,
reat Rough do	" vulpina	Meadows	
maller Panicled do	" teretiuscula	Bogs	,,
reater do. do	" paniculata	Do	"
tar Headed do	" stellulata	Marshes	
Vhite do.	" curta	Bogs	,,
llongated do.	" elongata	Marshes	
val do	" ovalis	_ Do	,,
temote-flowered do	" remota	Damp woods	,,
xillary-clustered do	,, axillaris	Marshes	,,
lusset do	" pulla	Mountain bogs	,,
log do	" cæspitosa	Marshes	
tigid do	,, rigida	Mountains	,,
ew-flowered do	" pauciflora	Peaty moors	,,
oose Pendulous do.	" pendula	Damp woods	,,
endulous Wood do.		Woods	,,
to man of the	" sylvatica	Damp do	,,
	" depauperata .	Dry do.	,,
oose-spiked Rock do	" Mielichoferi	Mountains	.,
Iud do.	" capillaris	Do	,,
oose-flowered do.	" limosa	Muddy bogs	,,
yperus do.	" rariflora	Scotch mountains	,,
lack do.	" Pseudo-Cyperus.	Damp places	,,
ale do.	,, atrata	Mountains	,,
ellow do.	" pallescens	Marshes	,,
awny do.	" flava	Turfy bogs	,,
	" Julva	Boggy meadows	.,,
ong-bracteated do.	" extensa	Marshes	,,
reen-ribbed do.	" distans	Do	,,
ound-headed do.	" binervis	Dry heaths	.,
owny-fruited do.	" pilulifera	Heaths and moors	,,
ink-leaved do.	" tomentosa	Meadows. Rare	,,
laucous Heath do.	" panicea	Bogs and meadows	,,,
nooth-beaked do.	" recurva	Woods and pastures .	
port-spiked Diadday	,, lævigata	Boggy woods	
do.	" vesicaria	Marshes	
ender-beaked Blad-			"
der do.	" ampullacea	Do	
			,,
airy do.	" hirta	Damp places	
weet Vernal Grass .	J Anthoxanthum odo-		**

PLANTS (continued).

Popular Name.	Scientific Name.	Localities.	Duration.
			Duración.
Mat Grass Nar	dus stricta	Damp heaths	Perennial.
Fox-tail do Alon	ecurus pratensis .	Pastures	,,
	" geniculatus .	Wet places	" Ammol
	laris Canariensis .	Naturalised.	Annual.
Cat's-tail do.	um pratense	Pastures	Perennial. Annual.
Millet do Mili	um effusum	Damp woods	Perennial.
Annual Beard do	ypogon monspe-	Way-sides	Annual.
Wood Road Cale	mamostie Enigerice	Damp places	Perennial.
Small do	" lanceolata	Do	
01000 40	ostis canina	Bogs. Rare	**
Water Whorl do Cate	ibrosa aquatica .	Wet places	
Alpine Hair do Air Early do	a alpina	Mountains	Annual.
Early do ,,	caryophyllea.	Hill pastures	Perennial.
Wood Melic do Mel	ica uniflora	Shady woods Mountain do. Rare .	"
Mountain do Hold	nutans	Meadows	" "
Oat do JAr	rhenatherum ave-)	Hedges and way-sides .	,,
	aceum ) eria cærulea )	Mountains	,,
Reed Meadow do Poa	aquatica	Ditches	
Hard do ,, Flat-stalked do ,,	rigida	Walls and dry ground . Dry places .	Annual. Perennial.
Flat-stalked do ,, Rough do ,,	trivialis	Meadows	
Smooth do	pratensis	Do. Waste ground	Annual.
Annual do " Glaucous Meadow do "	annua	Mountains	Perennial.
Sweet do	fluitans	Ditches and pool margins	Anninal
	loliacea	Sandy shores	Annual. Perennial.
	tylis glomerata.	Fields	,,
Single-husked Fescue   Fest	tuca uniglumis	Sandy shores	Biennial.
do	ovina	Dry pastures	Perennial.
Hard do	duriuscula .	Pastures	
Meadow do	mus sterilis	Fields	Annual.
Annual do	" diandrus	Dry places	"
C	mollis.	Pastures and road-sides.	"
Corn do	. squarrosus .	Corn-fields. Rare	Perennial.
	na pubescens deum murinum .	Chalky pastures	Annual.
Wall Barley How Meadow do	" pratense	Damp pastures	
Sea do	" maritimum .	Sea-side pastures	"
00	ticum repens	A common weed	Perennial.
Elas Duemo de	cachypodium sylva-	Copses and hedge-banks.	,,
	ticum ) ium perenne	Pastures	,,
Durney of the			
FERNS.	unadium milaana	Mossy banks, damp	,,
Common Polypody . Pol	ypodium vulgare .	Trocks, &c ) Shady banks	
Welsh do or i	" cambricum	(Damp woods and)	
Beech Fern	" Phegopteris	{ mountains. Local }	"
Smooth three-branched	" Dryopteris.		,,
do., or Oak do / Alpine do	" alpestre .	Scotch mountains .	
	ystichum Lonchitis .	Mountain rocks, es- pecially in Scotland	
Holly do.		( and Ireland )	1.1.1
Prickly do	aculeatum. strea Filix-mas	Shady places	
Male do La	serea race-mas		

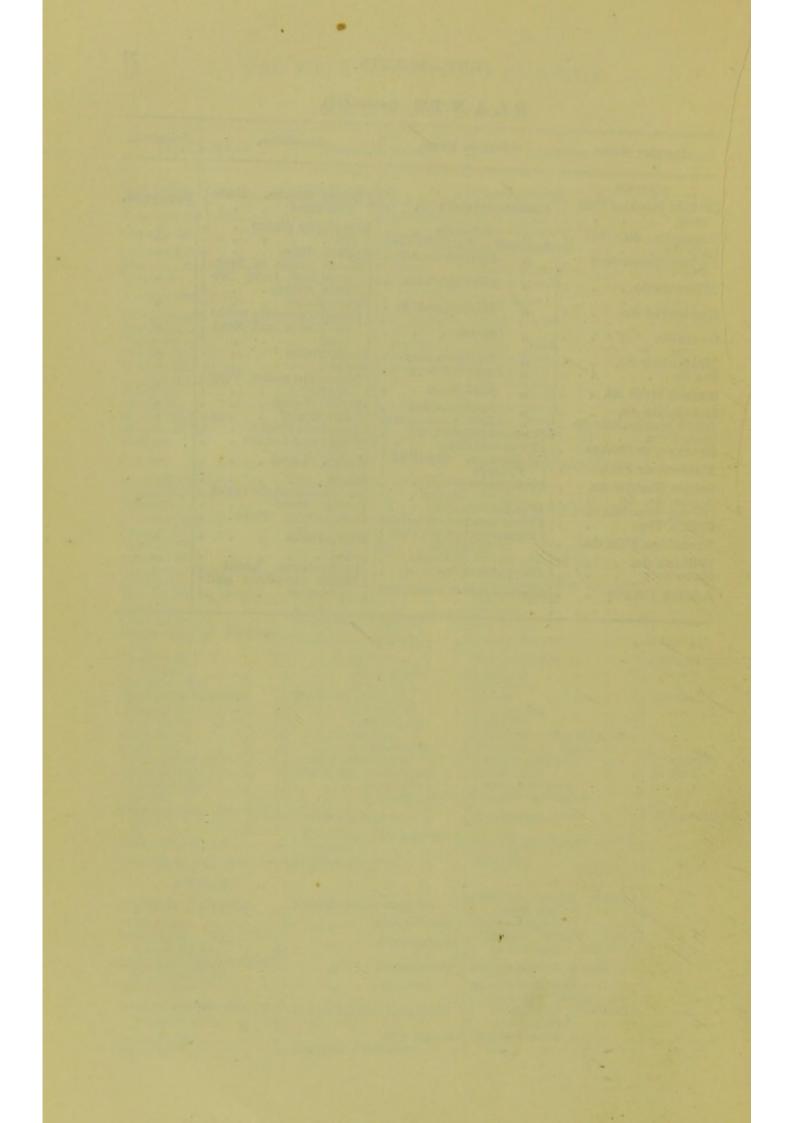
#### JUNE-PLANTS.

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PLA	N	TS	(contin	ued).
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Popular Name.	Scientific Name.	Localities.	Duration.
FERNS. Crested Buckler Poly- pody	Lastrea cristata dilatata Asplenium Filix-famina " septentrionale . " alternifolium . " Ruta-muraria . " viride " trichomanes . " Trichomanes . " Trichomanes . " fontanum .	{ Boggy heaths. Rare } { and local } Wet shady places	Perennial. " " " " " " " " " " " " " " " " " " "

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# 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.

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Popular Name.	Scientific Name.	Ova.	Larva.	Pupa.	Food-Plants.
BUTTERFLIES.	in the second				(NVII) a second formal and
Swallow Tail	Papilio Machaon .	6	6-8	8-5	{ Wild carrot, fennel, and marsh milk-parsley.
Black-veined White	Pieris cratægi.	6	8-5	6	Hawthorn, sloe, and fruit trees.
Large do E	" brassicæ .	5 & 8	6&9	7&9-4	Cabbage, &c., and nas
Small do E	" rapæ	5 & 8	6 & 9	7&9-4	Turnip, cabbage, &c.
Green-veined do. E	" napi	5 & 8	6 & 9	7&9-4	Rape, and other cruci
Brimstone, or Sul-)	Gonepteryx rhamni	4	6, 7	7	Buckthorn.
Silver-washed Fri-	Argynnis Paphia .	7	8-6	6	{ Dog and other violets wildraspberry, nettle
tillary ) Dark Green do	" Aglaia .	8	8-6	6	Dog and other violets and wild heartsease.
Niobe do	" Niobe .	8	8-5 8-6	6	Do. do. Do. do.
High Brown do. • Wood do. • •	" Adippe . Melitæa Athalia .	7	8-5	6	Narrow-leaved plan tain, foxglove, wild germander.
Comma · · ·	Vanessa C-album .	5 8 7	5 & 8	6 & 9	Elm, willow, sloe, cur rant, hop, nettle.
Small Tortoiseshell	" urtices .	4,5&7	5,6 & 8	6 & 8	Nettle.
Large do	" polychloros	5 s. 10	s.10-5,6	7	Elm, aspen, osier, will low, and fruit trees.
Camberwell Beauty	" Antiopa .	5	6, 7	7	Birch, poplar, willow and nettle.
Peacock E	" Io	4, 5	6, 7	7	Nettle. (Thistles, nettle, mal
Painted Lady . E	" cardui	6	6-9	7-9	low, and scarlet bean
White Admiral B Purple Emperor	Limenitis Sibylla .	77	8-5 8-5	6 6	Honeysuckle. Sallow, poplar.

INSECTS.

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### JULY-INSECTS.

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INSECTS (continued).

		N	1		
Popular Name,	Scientific Name.	Ova.	Larva,	Pupa.	Food-plants.
BUTTERFLIES.			1		-
Marbled White .	Arge Galatea	7	8-5	6	Grasses. (Annual meadow-grass,
Mountain Ringlet .	Erebia Epiphron .	-	8-5	-	sheep's fescue-grass, &c.
Scotch do	" Medea ·	8	9-5 6, 7 &	6	Poa and other grasses.
Wood Argus . E	Satyrus Ægeria .	5&8	9-3	4&7	Grasses. Couch and other grasses.
Grayling Meadow Brown	", Semele ", Janira	77	8-6 8-5	6 6	Grasses, &c.
Gate Keeper	". Tithonus . ". Hyperanthus	77	8-6 8-6	6 6	Annual meadow-grass. Grasses, &c.
Ringlet	{Canonympha }	6	8-5	6	White beak rush.
Small do	Davus . ) " Pamphilus .	5	5,6828		Grasses.
Purple Hairstreak .	Thecla quercus .	7-4	5,6	6 6	Oak. Wych elm, elm.
White Letter do Black do	" pruni	7-1	5, 6	6	Sloe.
Brown do	" betulæ	10	5, 6	7	Birch, sloe. (Great water dock. Pro-
Large Copper	{ Polyommatus } { Hippothoe }	8	8-6	7	{ bably now extinct.
Small do	" Phlæas	6 & 10	5-8 & 10-4	4 & 10-4	
Silver-studded Blue	Lycana Ægon .	7-2 9	5, 6 10-6	67	Bird's-foot, broom. Tufted horse-shoe vetch.
Chalk-hill do E Mazarine do	" Corydon . " Acis	-		-	Flower-heads of thrift.
Pearl Skipper	Hesperia comma .	8-3	6	7	{ Bird's-foot, and bird's- foot trefoil.
Small do	" linea .	7	8-6 6	77	Grasses. In wood reed.
Lulworth do M	" Actoson .	-	0		III WOOD LOOM
MOTHS. Death's Head Hawk	Acherontia Atropos	_	9, 10	9-6	Potato leaves.
Spotted Elephant )	(Deilephila eu-)	-	8,9	-	f Cypress spurge and sea
do	) phorbiæ §	-	8-10	-	Bedstraws.
Oleander do	Chærocampa nerii.	-	9	-	Oleander.
Ruby Clearwing .	Sesia chrysidi-	-	6	-/	In roots of dock and sorrel.
Ichneumon do	{ ,, ichneumoni-	-	7	-	In stems of stinking hellebore.
Thrift do	, muscæformis.	-	7-9	5	In stems of sea-thrift.
Orange do	" scoliæformis .	-	4	-	In birch. In stems of poplar and
Lunar Hornet do	" bembeciformis	7, 8	9-5	5	{ sallow.
Wood Leopard .	Zeuzera æsculi .	7	8-5	6	In stems of elm, ash, horse-chestnut, pear, oak, &c.
Goat	Cossus ligniperda .	7	9, 10	11-5	{ In trunks of oak, ash, elm, willow, &c.
Orange Swift . E	Hepialus sylvinus .	7	7	-	At roots of sorrel and dock.
Northern do	, , velleda .	6, 7	8-5	5	In roots of bracken.
Transparent Burnet	Limacodes asellus . Zygæna Minos	6, 7	8,9	10-6	Oak, poplar, beech. Trefoils and vetches.
Scotch do	,, exulans .	-		-	Azalea procumbens.
New Forest do	" meliloti .	-	5	6	Trefoil and vetch. Scabious, plantain,
Ribbon Bar	Syntomis phegea .	-	9-5	-	A dandelion.
Scarce Dotted do	Nola cucullatella .	=	55	56	Hawthorn, sloe, apple. Oak.
Scarce BlackArches Kentish do.	., centonalis .	=	5	6	Ash and bramble.
Scarce Muslin	, albulalis . Nudaria senex .	I	5,6	7	Lichens.
Muslin	Setina irrorella	=	5, 6	6, 7 5, 6	Lichens on walls. Ground lichens near sea.
				Burger	(Lichens on oaks, also
Rose Wing	Calligenia miniata	7	8-5	5, 6	and sallow.

Popular Name.	Scientific Name.	Ova,	Larva.	Pupa,	Food-plants.
MOTHS.					
Cour-spot	Lithosia mesomella	-	8-5	5,6	Heath and lichens.
Pearl Footman .	,, muscerda .	-	5,6	6, 7	Lichens on sallow. (Lichens on larch and
Drange do	" aureola .	-	9-5	-	l oak.
	" deplana .	-	6	6	Lichens on oak, beech yew and spruce fir.
	" lurideola .	-	8-5	5,6	Lichens.
Leaden do	" molybdeola " complana .	7 7, 8	7-5 8-6	$\begin{pmatrix} 6\\ 6 \end{pmatrix}$	Do. Lichens on sloe and fir.
Dun do	" griseola .	-	8-6	6 7	Lichens on poplar.
straw do	" stramineola	-	8-6	6, 7 6	Lichens on oak, sloe, &c
Large do	" quadra . " rubricollis.	-	5, 6 8-10	3, 4	apple. Lichens on larch, &c.
Red Necked do	,, ruoricottis . Eulepia grammica	_	5	5, 6	(Heath, mugwort, fe
Feathered do	cribrum .	7	8-5	5, 6	) cue-grass. Heath, bilberry.
Frey do	(Callimorpha Ja-	-	5	5, 6	Ragwort, groundsel.
Cinnabar	cobeae $f$			Sec. 1	f Nettle, and many othe
Figer	Chelonia caja	7	8-6	6	{ plants.
Brown Tail	{Liparis chrysor-} rhæa }	-	9-5	5-7	Hawthorn, sloe, &c.
Gold do	" auriflua .	8	9-5	6	Sloe, hawthorn, oal sallow, gooseberry currant, &c.
Satin M	" salicis.	8	8-5	6	Willow, poplar, oak.
Gipsy	" dispar	8-3	4-6	7	Willow, hawthor sloe, sweet gale.
Black Arches	" monacha .	8-3	5-7	7	Oak, birch, beech, fi apple.
Whittlesea Ermine	Orgyia cænosa .	-	8	-	Reed and sedge.
Scarce Vapourer	" gonostigma	6, 7	9-5	-	Oak, beech, brambl sloe, nut, &c.
Common do	" antiqua .	9-7	7-9	8, 9	Willow, oak, rose, fru trees, &c.
Lackey	Bombyx neustria .	7-3	5-7	7	Sloe, hawthorn, and fruit trees.
Coast do	" castrensis	7-3	6, 7	7	Sea wormwood, and sea-side carrot.
Oak Eggar	roboris .	7, 8	9-6	6, 7	Hawthorn, broom bramble, heat
T then le	011010010	8	9-5	6, 7	( buckthorn, sloe. Bilberry.
Drinker	, quercus . Odonestis potatoria	7, 8	9-5	6	{Couch, sword, an other grasses.
	(Uropteryx sam-)	-	9-5	6	(Elder, ivy, holl
Swallow Tail . B	bucata	7-4	5, 6	6	t bramble. Nut.
Bordered Beauty .	and stands	8-4	5, 6	6	(Nut, poplar, willow
Dark do. do	, apiciaria . . advenaria .	5, 6	8		i sallow, alder. Dogwood and wild ros
Little Thorn Brimstone	Rumia cratægata .	48 9	6&9-3		Hawthorn, sloe.
Orange	Angerona prunaria	7	10-4	5	Beech, sloe, salloy broom, plum, &c.
Pale Emerald	{ Metrocampa margaritata }	7, 8	9-5	6	Oak, birch, beech, hor beam, &c.
Barred Red	Ellopia fasciaria .	7,8	9-4	5, 6	Scotch fir. (Lilac, privet, elde
Lilac Beauty	{ Pericallia sy-}	6, 7	9-6	6	honevsuckle.
Early Thorn	Selenia illunaria .	4 & 7	6 & 9	6&9-3	Oalt ach hirch hoor
Purple do E	" illustraria.	-	6 & 9-10	7 & 11-4	Oak, ash, birch, beec maple. Oak, hawthorn, slo
Scalloped Oak. E	Crocallis elinguaria	8-2	5	6	1) heath.
Common Thorn E	Ennomos angularia	9-4	6-8	7,8	Oak, ash, birch, beech

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### INSECTS (continued).

#### JULY-INSECTS.

INSECTS (continued).

Popular Name,	Scientific Name.	Ova.	Larva,	Pupa.	Food-plants.
MOTHS.			0.5		
	Cleora lichenaria .	-	9-5	5, 6	Lichens. j Birch, sloe, bramble,
	Boarmia repandata	7	9-4	5	plum, spindle, &c. Oak, birch, lilac, elder,
Willow do		7	9-1	5	ivy, plum, &c.
Satin do	,, perfumaria . ,, abietaria .	77	4-6 9-6	6 6	Lilac, clematis, ivy. Larch and spruce fir.
Great Oak do Pale Oak do	" roboraria .	7	9-5	5	Oak.
		7	8	-	Do. (Sun cistus, thyme,
Annulet	Gnophos obscurata	7, 8	9-5	6	creeping cinquefoil, salad burnet.
Scotch do. Black Mountain	Dasydia obfuscata Psodos trepidaria .	7	9-6	7	Heath, vetches.
Scarce Birch Moth.	Mniophila cine-		5, 6	6	Lichens on walls.
	Pseudoterpna cy-	-			Broom, and needle
Grass Emerald .	tisaria	-	5, 6	6	greenwood.
Large do	{Geometra papi-} lionaria }	-	10-5	6	Birch, beech, nut, &c.
Essex do	,, smaragdaria Iodis vernaria.	Ξ	5 9-6	6	Clematis.
Blotched do. : .	[ Phorodesma ba-)	6, 7	7-5	6	Oak.
Dark do	) jularia	_	5	5, 6	Oak, hawthorn.
Maiden's Blush . Birch Mocha .	Ephyra punctaria.	6	7-9	8-4	Oak. Birch.
Purple-bordered	Hyria auroraria .	-	7 8-5	8-4 5, 6	Plantain.
Gold	Asthena sylvata .	_	8	0, 0	Alder.
Blomer's Wave .	" Blomeraria	-	8, 9	10-6	Wych elm.
Dingy Shell	{Eupisteria hepa-}	-	8, 9	10-5	Alder.
Welsh Wave	{Venusia cam-}		8,9		Mountain ash.
Fawny Red do.	Acidalia rubricata	7	8-5	5	f Knotgrass, trefoils, les-
Single Dotted do	" scutulata .	7	8-5	5	ser meadow-rue, &c. Chervil, dandelion, knotgrass.
Freble Brown }	" bisetata .	7	8-5	5	Dandelion, knotgrass.
Allied do.	" contiguaria	7	8-5	5	Crowberry, knotgrass.
London do Pretty Wave	" herbariata .	7	10-5	5	Tansy (?)
Dark Cream do.	" rusticata . " interjectaria	77	8-5 8-5	5, 6	Hawthorn. Dandelion.
Silky do	" holosericata	7	7-5	5	Sun-cistus, knotgrass,
Small Dusky do. Lace Border	" incanata .	7	9-5	6	Groundsel, dandelion, knotgrass.
Dotted Bordered	" ornata	7	7-1	5, 6	Marjoram, thyme, mint.
Cream Wave 5	" straminata.	7	7-5	5, 6	Knotgrass.
Satin do	,, mancuniata ,, subsericata	7	77	=	Do. Do.
esser Cream do	" immutata .	-	8-5	5	Do.
bub-angled do.	" strigilata .	7	8-6	6	Clematis, betony, woundwort, &c.
Riband do.	" emutaria .	7	7-5	5, 6	Couchgrass. Nut, primrose, goose
Plain do.	" aversata . " inornata .	7	9-5	5	( berry, wood avens.
ortland Riband)	,, degeneraria	7 7	8-5 8-4	6	Low plants.
mall Scallop : B	emarginata.	7	7	5	Knotgrass. Convolvulus and bed
Blood Vein	[Timandra ama-]	7	9-5	5,6	( straws.
harp-angled Pea-	Macaria alternata		00	0,0	Dock, knotgrass.

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INSECTS (continued).

Popular Name.	Scientific Name.	Ova.	Larva.	Pupa.	Food-plants.
MOTHS.	And the second second				Strate
Peacock	Macaria liturata . Halia vauaria .	=	9 5	10-4 6	Larch, Scotch fir. Gooseberry, &c.
Bordered Grey .	J Selidosema plu-		5	6, 7	Heath.
Rannoch Looper .	Fidonia pinetaria.	7-3	4, 5	5	Bilberry.
Frosted Yellow .	,, conspicuata Minoa euphorbiata	7 7 8	8, 9 8, 9	10-5 10-5	Broom. Cypress spurge.
Drab Looper Belle	Sterrha sacraria .	8	6 & 9		Dock, chamomile.
Purple Bar	{Lythria purpu-}	-	8	-	Dock, knotgrass.
Rest Harrow	Aplasta ononaria.	-	4 & 9	-	Rest-harrow.
Grass Wave	{Aspilates strigil-}	6	8-5	5	Broom, heath.
Magpie, or Currant	{Abraxas grossu- lariata }	-	5	6	{Currant, gooseberry, sloe, &c.
Clouded do	ulmata.	-	9	-	Wych elm.
Scorched Carpet . Yellow Ringed )	Ligdia adustata . { Larentia rufi- }	5, 6	6, 7	9-4	Spindle.
Carpet J	( cinctata )	-	5	0	Saxifrage.
Striped Twin Spot	" salicata.	-	-	-	Bedstraw.
Beech Green do Barred Rivulet .	,, olivata . Emmelesia taniata	8	10-4	5, 6	Hedge bedstraw. Holly (?)
Single Barred do	" unifasciata	8	9, 10	10-6	Wood chickweed.
Heath Rivulet Pretty Pinion	,, ericetata . ,, blandiata .	Ξ	9	=	Eyebright.
Lime-Speck Pug .	{ Eupithecia cen- }	5, 6	8,9	9-5	Flowers and seeds of yarrow, ragwort, gol-
Tune-speck I ag .	taureata.	0,0	0,0		( den-rod, angelica,&c. (Seeds of yarrow, mug-
Bordered Lime	" succenturiata	6	8, 9	9-7	wort, wormwood, va- lerian.
Rufous do	" subfulvata .	6, 7	9, 10	9-7 9-7	Yarrow and ox-eye. Juniper and savine.
Freyer's do	" arceuthata .	6, 7 6, 7	9, 10 9	9-6	Flowers and seeds of
Triple Spotted do Ash do.	" trisignata . " fraxinata .	8	8,9	10-4	Wild angelica.
Ribbed do.	", constrictata .	7	8, 9	8-6	Thyme. (Flowers and seeds of
Plain do	" subnotata .	6, 7	. 8, 9	9-6	
Harebell do	" campanulata	7	8, 9	9-7	<pre>     goosefoot and orache.     Harebell, &amp;c.     Willow, hawthorn,     golden-rod, ragwort. </pre>
Common do	" vulgata	5	7 & 9	8-5 9-7	golden-rod, ragwort. Flowers of golden-rod.
Large Pale do	,, expallidata .	7	9	9-1	(Flowers and seeds of
Wormwood do .	" absynthiata .	7	9, 10	9-7	a ragwort, mugwort, golden-rod, yarrow, &c.
Small Wormwood	minutata .	6,7	8,9	5-7	Scabious, and flowers of heath.
do	tenviata	6, 7	3, 4	5-7	Sallow catkins.
Downy do E	" subciliata .	8-4	5 5, 6	5-7 5-7	Maple. Juniper.
Juniper do.		6-8	6&-	and the second	(Flowers of chervil,
Double Striped do.			-	5, 6	Buds and flowers of
Green do.		7	4, 5	6, 7	l apple and crab. Whortleberry.
Manchester do. Pine Carpet	Thera firmata .	7	4, 5	-	Larch, and Scotch fir.
July Highflyer	Ynsipetes elutata .	7	10, 5	6	Sallow, nut, alder, bil-
Blue Bordered Carpet	{Melanthia rubi- ginata }		5, 6	6	Alder.
Beautiful do	albicillata		8,9	8-5 9-6	Bramble and raspberry. Birch and sweet gale.
Argent and Sable Bordered Chalk	Melanippe hastata		8,9	10-5	Clematis.
Carpet Sharp-angled do.	" unangulata	and the second second	7,8	-	Chickweed.

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### JULY-INSECTS.

INSECTS (continued).

Popular Name.	Scientific Name.	Ova,	Larva	. Pupa	. Food-plants.
MOTHS. Wood Carpet . Common do Silver Ground do. Red Barred do.	Melanippe rivata " subtristata " montanata Coremia munitata.	6-8	6 & 9 6 & 9 10-3 10-3	6&9- 4, 5 4, 5	
			1		Hawthorn, white dead
Large do Yellow Shell .	. , quadrifasciata {Camptogramma bilineata}	-	4,5&8		} nettle, knapweeds. { Dock, chickweed, and
Cam	. , fluviata		8	9	Spotted persicaria
Fern	(Phibalapteryx	_	9	_	( groundsel. Clematis.
Oblique Striped	tersata ) , lignata .	7 & 9	8 & 9-4		White water bedstraw
Brown Scallop E	Scotosia vetulata .	7-3	6	6, 7	Buckthorn.
Buckthorn Umber	", rhamnata ", undulata.	-	5,6	6	Buckthorn, birch.
Scallop Shell . Short Cloak Carpet	Cidaria picata .	7	9, 10 8	9-5	Poplar, sallow. Chickweed.
Beautiful Marsh do.	, sagittata.	7	8	10-5	Meadow rue.
Dark Marbled do. ,		8-3	5-7	7-8	Birch, alder, bilberry
Netted do	, ,, reticulata	-	-	-	
Phœnix	" prunata .	7-4	5, 6	6	Sloe, currant, goose berry.
Agate	" testata .	8-4	5	6	Birch, poplar, sallow.
Clouded Spinach .	" populata.	8-4	5	6	Poplar, sallow, bil berry, whortleberry.
Clouded Yellow .	" fulvata .	7	5	6	Dog-rose.
Straw Spinach .	" pyraliata	8-3	5	6	Hawthorn, and bed straws.
Spinach	Pelurga comitata.	8-4 7	4, 5 8, 9	5 10-6	Black and red currant. Goosefoot.
Small Mallow	{Eubolia mensu-}	-	6	-	Grasses.
Chalk Carpet Oblique Striped .	, bipunctaria	. 7	10-5	6	Trefoils and clovers.
Manchester )	,, lineolata . Carsia imbutata .	5 & 8	5,6&9	10-4	Yellow bedstraw. Cranberry, whortle-
Treble Barred ∫	and the second	7-	6	6, 7	d berry.
Chevron	Lithostege griseata. Chesias obliguaria.	6	7 7-9	8-4	Seed-pods of flixweed. Broom.
himney Sweep .	{ Tanagra chæro-}	7-2	5	6	Chervil and earth-nut.
Kitten Broad Barred do.	Dicranura furcula	6	7-9	9-5	Sallow, willow, poplar.
obster	Stauropus fagi	67	7-9 8, 9	9-4 10-5	Poplar. Beech, oak, birch, nut.
Buff-tip	Pygæra bucephala.	6	7-9	10-5	J Lime, elm, willow, sal-
hocolate Tip	Clostera curtula .	4827	5 & 8,9	6 & 9-3	low, oak, beech, nut. Poplar, sallow.
ale Prominent .	Ptilodontispalpina	-	7 & 9	10-6	J Willow, sallow, birch,
mall Swallow do	{Notodonta dictæ-}	6	7-9	10-5	( poplar. Birch.
ark do	" trilophus	-	7-9	-	Poplar and birch.
each Blossom	Thyatira derasa . batis	-	8, 9	10-5	Bramble and hawthorn.
esser Satin Carpet	(Cymatophoradu-)	0 7	8,9	10-5	Bramble and raspberry.
atin Carpet	l plaris . { " fluctuosa	6,7	8,9	10-5	Birch.
oplar Lutestring B	,, or	6, 7	9, 10 6-8	10-5 9, 10	Do. Poplar.
arbled Green .	{Bryophila glan-}	9	10-5	6	Lichens,
arbled Beauty	" verla .	-	10-5	5, 6	Do.
Green	" algæ .	-	-	-	Do.
jour Aarvel-de-	Diphthera Orion .	6	7-9	10-5	Oak, birch.
ark Dagger	Acronycta tridens .	7	8-10	10-5	Willow, sallow, haw- thorn, mountain ash,
					( sloe, &c.

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#### Popular Name. Scientific Name. Ova. Larva, Pupa, Food-plants. MOTHS. ∫ Poplar, elm, lime, haw-Grey Dagger . Acronycta psi . 6, 7 8, 9 10-5 . thorn, and pear. Birch, poplar, sallow, alder. Miller 7 - 9leporina. 5, 6 10-5. ... Sycamore, maple, birch, Sycamore . 7 aceris 8.9 10 . 39 horse-chestnut, oak. Streaked . strigosa . 7-9 8, 9 6 10-5Hawthorn. ,, B Coronet 6, 7 ligustri . 10-5. Ash and privet. ... (Bramble, plantain. Knotgrass rumicis . 6 6-8 9-4,, knotgrass. Bramble, bilberry, Scarce Dagger auricoma 7 6. 7 . -33 birch, oak. Sweet gale, sallow, Sweet Gale 8.9 myricæ . 6, 7 . .... birch. Bright Eve 5 Leucania conigera. 3-5 Grasses. 2, 3 Double-line turca . 4-5 Do. ., Plantain, chickweed, grasses, &c. Ochreous Brown 1-5 lithargyria . 5, 6 -,, Obscure Wainscot . obsoleta. 8, 9 7 Reed. ----,, Confluant do. . loreyi 33 Southern do. putrescens littoralis 10 Grasses. ,, Shore do. . 7 8-5 5 Sea-reed. ., Striped do. pudorina 3, 4 4, 5 Grasses and reed. ,, Shoulder Striped ) Sorrel and cocksfoot 8-4 6 comma . 5, 6 ,, do. grass. Streaked do. 2-4straminea 5, 6 Grasses and reed. . .. Sedge and cocksfoot Smoky do. 7 10-5 5, 6 impura. ,, grass. Deschampsia cæspitosa. 8,9 10-4 Common do. pallens 5, 6 ,, phragmitidis Fen do. 8-5 5, 6 Reed. Pale do. Tapinostola Bondii Coast do. . 5 6 elymi . Sea lyme grass. Silky do. Senta ulvæ 9-4 5, 6 Reed. Lineated do. Nonagria despecta. 4-6 Nerved do. neurica . \_ In stems of reed. Twin Spotted do. 7 geminipuncta \_ 5, 6 Do. Hydræcia nictitans 5, 6 8 4 Roots of coltsfoot, rush. Golden Ear Clouded Dart 7 10-5 Axylia putris . Low plants. Bordered Brindle Xylophasia rurea. 4, 5 Grasses. ( Roots of grass and low 6 5, 6 Light Arches . lithoxylea . 22 ) plants. Reddish Light do. . sublustris . ,, Low plants. Chickweed, grasses, &c. polyodon . 6, 7 4, 5 Dark do. \_ --8-4 Clouded Brindle 5 99 Slender Clouded ) Wood rushes, grasses. 5 scolopacina Brindle 8, 9 10-5 Dock, sorrel, &c. Dipterygia pinastri Bird's Wing {Aporophyla aus-} tralis (Annual meadow grass, 10 10-4 Feathered Brindle. succory. Neuria saponariæ Heliophobus po-) Campions. Bordered Gothic 7,8 6, 7 Roots of grasses. E 4.5 Feathered do. . pularis Charæas graminis Pachetra leucophæa 7, 8 5, 6 6 Do. $\mathbf{E}$ Antler Feathered Ear 10-4 Grasses. \_ StrawUnderwing E Cerigo cytherea 9-1 Do. 6 Meadow grasses. Crymodes exulis 6 Exile. Mamestra abjecta . At roots of couchgrass. Dusky Nutmeg 5 6 . 12-2 Nutmeg . . Dusky Brocade anceps \_ ,, 6 Grasses. furva . ... Cabbage, dock, goosebrassicæ . 5.6&8.9 9-4 foot. &c. Spotted persicaria, &c. Cabbage . " persicaria 7 8, 9 Union Rustic . Apamea connexa . " gemina 7 8-4 Grasses. Brown Pinion . 5 • " unanimis 9-44-6Do. Uniform Rustic -٠ " ophiogramma -In flower-stems of yel-Double Lobed . . " fibrosa 4, 5 5-7 Crescent Rustic . low flag. . 4, 5 Grasses. 5-7

oculea

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Common do.

INSECTS (continued).

# JULY-INSECTS.

INSECTS (continued).

Popular Name,	Scientific Name.	Ova.	Larva.	Pupa,	Food-plants.
MOTHS.			0.4		Grasses,
Marbled Minor . Middle Barred do	Miana strigilis . , fasciuncula	-	3, 4	=	Grasses.
Rosy do	" literosa .		5, 6	-	Slender foxtail grass. (In stems of fescue-
Cloaked do	" furuncula .	-	4-6	5, 6	grass and slender foxtail grass.
Wood do	arcuosa .	-	5	6	Turfy hair grass.
Least do	{Photedes cap-}	-	-	-	
Haworth's Minor .	Celæna Haworthii.	-	6, 7	7, 8	Cotton grass.
Triple Lines	(Grammesia tri-)	-	4, 5	5, 6	Great plantain.
Gold Line	Hydrilla palustris	-	7, 8	-	{Plantains and other low plants.
Dingy	{Acosmetia cali-}	-	-	-	
Bordered Rustic .	Caradrina mor-	7, 8	9, 10	5, 6	Orpine, sallow, bram-
Dotted do.	t pheus . f	8	9-4	5, 6	ble, dock, teazle, &c. Chickweed.
Powdered do	" blanda .		4	5, 6	Do.
Mottled Beauty .	" cubicularis	8	9-4	5-7	Grasses, &c.
Brown Feathered	Rusina tenebrosa .	-	9-3	4-6	Violets, knotgrass, &c.
Archer's Dart	Agrotis valligera .	-	10-5	5, 6	Roots of grasses. (Dandelion, knotgrass,
Shuttle-shaped do	" puta	8	9-12	-	lettuce, &c.
Dark Sword Grass.	" suffusa	4	5-7	8	Roots of lettuce and spinach.
Scarce do	" fennica	-	11 1 8	-	(Plantain, dock, and
Pearly Underwing.	" saucia	-	11-1 & 7, 8	-	? other low plants.
Turnip	" segetum	6	7-4	-	Roots of turnip.
Crescent Dart. E	" lunigera	-	8-10	-	Knotgrass. (Roots of cabbage, tur-
Heart and Dart .	" exclamationis	6	9-5	5, 6	7 nip. &c.
Heart and Club . Light Feathered )	" corticea	6	8-4	5, 6	Goosefoot.
Rustic J	" cinerea	-	9-5	5, 6	Roots of low plants.
Cloud Dart	,, ripæ	-	8-10	6	Hound's-tongue on coast. Sandwort, and leafy
Veined do	,, cursoria	-	5-7	7	d branched spurge.
Garden do	" nigricans .	7	5, 6	7	Plantain, clover. (Roots of sandwort and
White Line do	" tritici	-	6, 7	7	other low plants.
Eagle do	" aquilina	_	5	-	Bedstraw, poppy, chickweed, cabbage,
True Lover's Knot.	" porphyrea .	7	8-5	5, 6	( plantain, clover. Heather.
Portland Dart.	" præcox	_	5-7	7	Sea sandwort, chick- weed, and dwarf
Stout do	" ravida	2	4, 5	6	( willows. Thistles, dandelion, &c.
	., helvetina .	-	-	-	
Dotted Rustic Northern do	,, pyrophila . ,, lucernea .	-	8 2-4	6	Heath, grasses. Dandelion, harebell.
Welsh do	" Ashworthii .	_	9-5	6	Sun cistus, hawkweed, thyme, heath, hare-
Small Broad Bor-)					( bell, fescue-grass. ) Broom, chickweed, and
dered Yellow	Triphæna janthina	-	8-5	5, 6	low plants. (Birch, oak, sallow,
Broad Bordered	" fimbria .	9	10-4	5-7	broom, primrose,
Least Broad Bor- (	" interjecta	_	3, 4	-	( grasses, &c. Mallow, dock, grasses.
dered do. do. 5 Crescent do. do.	auhaaaua		10-4	5-7	
Lorgon do do	outona	7	8-5	5-7	Sallow buds, broom,
Desser do. do	,. oroona .		001	01	? nettle, and low plants.

# INSECTS (continued).

Popular Name.	Scientific Name.	Ova,	Larva.	Pupa.	Food-plants.
MOTHS.					
Large Yellow } Underwing . }	Triphæna pronuba	7	8-5	5-7	Dock, &c.
Black Spotted	Noctua depuncta .	-	4, 5	_	Sorrel.
Double Dart	" augur	7	8-5	5, 6	Sallow, hawthorn, and
Flame Shoulder .	" plecta	6	7-4	5-7	low plants. Low plants.
Flame Setaceous Hebrew	" flammatra .	-	-	-	and the second second second
Character . j	" C-nigrum .	-	4 & 10	-	{Pea-stems and low plants.
Scarce Rustic Double Square Spot	,, ditrapezium .	-	5	6	Low plants.
Clay Rustic		-	4, 5	6	Sallow, bramble. (Chickweed, sallow,
Dumlo Clar	" rhomboidea .	-	9-5	6, 7	{ hawthorn.
Ingrailed Clay	,, brunnea	-	4, 5	5, 6	Sallow, foxglove, vio-
Confluent do	,, festiva	7	7-5	5, 6	1 let, &c.
Barred Chestnut	" conflua " Dahlii : :	7	8-5 9-5	5, 6 5, 6	Moss campion. Low plants.
Rosy Marsh	" subrosea.	-	5, 6	6	Sweet gale, sallow.
Small Square Spot.	" rubi	-	6, 7	-	Low plants.
Six-striped Rustic .	" umbrosa	-	8-5	5, 6	Dock and other low plants.
Dotted Clay Scotch Rustic	" baja	Ξ	4, 5	5, 6	Low plants.
Neglected do E	" neglecta	_	10-5	5-7	Birch, sallow, heath.
Square Spot do	" xanthographa	8, 9	10-5	6, 7	f Plantain and many low
Mountain Drab .	Pachnobia alpina.	-	-		l plants.
Allied Rustic Dingy Shears	Orthosia suspecta .	Ξ	5	6,7	Poplar, birch.
Olive	Tethea subtusa :	7, 8	5, 6 4, 5	$^{6}_{6,7}$	Willow, poplar. Poplar.
Small do E Heart	Dicycla Oo	9	5, 6	6, 7	Poplar, willow, sallow.
		-	5, 6	-	Oak. (Oak, birch, hornbeam,
Dunbar	Cosmia trapezina .	8.	4-6	6, 7	{ &c. A cannibal in
White Spotted }	" difinis .	-	5, 6	6, 7	( confinement. Elm.
Lesser Spotted do	" affinis.	_	5	6, 7	Do.
Dusky Sallow	Eremobia ochroleuca ( Dianthæcia irre-)	-	5, 6	6, 7	Cock's-foot grass.
Marbled Shears .	gularis.	-	8	-	{Viper's bugloss, Spa- nish catchfly.
Tawny do Mottled do	" carpophaga	6	7-9	10-4	Seeds of campions.
Marbled Coronet .	" capsophila. " conspersa .	6	6-9 7-9	8-5	Campions. Seeds of do.
Northern Grey .	" cæsía	6	7, 8	8-5	Bladder, sea campions.
Ranunculus . B	Hecatera dysodea .	_	7,8		{Flowers and seed-heads of sow - thistle and
Broad Barred)					( lettuce.
White B)	,, serena .	-	7,8	9-5	Sow-thistle and wild lettuce.
	Dolin chi				(Sallow, hawthorn,
July Chi	Polia chi	-	4, 5	6	hawkweed, dock, lettuce, sow-thistle.
Minor Shoulder ) Knot B )	$Epunda\ viminal is$ .	8	4-6	6, 7	Sallow.
Angle Shades	${Phlogophora me}{ticulosa}$	-	11-4	-	Broom and many low plants.
7	A CONTRACTOR OF				(Bracken, male fern,
Small do	Euplexia lucipara.	. 6	8, 9	5-	{ sallow, nettle, plan- tain, &c.
Green Arches.	Aplecta herbida	_	8-4	5, 6	Dock and other low
Great Brocade .	o constitu	_	4.5	6	) plants. Plantain, primrose.
Grey Arches	" nebulosa .	-	10-5	6	Birch, sallow, hawthorn.
Silvery do Brown do B	" tincta " advena .	=	9-5 8-4	6 5, 6	Birch and grasses. Various low plants.
Dark Brocade	Hudena adusta	7	7-9		(Sallow, hawthorn, and
bark brocade	Hadena adusta .	1	1-9	4	low plants.

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# JULY-INSECTS.

# INSECTS (continued).

Popular Name.	Scientific Name.	Ova.	Larva.	Pupa,	Food-plants.
MOTHS.	C. Standard Barris		7 0	9-5	{ Birch, sallow, bilberry,
Glaucous Shears .	Hadena glauca .	-	7,8	5-0	l heath. Roots of dandelion.
Shears	,, dentina . ,, chenopodii	6	5, 6 7-9	10 5	Goosefoot.
Bright Line	" oleracea .	-	8, 9	10-4	Elm, nettle, dock, cab- bage.
Broom	, pisi	-	8-10	10-5	Bracken, broom, &c.
Pale Shouldered )	" thalassina	-	7,8	8-5	Sallow, broom, honey- suckle, knotgrass, &c.
Brocade . ) Beautiful do	" contigua .	-	8, 9	-	Oak, birch, nut, &c.
Northern do	,, rectilinea.	6	8-3	-	Sallow, bramble, bilberry.
Striped Lychnis .	Cucullia lychnitis .	-	7-9	9-5	dark mulleins.
Starwort	" asteris .	-	8, 9	9-5	Golden-rod, sea star- wort, and China aster.
Wormwood Shark.	" absynthii.		8, 9	9-5	Wormwood.
Common do	" umbratica	6, 7	7-9	9-5	Sow-thistle and lettuce. (Rest-harrow, henbane,
	Heliothis marginata	-	7, 8	9-6	l knotgrass.
Bordered Straw .	" peltigera.	-	7,8		Rest-harrow, henbane. (Toadflax and Spanish
Marbled Clover .	" dipsacea.	-	8, 9	10-5	{ catchfly.
Beautiful Yellow } Underwing . }	Anarta myrtilli .	-	7-10 s. 3, 4	-	Heath.
Spotted Sulphur .	{Agrophila sul-}	-	6-8	-	Small convolvulus.
Four Spot Pale Shoulder	Acontia luctuosa . ,, solaris .	6	6-8	Ξ	Do.
Rosy Marbled	Erastria venustula	-	8	9-5	{ Flowers of trailing tor- mentil.
Marbled White }	" fuscula .	-	8, 9	-	Lavender grass.
Silver Hook	Hydrelia unca .	6, 7	7, 8	-	Sedges.
Purple Marbled . Spectacle	Micra ostrina Abrostola urticæ .	-	8, 9	10-5	Low plants (?) Nettle.
Dark do	", triplasia	-	8, 9	10-5	Nettle, hop.
Scarce Burnished	Plusia orichalcea .	-	6, 7	-	Hemp agrimony.
Burnished Brass .	" chrysitis	6, 7	7-4	5	Thistle, nettle, dead nettle, burdock.
Gold Spangle	" bractea	-	5, 6	6	Hemp, agrimony.
Golden Y	,, iota	-	4-6	6	Honeysuckle, nettle, dead nettle, groundsel.
Beautiful do	" V-aureum .	-	5	6	Nettle.
Silver Y	,, gamma	-	4-9	-	Nettle, hop, and low plants.
Northern do	" interrogationis	-	5, 6	-	Nettle.
Copper Underwing	{Amphipyra py-} ramidea. }	-	5, 6	7, 8	Oak, elm, willow, birch.
Mouse	" tragopogonis	-	5, 6	7, 8	Hawthorn and low plants.
Dark Gothic Old Lady E	Mania typica maura .	7, 8 7, 8	9-4 9-5		Dock and low plants. Dock, chickweed, ivy.
Black Neck	{ Toxocampa pas-}	-	5	-	Tufted vetch.
Scarce do	( tinum . ) ,, craccæ .	-	6	-	Wood vetch.
Anomalous	Stilbia anomala .	-	1,2		Grasses.
Red Underwing E Light Crimson do	Catocala nupta .	=	5-7 5, 6	7, 8 6, 7 6, 7	Willow, poplar. Oak.
Dark Crimson do.	sponsa .	8	4-6	6, 7	Do.
sman r urpie barred	Phytometra ænea .	-	8, 9	10-5	Milkwort.

### PLANTS.

Popular Name.	Scientific Name.	Localities.	Duration.
Alpine Meadow Rue .	Thaliatnum alminum	{ Mountains of Scotland }	
Lesser do. do	Thalictrum alpinum .	and Wales	Perennial.
	" minus	Banks of ditches and	"
Yellow do. do Water Crowfoot	" flavum .	rivers	**
Ivy-leaved do	Ranunculus aquatilis . ,, hederaceus	Streams, ditches, &c.	"
Great Spearwort	" lingua .	Watery places	"
Celery-leaved Crowfoot	" rtammuta " sceleratus.	Do	Annual.
Creeping Buttercup .	" repens .	{ Meadows and sides of } ditches .	Perennial.
Meadow Crowfoot .	" acris	Meadows and waste)	"
Pale Hairy Buttercup .	" hirsutus .	ground	Annual.
Small-flowered Crow-}	" parviflorus	Fields and waste places.	,,
Mountain Globe-flower	Trollius Europæus .	{ Mountains of Scotland } and Wales	Perennial.
Columbine	Aquilegia vulgaris.	Woods and pastures .	,,
Field Larkspur	Delphinium consolida .	{Sandy and chalky }	Annual.
Monk's - hood, or Wolf's-bane	Aconitum Napellus .	River-sides. Rare	Perennial.
Water Lily	Nymphæa alba	{ Clear pools and slow }	17
Yellow do. do	Nuphar lutea	Rivers and ditches	,,
Long Rough-headed )	,, pumua Papaver Argemone .	Highland lakes	", Annual.
Poppy	" hybridum .	Do	,,
Long Smooth-headed do. Common Red do	,, dubium ,, Rhœas	Cultivated fields	
Opium do.	" somniferum .	Waste ground	"
Welsh do	$Meconopsis \ Cambrica$ .	{Rocky places in Wales, } Devonshire, &c}	Perennial.
Horned do	Glaucium luteum Corydalis claviculata .	Sea-shore Bushy places	Biennial. Annual.
Ramping Fumitory .	Fumaria capreolata .	Hedges and corn-fields .	minual.
Common do	,, officinalis . Thlaspi arvense	Fields and waste places.	"
ridate Mustard . 5	indispitationse	(Mountainous lime-)	"
Alpine Penny Cress .	" alpestre	{ stone pastures in }	Perennial.
Shepherd's Purse	Capsella Bursa-pastoris	( North of England ) A common weed	Annual.
Broad-leaved Pepper-}	Lepidium latifolium .	{Salt marshes and sea-}	Perennial
Field do	", campestre . ". Smithii.	Fields.	Annual.
Hairy do	Cochlearia Anglica .	Hedges Sea-shores	Perennial. Annual.
Great Water Radish . Twisted Whitlow Grass	Armoracia amphibia . Draba incana	River-banks Mountainous rocks	Perennial. Biennial.
Purple Sea Rocket .	Cakile maritima	Sandy sea-shores	Annual.
Wart Cress, or Swine's	Senebiera Coronopus .	A common weed	"
Lesser do. do Hairy Bitter Cress .	Cardamine hirsuta :	Do	"
Hairy Rock Cress	Arabis hirsuta	Walls and banks (Rocks in Wales and)	Biennial.
Alpine do. do	" petræa	Cotland J	Perennial.
Common Winter Cress Early do. do.	Barbarea vulgaris	Damp waste ground	Biennial.
Common Water do	Nasturtium officinale , sylvestre	Rivulets and ponds Watery places	Perennial.
Creeping Yellow do Annual do. do	", terrestre .	Do	Annual.
Hedge Mustard	Sisymbrium officinale .	{ Waste places and road-}	"

PLANTS (continued).

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

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

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Popular Name.	Scientific Name.	Localities.	Duration.
Balsam	J Impatiens Noli - me - }	Damp shady woods and stony river-}	Annual.
Tawny do.	tangere. 5	( banks. Local . ) ( Banks of the Wey, )	,,
	, Jutte Oxalis corniculata	Burrey . Damp places in west	,,
Yellow Wood Sorrel . Green Weed, or Petty )		{ of England. Rare } Heaths and moors	Shrub.
Whin	Genista Anglica		and the second second
Waxen )	" tinctoria	Heathy places and fields Heaths and dry commons	"." Perennial.
Rest Harrow Small do	Ononis spinosa ,, reclinata	Coast of Galloway	Annual.
Black Medick, or Non-	Medicago lupulina	Pastures	"
Lucerne, or Purple	" sativa	Fields. Not native	Perennial.
Sickle do	falcata Melilotus officinalis	Fields	Annual.
Yellow Melilot White do	leucantha .	Sandy fields	37
Bird's-foot Clover, or Fenugreek	{ Trigonella ornithopo- } dioides .	Dry sandy places	37
White or Dutch Clover,	Trifolium repens	Meadows	Perennial.
Purple do	" pratense .	Do Dry pastures and	"
Zigzag do	" medium	2 bushy places . )	"
Sulphur-coloured do Hare's-foot Trefoil .	" ochroleucrum " arvense	Sandy places and dry	Annual.
Teazle-headed do	manitimum	Salt marshes	
Rough do	" scabrum	Dry fields	33
Knotted do	" striatum . " glomeratum .	Sandy fields	99 37
Starry-headed do	" stellatum .	Shoreham, Sussex Damp pastures	Perennial.
Hop do	" procumbens . Lotus major	Dry do	Annual. Perennial.
Common do. do	,, corniculatus .	Dry pastures	33
Lady's Fingers, Kid- neyVetch,orWound- wort	Anthyllis Vulneraria .	Do	"
Hairy Mountain Oxy-)	Oxytropis Uralensis .	Dry mountain pas- tures in Scotland Clova Mountains, Angus	
Yellowish do. do Sweet Milk Vetch .	Astragalus glycyphyllus	Woods and dry fields .	
Purple do	" hypoglottis .	Chalky and gravelly	,,
Mountain do Wood do	Vicia Sylvatica	Clova Mountains, Angus Mountainous woods	
Tufted do	,, cracca	Bushy places	"
Common do Yellow do	, sativa	Fields. Doubtful native Sea-coast	Annual. Perennial.
Hairy do., or Tare Smooth do. do	" hirsuta	Fields and hedges	Annual.
Yellow Vetchling.	,, tetrasperma Lathyrus Aphaca	Sandy and gravelly	
Meadow do	" pratensis	Grassy places	Perennial
Narrow-leaved Ever-	" sylvestris	Woods and thickets	,
Blue Marsh Vetchling . Sea-side Everlasting )	" palustris	Boggy meadows .	
Pea	" maritimus .	Pebbly sea-shores .	
Crimson Vetchling . Rough-podded do.	, Nissola	Grassy places Fields. Rare	Annual.
Black Bitter Vetch Bird's-foot	Orobus niger	Rocks in the Highlands.	Perennial
Joint Vetch	Ornithopus perpusillus. ebracteatus.	Scilly Islands	Annual.
Horse-shoe Vetch			Perennial

# PLANTS (continued).

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

PLA	ANT	S (con	tinued).
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Popular Name.	Scientific Name.	Localities.	Duration.
	a lun Belenhium	Bushy places	Perennial.
Orpine, or Live-long . Thick-leaved Stonecrop	Sedum Telephium ,, dasyphyllum .	Rocks.	
Mountain do.	" anglicum	Do	"
White do	, album	Rocks and walls Damp rocks	"
Hairy do	" villosum	(Old walls and sandy)	"
Tasteless do	" sexangulare .	] places. Scarce . )	"
Crooked do	" reflexum	Walls and roofs Walls and dry places .	,,
Glaucous do Welsh do	glaucum Forsterianum .	Rocks.	"
Starry Saxifrage	Saxifraga stellaris	Mountains	"
Alpine do	" nivalis	Do	"
Yellow Mountain do	" aizoides .	tains	"
Drooping do	" cernua	Mountain rocks	,,
Alpine Brook do	" rivularis .	Damp rocks	,,
Hairy do	", hirta	Mountains.	**
Ladies' Cushion	", hypnoides .	Do	**
Opposite-leaved Gol-	Chrysosplenium oppo- }	Damp places	,,
den Saxifrage . ) Sea Holly, or Eryngo .	sitifolium ) Eryngium maritimum .	Sandy coasts	
Field Eryngo	., campestre .	Waste ground. Rare .	"
Wild Celery, or Small- )	Apium graveolens	Marshes	Biennial.
age ) Parsley	Petroselinum sativum .	Old walls	
Marshwort	{ Helosciadium nodi- }	Ditches	Perennial.
Creeping do	florum . f	Watery places	
Fool's Parsley	Æthusa Cynapium	A common weed	Annual.
Fennel	Fæniculum vulgare .	{ Chalky fields and way- } sides	Perennial.
Scottish Lovage	Ligusticum Scoticum .	Northern sea-cliffs	.,
Pepper Saxifrage	Silaus pratensis	Damp meadows	**
Spignel, Meu, or Bald	Meum Athamanticum .	Mountain pastures	"
Money	Angelica sylvestris.	Watery places	,,
Sea Hog's Fennel	Peucedanum officinale .	Salt marshes. Rare .	**
Milk Parsley, or Hog's ) Fennel	" palustre .	Marshes	,,
		(Damp pastures.Doubt-)	
Masterwort	", Ostruthium	fulnative f	"
Wild Parsnip	Pastinaca sativa	Fields and road-sides .	Biennial.
Cow do	lium	Fields	,,
Small Hartwort	Tordylium officinale .	{Corn-fields. Doubtful }	Annual.
Great do.	, maximum .	{ native	zamuai,
Wild Carrot, or Bird's-	Daucus carota.	Fields.	
nest			Biennial.
Sea-side do	Caucalis latifolia : :	South coast	Aminal
Upright Hedge Parsley	Torilis Anthriscus .	A common weed	Annual.
Spreading do	" infesta	Do	"
Knotted do	,, nodosa	Fields and banks	,,
Shepherd's Needle	Scandix Pecten-veneris .	A common weed	,,
Rough Chervil	{Chærophyllum temu-}	Hedge banks	Biennial.
Prickly Samphire	Echinophora spinosa .	Sandy coasts. Rare .	Perennial.
Hemlock	Conium maculatum .	Hedge banks	Biennial.
Cornish Bladder Seed .	{ Physospermum cor- nubiense }	Fields in Cornwall	Perennial.
Dwarf Cornel.	Cornus suecica	Mountain pastures	,,
Dwarf Elder, or Dane-	Sambucus Ebulus	Waste ground	
CommonHoneysuckle,	Lonicera Periclymenum	Woods	
or Woodbine . 5		A REAL PROPERTY AND A REAL	Shrub.
Wild Madder	Rubia peregrina	Shady thickets	Perennial.

# PLANTS (continued).

Popular Name.	Scientific Name.	Localities,	Duration.
Yellow Bedstraw	Galium verum	Dry fields	Perennial.
White Water do	" palustre	Ditches	
Rough Heath do	" Witheringii .	Boggy heaths	,,
Smooth Heath do.	" saxatile	Heaths	**
Rough Marsh do	" uliginosum .	Wet places	"
Grey do Rough-fruited do	" cinereum	Scotland. Rare	
Corn do.	" saccharatum . " tricorne	Corn-fields. Rare	Annual.
Smooth-fruited Corn do.		Forfar	"
Little Mountain do	" spurium	Limestone hills	Perennial.
	" Mollugo	Hedges	I cremman.
Great Hedge do Wall do Cross-leaved do	" Anglicum	Walls	Annual.
Cross-leaved do	Boreale	Rocky places	Perennial.
Goose Grass, or Cleavers	" Aparine	Hedge banks	Annual.
Field Madder	Sherardia arvensis .	Fields	,,
Field Woodruff	Asperula arvensis	Near Davenport	San San Land
Squinancy-wort	" cynanchica .	Dry banks	Perennial.
Red Valerian	Centranthus rubra	(Chalky banks and old)	
		} walls	"
Heart-leaved do	" pyrenaica.	Scotch woods. Doubt-	
Lamb's Lettuce	Fedia dentata	ful native f	
77 17 1 17 1	Dipsacus Fullonum	Corn-fields	Annual. Biennial.
		(Ditch banks and road-)	Dienmai.
Wild do	" sylvestris	sides	,
Field Scabious	Scabiosa arvensis	i sides	Perennial.
Small do	columbaria .	Pastures	and the second se
Yellow Goat's Beard .	Tragopogon pratensis .	Do	Biennial.
Ox Tongue	Helminthia echioides .	Hedge banks	Annual.
Yellow Succory	Picris Hieracioides .	Road-sides	Biennial.
Blue Sow-thistle	Sonchus alpinus	Scottish mountains	Perennial.
Marsh do	" palustris	River-sides. Rare	Aminal
Common do Ivy-leaved Wall Lettuce	,, oleraceus Prenanthes muralis	A common weed Walls and cliffs	Annual. Perennial.
Hawk-weed do		Near Forfar	Annual.
Dandelion	,, hieracifolia Leontodon Taraxacum.	A common weed	Perennial.
Rough Hawk Bit	Apargia hispida	Dry pastures and heaths.	,,,
Hairy do	Thrincia hirta	Gravelly commons	
Mouse-ear Hawkweed.	Hieracium Pilosella .	Dry places	.,,
Orange do	,, aurantiacum	Northern woods	"
Wood do	" sylvaticum .	Dry woods	**
Succory-leaved do	" paludosum .	Shady places	"
Soft do	" molle	Northern woods	"
Shrubby do	Crepis tectorum	Woods	Annual.
Smooth Hawk's-beard .	biennis	Dry pastures	Biennial.
Rough do	Borkhausia fætida	Chalky fields	Dicinitian
Spotted Cat's-ear .	Hypochæris maculata .	Dry pastures	Perennial.
Smooth do.	" glabra	Do	Annual.
Long-rooted do	, radicata .	Meadows	Perennial.
Nipple-wort	Lapsana communis .	A common weed	Annual.
Dwarf do	" pusilla	Sandy fields	,,
Chicory, or Succory .	Cichorium Intybus	(Chalky and dry fields)	Perennial.
emeory, or succory .	Cichor vane Integous.	and way-sides )	
Burdock	Arctium Lappa	Waste places and road-sides	Biennial.
		Waste places	Annual.
Musk Thistle	Carduus nutans	Road-sides.	
Welted do	tomaritlomus	Waste places	
Milk do.	" Marianus .	Do	Biennial.
Spear do.	Ciricus lanceolatus .	Do	,,
Marsh do.	" palustris	Marshes	
Common do	" arvensis	A common weed	Perennial.
	enionhomus	[Limestone pastures]	
Woolly-headed do		and waste places )	
Dark Plume do	" heterophyllus .	Northern pastures	"
Meadow Plume do	" pratensis	heaths	"
	angailin	Chalk pastures	
Dwarf do. do	,, acauns	, chan passaros	

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PLANTS (continued).	<b>TS</b> (continued).
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Popular Name.	Scientific Name.	Localities.	Duration.
Carline Thistle	Carlina vulgaris	Dry pastures	Biennial.
Nodding Bur Marigold.	Bidens cernua	Ditches	Annual.
Common do Hemp Agrimony	f Eupatorium canna-	Do	Perennial.
Tansy	Tanacetum vulgare	Fields	·· ·
Cat's-foot	Antennaria dioica	Dry heaths	
Jersey Cudweed	1 album 5	Dry fields	Annual.
Dwarf do	" supinum " Gallicum	Highland mountains . Dry fields. Rare	Perennial. Annual.
Least do	" minimum	Dry ground	"
Common do	<i>Germanicum</i> . Erigeron alpinum .	Do	Perennial.
Groundsel	Senecio vulgaris	A common weed Waste ground	Annual.
Stinking do Mountain do	" viscosus · · · · · · · · · · · · · · · · · ·	Dry pastures	99 , 99
Inelegant Ragwort . Hoary do.	" squalidus	Walls and waste places . Banks and way-sides .	Perennial.
Common do	" Jacobæa	Dry places	17
Marsh do	" aquaticus " paludosus	Wet places. Fens and ditches. Rare.	" "
Broad-leaved do	Saracenicus .	Damp meadows. Rare .	**
Golden-rod Elecampane	Solidago virgaurea . Inula Helenium	Damp pastures	"
Marsh Flea-wort	Cineraria palustris (Doronicum Pardali-)	Fens. Local	"
Common Leopard's-	anches	Damp woods	"
Daisy	Bell's perennis	Pastures	"
Ox-eye do	canthemum.	Dry meadows	
Corn Marigold	Pyrethrum Parthenium	Corn-fields	Annual. Perennial.
Sea-side do	maritimum	Sandy sea-shores	,,
Wild Chamomile	{ Matricaria Chamo- }	Corn-fields	Annual.
Sea do	Anthemis maritima . arvensis.	Rocky coasts Corn-fields	Biennial.
Stinking do	" Cotula	A common weed	Annual.
Ox-eye do. Sneeze-wort, or Goose-	,, tinctoria .	Dry fields. Rare	Biennial.
wort f	Achillea Ptarmica	Damp pastures	Perennial.
Yarrow, or Milfoil . Golden Milfoil .	". Millefolium . ". tomentosa	Pastures and way-sides . Dry hill-pastures. Scarce	"
Black Knapweed	Centaurea nigra	Pastures and way-sides .	"
Corn-flower, or Blue-	" Cyanus	Corn-fields	Annual.
Great Knapweed Common Star Thistle .	" Scabiosa . " calcitrapa .	Corn-fields and pastures. Waste places. Local	Perennial. Annual.
Yellow do	., solstitialis .	Waste places	,,
Blue-bell, or Hare-bell .	{Campanula rotundi-}	Heaths and dry meadows	Perennial.
Spreading Bell-flower .	" patula .	Woods	Biennial.
Rampion do Peach-leaved do	" Rapunculus . " persicifolia .	Banks and fields Woods. Very rare	Perennial.
Creeping do	" rapunculoides .	Northern corn-fields .	,,
Clustered do	", Trachelium . ", glomerata .	Woods and hedges Chalky pastures	"
Ivy-leaved do Sheep's Scabious	Jasione montana	Bogs	Annual.
Water Lobelia	Lobelia Dortmanna .	Mountain lakes	Perennial.
Cross-leaved Heath . Common do	Erica Tetralix	Heaths	Shrub.
Cornish do	" vagans	Cornish heaths	"" "
Fringe-leaved do	Calluna vulgaris	Do	"
Scotch Menziesia	Menziesia cærulea	Highland moors	"
Trailing Azalea	Azalea procumbens	West of Ireland	"

# PLANTS (continued).

Popular Name.	Scientific Name.	Localities.	Duration.
Round-leaved Winter- }	Pyrola rotundifolia .	Damp woods. Rare .	Perennial.
green f			r crennan.
Common do	, media minor	Damp woods	"
Serrated do.	" secunda : .	Fir woods in Scotland .	**
Single-flowered do	" uniflora	Damp mountain woods .	
Yellow Bird's-nest	Monotropa Hypopitrys.	(Roots of beech and fir)	
		( trees ) Thickets. Scarce	"
Lesser Periwinkle Gentianella	Vinca minor Exacum filiforme	Bogs. Local	Annual.
Centaury.	Erythræa Centaurium .	Dry pastures	
Tufted do.	" littoralis .	Sea-coast	**
Small Alpine Gentian .	Gentiana nivalis	[Mountain summits.]	
Construction of the second second second second second		Rare J	**
Yellow-wort Small Bind-weed	Chlora perfoliata Convolvulus arvensis .	Chalky hills Hedge-banks, &c	Perennial
Chaot do	", Sepium	Hedges and ditch-banks.	r erennar
Sea do.	". Soldanella	Sandy shores. Local .	
Viper-grass	Echium vulgare	Dry fields	Biennial.
Corn Gromwell	Lithospermum arvense.	Fields and waste places.	Annual.
Creeping do	" purpuro-cæruleum	Do	Perennial
Forget-me-not Creeping do	Myosotis palustris	Damp peaty places .	"
Tufted do.	", cæspitosa.	Watery places	Annual.
Alpine do.	" alpestris	Mountains	Perennial
Wood do	" sylvatica	Shady places	
Field do	" arvensis	Dry places	Annual.
Early do	" collina · · · · versicolor. ·	Dry fields and walls . Dry places .	"
Changeable do.	Anchusa officinalis.	Waste ground. Rare .	Perennial
Comfrey	Symphytum officinale .	Watery places	
Tuberous do	tuberosum.	Do. Rare	
Borage	Borago officinalis	Waste ground	Biennial.
Madwort	Asperugo procumbens .	Do. Rare · · · Waste ground · · ·	Annual. Biennial.
Hound's-tongue	Cynoglossum officinale . sylvaticum	Shady places	and the second se
Green-leaved do		(Waste ground. Not)	Annual.
Thorn-apple	Datura Stramonium .	{Waste ground. Not native }	Amuai
Henbane	Hyoscyamus niger	Do	"
Woody Nightshade, or )	Solanum Dulcamara .	Hedges	Perennial
Bittersweet )	nigrum	A common weed	Annual.
Garden do Broom Rape	Orobanche major	Roots of broom and furze	
Clove-scented do	" caryophyllacea	On roots of bedstraw .	.,,
Red do	" rubra	On thyme	"
m-11 de	elation	On knapweeds and	,,
		On clover	,,
Lesser do	" Hedere	Ivy-roots	
Ivy do	. cærulea	[ On wormwoods, mug- ]	.,
Purple do	"	) worts, &c )	and the second
Spiked Speedwell	Veronica spicata	Dry meadows Mountains	"
Alpine do	" alpina · · · · · · · · · · · · · · · · · · ·	Do.	"
Blue Rock do	fruticulosa .	Highland do	,,
Shrubby do Marsh do	scutellata .	Bogs	"
Marsh do	". Anagallis .	Ditches	"
Brooklime	Beccabunga .	Do	"
Common Speedwell .	" officinalis	Shady woods. Not	"
Mountain do	" montana		"
Ivy-leaved do.	hederifolia .	A common weed	Annual.
Germander Chickweed	agrestis		"
Grey Speedwell	, polita	Do	
	Buxbaumii .	Fields . Mountain pastures. Rare	Perennia
Alpine Painted-cup .	Bartsia alpina Odontites	A common weed .	Annual.
Red Eye-bright	Euphrasia officinalis	Dry pastures	.,
Common do	Rhinanthus major .		

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Popular Name.	Scientific Name.	Localities.	Duration.
Crested Cow-wheat .	Melampyrum cristatum	Woods and fields	Annual.
Purple do	" arvense	Fields. Local	,,
Yellow do	. pratense .	Woods.	
Wood do	" sylvaticum .	Mountain woods. Rare.	"
Marsh Red Rattle, or }	Pedicularis palustris .	Marshes	Perennial.
Dwarf do	" sylvatica .	{Damp meadows and }	**
Knotty Fig-wort	Scrophularia nodosa . ,, aquatica .	Woods · · · · · Ditches · · · ·	" "
Balm-leaved do.	" Scorodonia	{ Do. in Ireland and the } S. counties	
	Digitalis purpurea .	Woods and hedge-banks	Biennial.
Foxglove	Antirrhinum majus .	Old walls. Not native .	Perennial.
Calf's-snout	., Orontium	Corn-fields	Annual.
(vv - leaved Snap-)	Linaria Cymbalaria .	Walls. Not native	Perennial.
dragon, or Toad-flax )			
Fluellen, or Toad-flax .	" spuria · ·	Dry fields	Annual.
Sharp-leaved do	" Elatine · ·	Do	Perennial.
Creeping Toad-flax .	" repens		rerennal
Common do., or Butter	" vulgaris	Hedges	,,
and eggs ) Small do	minor	Chalky fields. Local .	Annual.
Mudwort.	Limosella aquatica	Muddy places	
Cornish Money-wort	Sibthorpia Europæa .	Damp places. Local .	Perennial
Great Mullein	Verbascum Thapsus .	Hedge-banks	Biennial.
Hoary do	" pulverulentum	{Waste ground and } hedge-banks . }	,,
Dark do	" nigrum	Hedge-banks Do. Rare	Perennial
Moth do	,, Blattaria . Lycopus Europæus .	Ditches and pool-sides .	Annual. Perennial
Sipsy-wort		(Dry fields and hedge-)	rerenniai
Wild Clary	Salvia verbenaca	banks	**
Sharp-leaved Mint .	Mentha acutifolia	Wet places. Rare	
Corn do	., arvensis	Corn-fields	,,
Wild Thyme	Thymus Serpyllum .	Heaths and hedge-banks	"
Marjoram	Origanum vulgare	{Hedge - banks and } { bushy places . }	"
Germander, or Wood )	Teucrium Scorodonia .	Woods and commons .	
Sage J			"
Water do	" Scordium .	Wet meadows. Local.	,,
Wall do	,, Chamædrys .	Old walls. Naturalised Mountains. Rare	"
Black Horehound	Ajuga alpina Ballota nigra	Hedges and waste ground	"
Mother-wort	Leonurus Cardiaca	Hedge-banks	"
Dwarf Hemp-nettle .	Galeopsis villosa	Sandy fields	Annual.
Bee-nettle	rereicolor	Corn-fields	and the second se
White Dead-nettle .	Lamium album	Hedges and way-sides .	Perennial
spotted do	,, maculatum .	Hedge-banks. Rare .	
Red do	purpureum .	A common weed	Annual.
Betony	Betonica officinalis .	Woods	Perennial
Hedge Woundwort .	Stachys sylvatica	Hedge-banks	1
Cat-mint	Nepeta Cataria	Corn-fields	Annual.
Calamint.	Calamintha officinalis .	Warreidan	Perennial
Self-heal	Prunella vulgaris	Fields	"
Skull-cap	Scutellaria galericulata		"
Lesser do	,, minor	Do.	"
Vervain	Verbena officinalis	Waste places	,,,
Butterwort	Pinquicula vulgaris .	Bogs	
Bladderwort	Utricularia vulgaris .	Stagnant water	**
Intermediate do.		Water. Rare	
		Pools on moors	"
Bird's-eye Primrose .	Primula farinosa	{ Damp places on moun- }	,,
Scotch do.	Scotica	Northern Highlands	
Sea Milkwort	Classes and Mines	(Sea-shores and salt-)	,"
	Glaux maritima	and marshes	,,
Loosestrife	Lysimachia vulgaris .	Damp places	

No.

# PLANTS (continued).

Popular Name.	Scientific Name.	Localities.	Duration.
Tufted Loosetrife	Lysimachia thyrsiflora	Borders of lakes. Rare	Perennial.
Wood Pimpernel	,, nemorum .	Woods	"
Moneywort	" Nummularia	shady places .	
Scarlet Pimpernel .	Anagallis arvensis .	A common weed	Annual.
Bog do	,, tenella Centunculus minimus .	Bogs	Perennial Annual.
Brookweed	Samolus Valerandi .	Do	Perennial.
Sea Thrift	Armeria maritima .	Sea-cliffs	"
Sea Lavender Matted do. do	Statice Limonium	Sea-coast	**
Greater Plantain	Plantago major	A common weed	,,
Hoary do	" media · ·	Chalky hills	"
Sea do	", maritima . ", Coronopus .	Muddy sea-coasts	Annual.
Beet	Beta maritima	Muddy sea-coasts	Perennial.
Shrubby Goosefoot .	Chenopodium fruticosum		Annual.
Sea do	", maritimum ", Bonus-Henricus	Sea-shores · · · · · · · · · · · · · · · · · · ·	Perennial.
White Goosefoot	", album	A common weed	Annual.
Shrubby Orache, or )	Atriplex portulacoides .	Sea-shores	Perennial.
Sea Purslane Frosted Sea do	Inciniata	Sandy do	Annual.
	matula	[ Dunghills and waste ]	
Spreading do	an an atilalia	places )	"
Narrow-leaved do	" angustifolia . " littoralis .	Waste ground Salt-marshes	
Marsh do	", pedunculata .	Marshes	
Triangular-leaved do	,, deltoidea	Waste ground	"
Saltwort	Salsola Kali Scleranthus annuus .	Sea-coast	
Knawel . Bistort, or Snakeweed	Polygonum Bistorta .	Damp meadows	Perennial.
Alpine do	" viviparum .	Mountain pastures A common weed	Annual.
Knotgrass	, aviculare . maritimum .	Sandy shores	Perennial.
Sea do	", Fagopyrum .	Fields. Naturalised .	Annual.
Black Bindweed, or	" Convolvulus .	A common weed	,,
Climbing Buckwheat { Water Persicaria, or {		Ponds and wet places .	Perennial.
Water Bistort . )	" amphibium .		Annual.
Spotted do	" Persicaria .	Damp ground	
Pale-flowered do	" lapathifolium	ground )	"
Small Creeping Persi-)	minus	TTT + Jacon	,,
caria )	Rumex Hydrolapathum	Contraction and the second	Perennial.
Great Water Dock	crispus	A common weed	,,
Meadow do	pratensis	Meadows. Rare A common weed	"
Broad-leaved do	" obtusifolius	TW-st wloadd	,,,
Grainless Water do Monk's Rhubarb	", alpinus .	Mountains	"
Red-veined Dock	" sanguineus .	Woods and way-sides . Wet places	"
Sharp do	, acutus	Marshes	,,,
Golden do	malustris .	Do	,
Sorrel	. acetosa	Meadows · · · ·	"
Sheep's do	Oxyria reniformis .	Mountains	
Mountain do	Thesium linophyllum .	Chalky pastures	"
	Aristolochia Clematitis	Ruins and thickets.	,
Birthwort	Euphorbia Peplis	Sandy shores	Annual.
Purple Spurge	Helioscopia.	A common weed	,,
Broad-leaved do	" platyphylla. coralloides	Fields . Hedges in Sussex	Perennial
Coral do	Esula	Shady woods	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Leafy-branched do Cypress do	". Cyparissias	Thickets. Local	Annual.
Petty do	Penlus	A common weed	Annual.
Dwarf do	, excigute	Commence of the second s	

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PLA	N !	rs (	contin	nued).
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Popular Name.	Scientific Name.	Localities.	Duration.
Caper Spurge	Euphorbia Lathyris .	Deele	
Spring Water Starwort Stalked do. do.	Callitriche verna	Pools	a second s
Autumnal do. do	" pedunculata " autumnalis	Do	
Spiny-fruited Horn-)	(Ceratophyllum de-)	A CONTRACTOR OF A CONTRACTOR O	
wort	) mersum S		Perennial.
Roman Nettle	Urtica pilulifera	Waste ground	Annual.
Small do	" urens		
Common do	, dioica	Way-sides and fields .	Perennial.
Pellitory	Humulus Lupulus .	Old walls Hedges	"
Conseth TITIL	And the second	(Wet woods and osier-)	"
Smooth Willow	Salix triandra	d beds	Tree.
Net-leaved do	" reticulata	Scottish mountains	., .
Downy do	, glauca	Highlands	
Water Thyme	Eudorea Canadensis . (Hydrocharis Morsus)	Canals. Not native	Perennial.
Frog-bit	Ranæ	Ponds and streams	,,
Water Soldier, or )	Stratiotes aloides	Deals	
Water Aloe . 5		Pools	"
Pyramidal Orchis	Orchis pyramidalis .	Pastures	33
Lizard do Marsh do	" hircina	Chalky thickets	,,
Spotted do.	,, latifolia ,, maculata	Marshes	,,
Fragrant do.	Gymnadenia conopsea .	Chalk hills	"
Frog do	Habenaria viridis .	Hill pastures	"
Small White do	albida	Mountains.	"
Green Musk do	Herminium Monorchis	Chalky pastures	"
Mountain Tway-blade. Helleborine	Listera Nidus-Avis .	Mountains	,,,
Marsh do.	Epipactis latifolia . ,, palustris .	Woods	**
White do.	" grandiflora .	Marshy pastures Woods on chalk soil .	,,
Two-leaved Bog Orchis	Liparis Locsellii	Sandy marshes	.,
Coral-root	Corallorrhiza innata .	Scotland	"
Lady's Slipper	Cypripedium Calceolus	(Northern Woods.)	"
Yellow Iris	Iris Pseud-Acorus.	Very scarce.	"
Stinking do.	fætidissima	Watery places Pastures and thickets .	"
Sand Garlie	Allium arenarium	Woods and pastures .	"
Mountain do.	" carinatum	Pastures .	"
Wild do	" oleraceum	Fields.	,"
Crow do.	, vineale . ;	Dry do.	"
Spiked Star of Beth-	(Ornithogalum pyre-)	Pastures. Naturalised .	
		172	"
Scottish Asphodel .	Tofieldia palustris.	Boggy places on mountains	,,
Bog do	Narthecium ossifragum	Bogs	
Great Sea Rush	Juncus acutus.	Sandy shores	"
Common do.	" conglomeratus .	Damp ground	.,
Hard do.	" effusus " glaucus	Do	,,
Thread do.	" filiformis	Lake shores in North	,,
Baltic do.	" Balticus	Sandy shores	"
Sharp-flowered do.	" acutiflorus .	Damp ground	"
Jointed do	" lamprocarpus .	Wet places	"
Round-fruited do.	" uliginosus	Damp heaths	
Slender Spreading do.	", compressus . ", Gesneri	Marshes	,,
Toad do.	hufoning	Highlands	1
Three-leaved do.	" trifidus	Mountain hoon	Annual.
Clustered do.	" castaneus	Do	Perennial.
Moss do Three-flowered do.	" squarrosus	Do	"
	" triglumis	Mountain rills .	"
Curved Hairy do	Luzula arcuata	Summits of Highland	
Spiked do	" spicata	High mountains	"
Flowering do	Butomus umbellatus	Ponds and slow streams	**
Star Fruit	(Actinocarpus Dama-)	Pools	
.1	sonium	Pools	

### PLANTS (continued).

Popular Name.	Scientific Name.	Localities.	Duration.
Water Plantain	Alisma Plantago	Ditches	Perennial
Floating do	Sagittaria sagittifolia	Lakes. Local	,,
Arrowhead	Sagittaria sagittifolia .	Ditches and pools	
Sea-side Arrow-grass .	Triglochin maritimum .	(Salt - marshes and)	,,
Marsh Scheuchzeria .	Scheuchzeria palustris.	1 muddy shores Bogs. Rare	
Bull-rush, or Cat s-tail.	Typha latifolia	Pools	
Lesser do.	" angustifolia .	Do	
Dwarf do	., minor	Marshes. Doubtfulnative	.,
Branched Bur Reed .	Sparganium ramosum.	Ditches	,,
Upright do Floating do	,, simplex . ,, natans .	Do	"
Sweet Flag	Acorus Calamus	River-sides	"
Ivy-leaved Duckweed .	Lemna trisulca		Annual.
Broad-leaved Pond-	Potamogeton natans .	Pools and streams	Perennial
Plantain-leaved do	" plantagineus	Pools	,,
Various-leaved do	" heterophyllus	Do	,,
Perfoliate do Curled do	" perfoliatus . crispus	Ponds	"
Oblong-leaved do.		Ponds	"
Long-stalked do	" prælongus .	Pools	
Flat-stalked do	" compressus .	Ducnes	,,
Grassy do	" gramineus .	Do	,,
Small do	" pusillus . " acutifolius .	Ditches	"
Sharp-leaved do Grass-wrack do	" zosteræfolius	Ponds and lakes .	
Sea Ruppia	Ruppia maritima	Salt-ditches	
Sweet Cyperus	Cyperus longus	Bogs	
Brown do Black Bog Rush	", fuscus	Do. Rare	Annual.
Black Bog Rush	Schenus nigricans	Bogs	Perennia
Compressed do	,, compressus . ,, rufus .	Scotch bogs	"
Brown do Twig Rush	Cladium mariscus	Do. Rare	
White Beak Rush	Rhunchospora alba .	Do. Rare	,,
Brown do	" fusca .	$D0, D0, \cdots, \cdots, \cdots$	"
Creeping Spike Rush .	Eleocharis palustris .	Ditches and bogs Mountains and heaths .	"
Scaly do	,, cæspitosa . ,, pauciflora .		"
Floating Water Rush .	Eleogiton fluitans	Pools	
Bull Rush, or Great		Ditches and pools	1
Club Rush )	Poor Lune and the second second	A REAL PROPERTY OF A REAP	
Least Club Rush	" setaceus	Watery places	"
Savi's do	", Savii ", maritimus	Bogs	"
Sea do	outrations	Woods	
Hare's foot Sledge	Carex leporina	Highlands	
Rigid do.	,, rigida	Mountains	
Straight-leaved Moun- )	" aquatilis	Scotch marshes	"
tain do )	Mielichoferi	Mountains	.,,
Loose-spiked Rock do. Dwarf do.	aamillamie	Do	
Scorched do.	", ustulata	Highlands	,.
Black do.	atrata	Mountains	
Short-spiked do	" speirostachya .	Bogs	
Short Brown-spiked do.	Alopecurus alpinus	Do. Rare	
Alpine Fox-tail Grass .			Annual.
Slender do. do., or Black Bent	,, agrestis .	Waste ground	
Bulbous do. do.	" bulbosus .		Perennia
Floating do. do	", geniculatus Phalaris Canariensis .	(Uncultivated places.	Annual.
Canary Grass Reed do	arundinacea.	Pools and ditches	Perennia
The second se	(Ammophila arundi-)	Sandy shores	
Sea Reed or Marram .	Phleum pratense	Pastures	,
Cat's-tail Grass Mountain do. do	alpinum	Mountains	A
Rough do. do.	, asperum	1 million and a second s	Annual.

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PLANTS (continued).

		and the second se	
Popular Name,	Scientific Name,	Localities.	Duration.
Purple-stalked Cat's			
Tail Grass )	Fineum Dienmert	Pastures	Perennial.
Annual Beard Grass .	{ Polypogon monspeli- ensis }	Way-sides	Annual.
Perennial do	,, littoralis .	Salt marshes	Perennial.
Close Reed	Calamagrostis stricta .	Bogs. Rare	
Silky Bent Grass Brown do		Sandy fields	Annual.
Bristle-leaved do.	,, canina . ., setacea	Damp fields Turfy heaths	Perennial.
Marsh do.	aller	35	
Turfy Hair Grass	Aira cæspitosa :	Pastures	,,
Alpine do	" alpina	Mountains	**
Waved do	" flexuosa	Heaths	
Grey do	, canescens	Sandy fields near the sea	
Wood Melic Grass .	Melica uniflora	Shady woods	
Creeping Soft Grass . Crested Hair Grass .	Holcus mollis	Pastures	,,
Panick Grass	Kæhleria cristata	Dry do	A
Rough do.	Panicum Crus-galli . Setaria verticillata .	Fields	Annual.
Green do	viridis .	Do	"
Reed Meadow Grass .	Poa aquatica	Ditches	Perennial.
Reflexed do	,, distans	Pastures	,,
Sea do	, maritima	Salt marshes	,,,
Procumbent do	" procumbens	Do	Annual.
Flat-stalked do	,, compressa	Dry places	Perennial.
Alpine do	" alpina	Mountains	.,
Wavy do.	" <i>laxa</i>	Grampians	
Wood do.	" annua	Waste ground	Annual.
Borrer's do.	" Borreri	Woods	Perennial.
Sweet Grass	Poa fluitans	Ditchesand pool margins	"
Heath Grass	Triodia decumbens.	Moors.	"
Smaller Quaking Grass	Briza minor	Fields. Rare	Annual.
Cock's-foot Grass	Dactylis glomerata .	Fields	Perennial.
Dog's-tail Grass	Cynosurus cristatus .	Pastures	
Rough do	Festuca bromoides .	Southern sea-shores .	Annual.
Barren Fescue Grass . Hard do.		Dry ground	
	" duriuscula " gigantea	Pastures	Perennial.
	aglamania	Shady places	"
Spiked do.	,, loliacea	Damp woods	"
fall do.	elatior	Doman de	99
Upright Brome Grass .	Bromus erectus	Candy noaturner	
Hairy do	" asper ·	Woods	Annual.
Barren do	" sterilis	Fields	
Rye do	" Secalinus	Do	"
Field do	" arvensis	Sea-coast	"
Wild Oat, or Haver	Anena fatua	Corn-fields. Rare	,,
Bristle do.	Avena fatua	Do	,,
Varrow-leaved Oat)		Do	72
Grass	" pratensis	Dry pastures	Perennial.
Alpine do	" alpina	Mountains .	
lat-stemmed do	" planiculmis .	Do	"
fellow do	" flavescens	Chalky fields	"
Reed	Arundo Phragmites .	Ditches and river-sides .	"
yme Grass Drooping do	Luymus arenarius	Sandy shores	,.
Vood Barley	Hordeum subscitioum	Salt marshes	"
Vall do.		Woods	
feadow do.		Road-sides	Annual.
ea do.	and counter the second	Damp pastures.	**
rested Wheat Grass .	PPT 143	Sea-side do.	Donomit
tushy do.		Sand-dunes : : :	Perennial.
CHARLES CAMPAGE AND TAXABLE			**
ouch Grass, or Dog		A	
Grass	" repens	A common weed	,,
Bearded do.	,, repens	A common weed Woods	"
Grass (	" repens		

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# PLANTS (continued).

Popular Name.	Scientific Name,	Localities.	Duration.
Heath Brome Grass .	{Brachypodium pin-}	Heaths	Perennial
Darnel, or Rye Grass .	l natum	Pastures	rerennan
Annual Rye Grass .	,, linicola	Fields. Rare	Annual.
Bearded Darnel Hard Grass	,, temulentum . Lepturus incurvatus .	Do	,,
Dog's-tooth Grass	Cynodon dactylon	Sea-coast	Perennial
Hairy Finger Grass .	Digitaria sanguinalis .	Fields. Rare	Annual.
Finger Grass	,, humifusa .	Fields	"
FERNS. Common Polypody .	Polypodium vulgare .	{ Mossy banks, damp }	
Welsh do.		7 rocks, &c	Perennial
Mountain do., or )	" cambricum.	(Damp woods and)	"
Beech Fern	" Phegopteris	i mountains. Local	,,
branched do., or	" Dryopteris.	Damp places I cool	
Oak Fern )	" Dryopteris.	Damp places. Local .	**
Limestone do	», calcareum.	{Limestone rocks. } Rare and local. }	"
Alpine do	" alpestre .	Scotch mountains	,,
Rock Brakes, or Mountain Parsley	Allosorus crispus	Stony hills. Rare and )	,,
Alpine Shield Fern, or (		(Mountain rocks, espe-)	
Holly Fern	Polystichum Lonchitis .	{ cially in Scotland }	**
Prickly do	aculeatum .	( and Ireland ) Shady places	
Iarsh Buckler Fern .	Lastrea palustris	Marshes	,
Ieath Shield Fern . Jale Fern	,, Oreopteris ,, Filix-mas	Heaths	"
Crested Buckler Fern .	mistata	Shady places	"
	" cristata	and local f	"
Broad do. do	,, dilatata (Asplenium Filix-fæ-)	Wet shady places	**
Lady Fern	a mina S	Do	"
Forked Spleenwort .	" septentrionale .	Rocks. Rare	"
Alternate do	" alternifolium .	{Shady rocks in Scot- land and Lake Dis-}	.,
Rue-leaved do	" Ruta-muraria .	( trict. Rare ) Shady rocks	
tue-leaved do		(Damp mountain rocks)	"
Green do	,, viride	in Wales and Scot-	**
Maidenhair do	., Trichomanes	Shady rocks	
Sea do	" marinum	Rocks	"
mooth Rock do	,, fontanum	{ Mountain rocks. Very }	
anceolate do	" lanceolatum	Rocks. Local	,,
Black Maidenhair do	, Adiantum-nigrum	Shady places	
Hart's-tongue	Scolopendrium offici-	Damp do. do., and walls	,,
Scale Fern	Ceterach officinarum .	Limestone rocks	,,
Hard Fern Bracken, or Brakes .	Blechnum boreale Pteris aquilina	Heaths	"
Maidenhair Fern	(Adiantum Capillus-)		"
	Veneris	Rocks. Local	"
Brittle Bladder Fern . Oblong Woodsia	Cystopteris fragilis . Woodsia ilvensis	Walls	"
Alpine do.	humenhouse	Scotch mountain )	
Flowering Fern	Osmunda regalis	Crocks. Rare	"
Bristle Fern	Trichomanes brevisetum	Damp rocks. Rare.	"
Funbridge Film Fern .	S Hymenophllum Tun-	Damp rocks	
Wilson's do.	Wilsoni	Do	
Moonwort	Botrychium lunaria .	Hill pastures. Local	"
	(Ophioglossum vulga-)	(Damp meadows and)	

### 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.

	IND	HOI			
Popular Name.	Scientific Name.	Ova.	Larva.	Pupa,	Food-plants.
BUTTERFLIES.		-			
Wood White	${Leucophasia \\ Sinapis }$	5,6, & 8	6 & 9,10	7 & 9-4	Tufted vetch, tuberous orobus.
Large do	Pieris brassicæ .	5 & 8	6 & 9	7 & 9-4	{Cabbage, &c., and nas- turtium.
Small do	" rapæ	5 & 8	6 & 9	7 & 9-4	{Turnip, cabbage, &c., and nasturtium.
Green-veined do	" napi	5 & 8		7 & 9-4	{Rape, and other cruci- feræ.
Bath do	,, daplidice . Gonepteryx rhamni	5 & 8 4	6 & 9 6, 7	7 & 9-4 7	Weld, wild mignonette. Buckthorn.
•Clouded Yellow .	Colias Edusa	9-5	6, 7	8	{Lucerne, Dutch clover,
Pale do. do	" Hyale	5	7	8	trefoils, &c. Melilot, clover, lucerne.
Queen of Spain }	Argynnis Latona .	8, 9	8-5	6, 7	{ Dog and sweet violets, wild heartsease, sain-
Pearl-bordered do.	" Euphrosyne	6	7-5	5	( foin, borage. Dog and other violets.
Small Pearl-bor-	" Selene	6	7-5	5	Do.
Large Tortoiseshell	Vanessa polychloros	5 s.10	s 10-6	7	Elm, aspen, osier, wil- low, and fruit-trees.
Camberwell Beauty	" Antiopa .	5	6, 7	7	{Birch, poplar, willow, and nettle
Peacock Red Admiral	" Io " Atalanta :	4,5	6, 7 6, 7	777	Nettle. Do.
Painted Lady	" cardui .	6	6-9	7-9	{ Thistles, nettle, mallow, and scarlet bean
Scotch Ringlet .	Erebia Medea	8	9-5	6	Poa and other grasses.
Wood Argus : .	Satyrus Ægeria .	5 & 8	6, 7, & 9-3	4 & 7	Grasses.
Wall	", Megæra .	5 & 8	6,7, & 9-4	4 & 7	Do.
Small Heath	{Canonympha } { Pamphilus. }	5	5,6, & 8	4 & 7	Do. (Bramble, broom, birch,
Green Hairstreak S	Thecla rubi	5	7 & 10	8-4	greenwood, creeping willow,
Brown do	,, betulæ .	10	5, 6	7	Birch, sloe. Great water dock (pro-
Large Copper	{ Polyommatus Hippothoe }	8	8-6	7	{ bably now extinct).
Small do	" phlæas .	6 & 10	C 10-4	4 & 10	Ragwort, dock, sorrel.
Long-tailed Blue . Silver-studded do.	Lycæna bætica . "Ægon .	1 7 0	7-9 5, 6	6	Bladder senna. Birdsfoot broom.
Brown Argus	" Agestis .	8	78:94	4 8 7	Hemlock storksbill. Birdsfoot trefoil.
Common Blue . E Clifton do.	,, Alexis . ,, Adonis .	5 & 9 10	4 & 8 5 & 7.8	5 & 8 5 & 8	Tufted horse-shoe vetch.
Chalk-hill do B	" Corydon .	9	10-6	7	Do. Flowers of holly, buck-
Holly, or Azure do.	and the second	5 & 8		78: 10-4	Wild raspberry, bram-
Grizzled Skipper S	and the second s	and the state of the	5	-	l ble, silver weed.
Dingy do	Thanaos Tages . Hesperia sylvanus.	5 & 8	7 & 9- 5 & 7		Birdsfoot trefoil. Grasses. Girdsfoot and birdsfoot
Pearl do	" comma .	8-3	6	7	l trefoil.
Lulworth do	" Actoon .	-	6	7	In wood reed.
MOTHS.	and the second second			Sec. 1	
Convolvulus Hawk	Sphinx convolvuli		7	-	Small convolvulus and balsam.
Spotted Elephant )	Deilephila	- 1	8,9	-	S Cypress spurge and sea
do	euphoroiæ,		8-10	-	Edstraws.
Silver-striped do	, lineata.	=	6, 7 8, 9	1 =	Do. Bedstraws.
Sharp-winged do	· Chierocampa celera		, .		

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### INSECTS.

#### AUGUST-INSECTS.

### INSECTS (continued).

Popular Name,	Scientific Name.	Ova,	Larva	. Pupa	. Food-plants.
MOTHS.					
Oleander Hawk .	Chærocampa nerii.	1-1	9	-	Oleander.
Orange Swift	Hepialus sylvinus .	-	7	-	At roots of sorrel and dock.
	Syntomis phegea .	-	9-5	-	Scabious, plantain, dan-
Scarce Muslin	Nudaria senex	_	5, 6	7	l delion. Lichens.
Small Dew Lackey.		-	5	5, 6	f Ground lichens near
Pearl Footman .	T.117		5,6	6, 7	Lichens on sallow.
Small do	" pygmæola	-	4-6	6, 7	Lichens.
Scarce do	adapter and the second	=	6 8-6	6-7	Birdsfoot trefoil. Lichens on oak, sloe, &c.
Large do	" quadra .	-	5, 6	6	J Lichens on oak, beech,
Crimson-speckled ?			10000		{ apple. ∫ Field forget-me-not, or
do }	Deiopeia pulchella.	-	7	-	c scorpion grass.
Clouded Buff . S	$Euthemonia russula . }$	6	9-5	-	Heath, plantain.
Ruby Tiger	Arctia fuliginosa .	-	4 & 8	5 & 8	{Plantain, nettle, dock, grasses.
Brown Tail	{Liparis chrysor- rhæa }	-	9-5	5-7	Hawthorn, sloe, &c.
Satin	" salicis .	8	8-5	6	Willow, poplar, oak.
Black Arches	,, monacha.	8-3	5-7	7	{Oak, birch, beech, fir, apple.
Whittlesea Ermine	Orgyia cœnosa 🛛 .	-	8	-	Reed and sedge.
Scarce Vapourer .	" gonostigma.	6, 7	9-5	-	{Oak, beech, bramble, sloe, nut, &c.
Common do	" antiqua .	9-7	7-9	8, 9	{Willow,oak, rose, fruit- trees, &c.
Grey Eggar	$Trichiura\ cratagi$ .	9-3	5, 6	7	{Hawthorn, sloe, sallow, oak, birch, plum.
Lackey	Bombyx neustria .	7-3	5-7	7	Sloe, hawthorn, and fruit-trees.
Coast do	" castrensis.	7-3	6, 7	7	{Sea wormwood and sea- side carrot.
Oak Eggar	" roboris .	7, 8	9-6	6, 7	{Hawthorn, broom, bramble, heath, buck-
Northern do	" quercus .	8	9-5	6, 7	( thorn, sloe. Bilberry.
Grass Eggar	" trifolii .	8	9-6	7	Trefoils, clover, grasses:
Dark Bordered		a line			also broom and furze.
Beauty 5 Brimstone	Epione apiciaria .	8-4	5, 6	6	C sallow, alder.
Barred Red	Rumia cratægata . Ellopia fasciaria .	4 & 9 7, 8	6&9-3 9-4	5, 6	Hawthorn, sloe. Scotch fir.
Lilac Beauty	S Pericallia syrin-	7	9-6	6	[Lilac, privet, elder.
Purple Thorn	( garia 5 Selenia illustraria.	_	6& 9-10		( honeysuckle. ( Oak, ash, birch, beech.
Scalloped Oak	Crocallis elinguaria	8-2	1000		C maple.
Canary-shouldered }	2 A A A A A A A A A A A A A A A A A A A		5	6	C heath.
Thorn E } Dusky do	Ennomos tiliaria .	9-5	6, 7	8	Oak, birch, sallow, alder.
September do. E	" fuscantaria " erosaria	9-5 9-5	6, 7 6	87	Ash, privet.
Common do	" angularia	9-5	68	6,7	Oak, birch, &c. Oak, ash, birch, beech.
Waved Umber .	{Hemerophila abruptaria. }	5, 6	6	9-4	Lilac, privet, rose.
Scotch Annulet . Small Bordered	Dasydia obfuscata.	7	9-6	7	Heath, vetches.
Wave }	Acidalia trigemi-	6	7-5	5	Knotgrass.
Small Dusky do.	" incanata	7	9-5	C	Groundsel, dandelion,
Lace Border	, ornata .	7		6	( knotgrass.
Mullein Wave.	" promutata	-	7-4	5, 6	Marjoram, thyme, mint. { Yarrow, mugwort,
Y	., mancuniata .			5	creeping cinquefoil.
	· · ··································		7	- !	Knotgrass.

### INSECTS (continued.)

Popular Name.	Scientific Name.	Ova.	Larva	Pupa.	Food alasta
				r upa.	Food-plants.
MOTHS.	[ Acidalia subseri- ]	7	7	_	Knotgrass.
Satin Wave Small Blood-vein .	ceata	-	5,6	_	
Bordered Grey .	Selidosema plu->	_	5	6, 7	Bedstraws, sorrel. Heath.
Belle	( maria	8	6&9	0, 7	The second se
Yellow do.	Aspilates citraria . " gilvaria.	5 & 8 8, 9	7 & 10	8	Dock, chamomile. Trefoil, wild carrot. Yarrow.
Magpie, or Currant	{Abraxas grossu-}	_	5	6	{Currant, gooseberry, sloe, &c.
Clouded Border .	{Lomaspilis mar-}	-	6 & 9	-	Willow, sallow, aspen.
Autumnal	{Oporabia fili-} grammaria }	9-2	2-4 -	-	Sallow, bilberry.
Beech Green Car-}	Larentia olivata .	8	10-4	5, 6	Hedge bedstraw.
Pretty Pinion	{Emmelesia blan- diata }	-	9	-	Eyebright.
Lime-speck Pug .	$\left\{ egin{array}{c} Eupithecia & cen-\taureata & . \end{array}  ight\}$	5, 6	8, 9	9-5	Flowers and seeds of yarrow, ragwort, golden rod, angelica, &c.
Rufous do Guenée's do	" subfulvata . " pernotata .	6, 7 9	9, 10	9-7 9-73	Yarrow and ox-eye.
Burnet do	" pimpinellata	6, 7	6 & 9	9-6	{ Seeds of pimpernels and angelica.
Ochreous do Ribbed do	" indigata . " constrictata .	5, 6 7	7 8, 9	7-5 8-6	Juniper and Scotch fir. Thyme.
Narrow-winged do.	,, constrictata .	7	8,9	9-6	Flowers of heath.
Large Pale do	,, expallidata .	7	9	9-7	Flowers of golden-rod.
Currant Pug	" assimilata .	6, 7	9, 10	9-6	Hop, black-currant. f Flowers of gorse, cher
Double-striped do	" pumilata .	6-8	6&-	8.6	₹ vil, clematis, &c.
Grey Carpet Shaded Broad Bar .	Thera simulata . variata .	=	6 & 10 7 & 3-5	=	Juniper. Larch, Scotch fir.
Wood Carpet	Melanippe rivata .	-	689	-	Hedge bedstraw.
Garden do.	" fluctuata	-	6 & 9	-	{Cabbage, nasturtium, { horse-radish, &c.
Barberry do	Anticlea berberata.	-	6 & 9	-	Barberry.
Red Twin-spot do	Coremia ferrugata.	5 & 8	7 & 9	-	{Chickweed, bedstraw, ground ivy.
Dark-barred do. do.	" unidentata	-	8	4	{ Bedstraw, sweet wood- { ruff.
Yellow Shell	{ Camptogramma }	-	4	-	{Dock, chickweed, and grasses.
Slender-striped }	{ Phibalapteryx }	-	5,6	-	Clematis.
Carpet f Oblique-striped do.	l'apidata } ,, lignata	78:9	8 & 9-4	-	White water-bedstraw.
Many-lined	" polygrammata	-	-	-	
Small Waved }	" vitalbata	7, 8	6 & 10	-	Clematis.
Silky Tissue	Scotosia dubitata .	4	6	7	Buckthorn.
Marbled Carpet .	Cidaria russata .	5 & 8	7& 10-4	7 & 5	Hawthorn, birch, sal-
Dark Marbled do	" immanata	8-3	5-7	7, 8	{Birch, alder, bilberry, {strawberry. {Enchanter's night-
Small Phœnix .	" silaceata .	-		7& 10-4	{ shade, willow herbs.
Small Mallow	{Eubolia mensu-}	-	6	-	Grasses.
Fortified Carpet .	" mæniata.	E	5 6 8- 0	-	Broom. Yellow bedstraw.
Oblique-striped .	" lineolata.	5 & 8	5, 6, & 9	-	(Perforated St. John's
Treble-barred	Anaitis plagiata .	-	7& 10-4	-	{ wort.
Pebble Hook-tip .	Platy ptery x falcula	-	7 & 10	-	Birch, oak, poplar, wil-
Oak do	" hamula .		6&9	-	Oak, birch.
Beech do	" unguicula	6 & 8	7& 9,10	- 1	Beech.

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# AUGUST-INSECTS.

INSECTS (continued).

				-	
Popular Name.	Scientific Name.	Ova.	Larva,	Pupa,	Food-plants.
MOTHS.	and a straight	_	5,6, & 7	6 & 7	f Hawthorn, sloe, moun-
Goose Egg	Cilix spinula	-	120		tain ash.
Scarce Chocolate }	Clostera anachoreta	-	7	7, 8	Poplar, sallow.
Small do	" reclusa .	-	7 & 9	-	Poplar, willow, sallow. (Oak, beech, birch, alder,
Coxcomb Prominent }	Notodonta camelina	6	7 & 9	7& 10-5	aspen, maple, sallow, nut, &c.
Maple do S Swallow do	cucullina .	=	8,9 6&9	10 5 7& 10-5	Sycamore and maple. Poplar, willow, sallow.
Iron do.	, dromedarius	6	7 & 8,9	10-5	Birch, alder, and nut.
Dark do	" trilophus .	-	7&9		Poplar and birch. S Poplar, willow, sallow,
Pebble do	" ziczac	-	6 & 9	7& 10-5	l alder.
Lesser Lutestring .	Cymatophoradiluta {Bryophila glan-}	-	5,6	7	Oak, birch.
Marbled Green .	difera.	9	10-5	6	Lichens.
Marbled Beauty .	" perla	-	10-6	6	Do.
Scarce Marbled }	" algæ	-		-	Do.
Alder	Acronycta alni .	-	7-9	8-4	Alder, willow, oak, lime, elm, nut, beech, birch, &c.
Scarce Dagger	" auricoma		6, 7	7	Bramble, bilberry, birch, oak.
Mouselet	Synia musculosa . {Leucania lithar-}	-	-	-	S Plantain, chickweed,
Ochreous Brown .	( gyria. )	-	1-5	5, 6	{ grasses, &c.
Lunar White Spot. Southern Wain-	" albipuncta .	-	-		
scot Bj	" putrescens .	-	10	-	Grasses.
Streaked do B Common do B Lineated do	" straminea . " pallens Nonagria despecta.	8, 9	2-4 10-4	5, 6 5, 6	Grasses and reed. Grasses.
Small do	" fulva	-	5,6	-	In stems of reed, mea-
Nerved do	" neurica .	-	4-6	-	dow-grass, and sedge. In stems of reed.
Scarce do	" brevilinea .	-	5.6	7	In stems of reed.
Twin-spotted do	" geminipuncta " cannæ	-	5,6	-	Reed mace.
Large do	" lutosa	9	10-6	7	{ In stems of reed, below
Golden Ear	Hydræcia nictitans	-	5, 6	7	{ ground. Roots of coltsfoot, rush.
Butter-bur	" petasitis .	-	6, 7	7, 8	{In stems and roots of butter-bur and bur-
Rosy Rustic	" micacea .	-	5-7	7, 8	C dock. Sedge, and roots of horsetail and dock.
Dark Arches	{Xylophasia poly- odon }	-	4, 5	-	Low plants.
Slender Clouded }	scolonacina	-	5	-	Wood rushes, grasses.
Feathered Brindle .	{Aporophyla aus-} { tralis }	10	10-4	-	{Annual meadow-grass, succory.
Small Mottled }	Laphygma exigua .	7	8, 9	-	Plantain.
Bordered Gothic .	Neuria saponariæ.	-	7, 8	-	Campions.
Feathered do	{Heliophobus popularis . }	-	4, 5	6, 7	Roots of grasses.
Antler	Charaas graminis.	-	6	7, 8	Do.
Straw Under-wing. Lesser Flounced	Cerigo cytherea .	-	9-4	-	Grasses.
Rustic §	Luperina testacea .	-	3	-	Grass-stems.
Tawny do	" Dumerilii " cespitis .	=	4-6	=	Grasses.
Dusky Brocade .	Mamestra furva .	-	6	-	Do.
Cabbage	, brassicæ	-	5,6 & 8,9	9-4	Cabbage, dock, goose foot, &c.

Popular Name.	Scientific Name.	Ova.	Larva.	Pupa.	Food-plants.
MOTHS.					
Brown Pinion	Apamea gemina .	7	8-5	5	Grasses.
Crescent Rustic .	" fibrosa .	-	4, 5	5-7	{In flower stems of yel-
Common do Rosy Minor	,, oculea . Miana literosa .	-	4,5	5-7	Grasses.
Haworth's do.	Celæna Haworthii.	=	$5, 6 \\ 6, 7$	7,8	Slender foxtail grass. Cotton grass.
Dingy	{Acosmetia caligi-}	_	_	.,.	
Mottled Beauty .	{Caradrina cubi-}	8	9-4	5-7	Grasses, &c.
Archer's Dart	Agrotis valligera .	-	10-5	5, 6	Roots of grasses.
Shuttle-shaped do	" puta	8	9-12	-	{Dandelion, knotgrass lettuce, &c.
Dark Sword-grass .	" suffusa	4	5-7	-	{Roots of lettuce and spinach.
Scarce do	" fennica	-		-	
Pearly Underwing.	" saucia	-	11-1 & 7, 8	-	{Plantain, dock, and other low plants.
Common Dart	,, segetum	6	7-1	-	Root of turnip.
Crescent do	" lunigera	_	8-10	-	Knotgrass. (Roots of cabbage, tur
Heart and Dart .	" exclamationis	6	9-5	5-6	2 nip, &c.
Veined Dart	" cursoria	-	5-7	7	Sandwort, leafy-bran ched spurge.
Garden do	" nigricans .	7	5, 6	7	Plantain, clover. Roots of sandwort and
White Line do. B	,, tritici	-	6, 7	7	¿ other low plants
Eagle do B	" aquilina	-	5	-	Bedstraw, poppy, chick weed, cabbage, plan
Square-spot do	" obelisca	-	5		C tain, clover. Yellow bedstraw.
White-lettered do I'rue Lover's Knot.	" agathina .	7	4, 5 8-5	6, 7	Heather. Do.
	" porphyrea .		0-0	5, 6	(Sea sandwort, chick
Portland	" præcox	-	5-7	7	weed, and dwarf will lows.
Stout Dart . B	" ravida	-	4, 5	6	Thistles, dandelion, &c.
Dotted Rustic . B	" pyrophila .	-	8	-	Heath, grasses. (Sun cistus, hawkweed
Welsh do	" Ashworthii .	-	9-5	6	thyme, heath, hare bell, fescue-grass.
Small Broad-bor- dered Yellow Underwing .	Triphæna janthina	-	8-5	5-7	{Broom, chickweed, and low plants.
Broad-bordered }	" fimbria .	9	10-4	5-7	Birch, oak, sallow broom, primrose
Least Broad-bor- 2	" interjecta		3, 4	-	( grasses, &c. Mallow, dock, grasses.
dered do. do. 5 Crescent do. do.	autoreur	_	10-4	5-7	Low plants.
d	and an a	7	8-5	5-7	Sallow-buds, broom
Lesser do. do	muonuha	7	8-5	5-7	A nettle, and low plants     Dock, &c.
Autumnal Rustic E	Noctua glareosa .	- 1	6	-	Broom, dock, sorrel.
Black-spotted	" depuncta	-	4, 5	-	Sorrel. Sallow, hawthorn, and
Double Dart	" augur	7	8-5	5, 6	low plants.
Flame Shoulder .	" plecta	6	7-4	5-7	Low plants. (Pea-stems and low
Character . }	" C-nigrum .	-	4 & 10	-	Chickweed, sallow
Clay Rustic	" rhomboidea .	-	9-5	6, 7	l hawthorn.
Purple Clay	" brunnea	-	4, 5	5, 6	Sallow.
Ingrailed do	" festiva	7	7-5	5, 6	2 let, &c.
Confluent do	" conflua " Dahlii	7	8-5 9-5	5,6	Moss campion. Low plants.
Barred Chestnut . Small Square-spot .	" rubi		6-7	0,0	Do.

## INSECTS (continued).

### AUGUST-INSECTS.

INSECTS (continued).

Popular Name.	Scientific Name,	Ova,	Larva,	Pupa.	Food-plants.
MOTHS.			0.5		Dock and other low
Six-striped Rustic .	Noctua umbrosa .	-	8-5	5, 6	l plants.
Dotted Clay Scotch Rustic	, baja	=	4, 5	5, 6	Low plants.
Neglected do	,, soorina		10-5	5-7	Birch, sallow, heath.
Square-spot do	" xanthographa	8, 9	10-5	6, 7	{ Plantain, and many low { plants.
Mountain Drab .	Pachnobia alpina.	-	-		
Allied Rustic Flounced do E	Orthosia suspecta . Anchocelis rufina .	=	5	6, 7	Poplar, birch. Oak.
Pale-headed }E		_	4-6	6-8	Dock, buttercups, &c.
Chestnut .)					(Oak, willow, alder,
Brown-spot Pinion.	" litura .	-	5,6	7,8	? meadow sweet.
Orange Sallow . Lemon do	Xanthia citrago .	-	5, 6 4, 5	8	Lime. Sallow.
Pink Bar do	" silago .	-	4-6	8	Do.
Barred do E Ruddy do	" aurago . " gilvago .	Z	5, 6 5, 6	8	Beech. Wych elm.
35-41-2 2-	famminar	_	4-6	7,8	Sallow, wych elm,
	,, ferruginez (Cirrhoëdia xe-)				¿ aspen.
Centre Bar do	2 rampelina : 5	8, 9	10-7	7,8	Ash.
Olive B Small do	Tethea subtusa . ., retusa .	7,8	4, 5 5, 6		Poplar. Poplar, willow, sallow.
Angle-striped	Euperia fulvago .	-	6	7	Oak, birch.
Heant	Dicycla Oo	_	5, 6	-	Oak, onen.
			0,0		(Oak, birch, hornbeam,
Dunbar	Cosmia trapezina.	8	4-6	6, 7	&c. A cannibal in confinement.
Lunar-spotted Pinion } White-spotted Pinion	" pyralina .	-	4, 5	-	Pear, plum.
White-spotted }	" diffinis .	_	5,6	7	Elm.
Lesser-spotted do.	., affinis .	-	5	6, 7	Do.
Dusky Sallow	{Eremobia ochro-}	-	5,6	6, 7	Cocksfoot grass.
Mottled Shears .	§ Dianthæcia cap-	6	6-9	8-5	Campions.
Inchnia	, capsincola ,	6	7-9	8-5	Seeds of Campions.
Campion	,, cucubali .	6	7,8		Do.
July Chi	Polia chi			6	Sallow, hawthorn,
suiten	1 0000 CMC	-	4, 5	0	{ hawkweed, dock, let- tuce, sow-thistle.
Black-banded	$\{ ,, xanthomista \}$ $\{ (nigro cincta, N) \}$	-	6, 7	7	{Campion, harebell, vio- let, and sea plantain.
Large Ranunculus .	" flavicincta .	9, 10	6, 7	7,8	f Groundsel, chickweed,
Smoky Rustic	Epunda lutulenta .	10	10-4		Corn gromwell.
Dusky Nutmeg .	" nigra.		5, 6	7	∫ Hedge bedstraw, plan-
Minor Shoulder- )		0			tain, grasses.
Feathered Ranun-	,, viminalis.	8	4-6	6, 7	Sallow.
culus }	" lichenea .	10	11-7	6, 7	{Ragwort and low } plants on coast.
	Miselia bimaculosa	-	5	-	Elm.
Angle-shades .	{Phlogophora me- ticulosa . }	-	11-4	-	Broom and many low plants.
Great Brocade	Aplecta occulta .	-	4, 5	6	Plantain, primrose.
Grey Arches	" nebulosa .	-	10-5	6	Birch, sallow, haw-
Silvery do	TT- " tincta .	-	9-5	6	Birch and grasses.
Scarce Brocade . Brindled Green .	Hadena satura . " protea .	-	5,6	777	Honeysuckle. Oak.
Scarco Shoara	management of a	=	5-7	7	Goosefoot and prickly
Nutmore				1	( saltwort.
Numey	" chenopodii	6	7-9	-	Goosefoot.

Popular Name.	Scientific Name.	Ova,	Larva.	Pupa.	Food-plants.
MOTHS.					
Shepherd's Purse .	{Cloantha solida-}	-	5, 6	7	Bilberry, hawthorn.
Red Sword-grass E	Calocampa vetusta	3, 4	4-6	8	Poplar and various
Common do E	" exoleta	+	4-7	8	Scabious, rest-harrow,
Obscure Dagger .	Xylina Zinckenii .	_	5, 6	_	C campion, dock, Sweet gale.
Tawny Pinion Bordered Straw .	Heliothis peltigera	3	5, 6	7, 8	Birch and alder.
Scarce do. do	" armigera	=	7, 8 6, 7	7,8	Rest-harrow, henbane. Wild mignonette.
Scarce Four-spot .	,, scutosa .	-	7		Field southernwood.
Spotted Sulphur .	{ Agrophila sul-}	-	6-8	-	Small convolvulus.
Four-spot	Acontia luctuosa	6	6-8	-	Do.
Spectacle	Abrostola urticæ . ,, triplasia	=	8, 9 8, 9	$10-5 \\ 10-5$	Nettle.
Scarce Burnished	Plusia orichalcea .	_	6, 7		Nettle, hop. Hemp agrimony.
Burnished Brass .	" chrysitis .	6, 7	and the second	-	SThistle, nettle, dead
Cold Spanala	hugatan	0, 1	7-4	5	{ nettle, burdock.
Gold Spot.	" oractea " festucæ	_	5, 6 5-8	6 7, 8	Hemp agrimony. Reeds, sedges, grasses.
Golden Y			0.00		(Honeysuckle, nettle,
Golden Y	"iota	-	4-6	6	{ dead nettle, ground-
Silver do	" gamma	-	4-9	-	Nettle, hop, and low plants.
Scarce do	" ni	-	-	-	
Northern do Herald E	" interrogationis Gonoptera libatrix	=	5, 6 6, 7	7	Nettle. Poplar, willow, sallow.
Copper Under-wing	{Amphipyra py-2		5, 6	7,8	Oak, elm, willow, birch.
	t ramidea s	and the second second			
Mouse	,, tragopogonis	-	5, 6	7, 8	{Hawthorn and low plants.
Old Lady	Mania maura	7, 8	9-5	6	Dock, chickweed, ivy.
Clifden Nonpareil .	Catocala fraxini .	=	1, 2 7	8	Grasses. Ash, poplar.
Red Under-wing .	,, nupta .	-	5-7	7.8	Willow, poplar.
Light Crimson do Dark Crimson do	,, promissa. ,, sponsa .	8	5, 6 4-6	6, 7 6, 7	Oak. Do.
and or moon dot 1	" sponsa .	0	10	0,1	10.

## INSECTS (continued).

PLANTS.

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

#### AUGUST-PLANTS.

P	L	A	N	T	S	(cont	inued	).
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Popular Name,	Scientific Name.	Localities.	Duration.
Shepherd's Purse	Capsella Bursa-pastoris	A common weed .	Annual
Field Pepperwort	Lepidium campestre .	Fields	Perennial.
Hairy do English Scurvy Grass .	Cochlearia Anglica	Hedges	Annual.
Great Water Radish .	Armoracia amphibia .	River-banks	Perennial.
Purple Sea Rocket .	Cakile maritima	Sandy sea-shores	Annual.
Wart Cress, or Swine's }	Senebiera coronopus .	A common weed	"
Lesser do. do	didyma Cardamine hirsuta .	Do	"
Hairy Bitter Cress	and the second	f Rocks in Scotland and	"Perennial.
Alpine Rock do	Arabis petræa	Wales	Perenmal.
Common Winter do Early do. do	Barbarea vulgaris	Damp waste ground	Biennial.
Common Water do	Nasturtium officinale .	Rivulets and ponds	Perennial
Creeping Yellow do	,, sylvestre .	Watery places	Annual.
Annual do. do Flixweed	Sisymbrium Sophia	Do	minual.
London Rocket	Iris	Do. near London	33
Worm - seed Treacle ) Mustard	Erysimum cheiran-	Fields and waste places.	,,
		(Sandy coasts of Corn-)	Dianalal
Great Sea Stock	Matthiola sinuata	} wall and Wales . }	Biennial.
Wall Rocket	Diplotaxis tenuifolia . ,, muralis .	Walls, quarries, &c Sandy sea-shores	Perennial. Annual.
		(Chalky hills and waste)	Biennial.
Wild Mignonette	Reseda lutea	} places	Dienmai.
Common Rock Rose .	Helianthemum vulgare.	{ Hilly pastures on chalk } or gravel soil . }	Perennial.
Pansy, or Heartsease .	Viola tricolor	Cultivated fields	Annual.
Round-leaved Sundew.	Drosera rotundifolia .	Bogs	Perennial.
Long-leaved do	,, longifolia ., Anglica	Do	"
Grass of Parnassus .	Parnassia palustris .	Do	· · · · · · · · · · · · · · · · · · ·
Common Milkwort . Six-stamened Water-)	Polygala vulgaris	Heaths and dry pastures. Wet sandy places or )	,
wort	Elatine hexandra	shallow water .	Annual.
Eight-stamened do	,, Hydropiper . Dianthus Armeria.	Do. Rare	,,
Deptford Pink Maiden u	deltoides .	Waste places Gravelly banks	Perennial.
Soapwort	Sapenaria officinalis .	Cultivated ground	"
Bladder Campion	Silene inflata	Corn-fields and pastures	"
Sea do		{ Sea-shore and moun-} tain streams . }	,,
Red Robin, or Campion	Lychnis diurna	Hedges and banks	,,
Evening Campion Procumbent Pearlwort.	,, vespertina Sagina procumbens .	Do	"
Sea do.	and and the second second	∫ Sea-shore and summit )	"
Spurrey	,, maritima	{ of Ben Nevis . ∫	Annual.
Knotted do	Spergula arvensis ,, nodosa	Wet sandy places	Perennial.
Small Hairy do	" subulata.	Gravelly places	
Chickweed	Stellaria media	A common weed	Annual.
Fringed Sandwort	Arenaria ciliata	{ Limestone mountains } { in Ireland. Very rare }	Perennial.
Norway do	" Norvegica .	Unst, Shetland	,,
Red do.	" rubella	Mountains. Very rare . Fields and dry places .	Annual.
Sea do	", marina	Sandy sea-shores	"
Narrow-leavedMouse-	Cerastium viscosum .	Fields and road-sides .	Perennial.
Mountain Chickweed .	" alpinum .	Mountaina	1 martine and
Broad-leaved Moun- )	Tutilalium	Do	"
tain do.	aquation	Wet places.	
Mossy Cyphel	Cherleria sedoides	Highland mountains	**
Flax-seed	Radiola millegrana .	Damp heaths	Annual.
Common Mallow	Malva sylvestris	{Roadsides and waste }	Perennial.
		( macco )	

PLANTS (continued).

Scientific Name,	Localities,	Duration.
Malva rotundifolia .	{Roadsides and waste }	Annual.
,, moschata	Hedges and borders of	Perennial.
Lavatera arborea	Rocks and cliffs on	Biennial.
Althœa officinalis	Marshes near sea	Perennial.
Hypericum calycinum .	Bushy places	"
" quadrangulum.	Wet places	,,
		"
" duoium .	Carce	**
" humifusum.	) banks	"
, linarifolium		,,
mailahmaim	Heaths and woods	"
" elodes		"
Geranium Robertianum	Roadsides and hedges .	Annual.
" lucidum	Walls and stony places .	"
" notrun difolirum	Do	"
, pusillum .		"
Erodium cicutarium .	Waste ground	** **
,, maritimum .		Perennial.
	(Damp shady woods)	Annual
	(Damp places in west)	and an interest
	i of England. Rare	" Shrub.
Genista Anglica	Heaths and moors	"
" tinctoria		
Ononeo opinioan		Perennial.
	And the second se	Annual.
		and the second second
		Perennial.
	(Dry pastures and)	"
"	bushy places . )	"
,,		Annual.
" arvense	1 fields 5	Annual.
, stellatum . fraaiferum .	Damp pastures	Perennial.
Lotus major	Bushy places	"
,, corniculatus	De	"
Trengeres i derter en en	and the second	"
Vicia sylvatica	Bushy places	",
	Sandy and gravelly }	Annual.
matensis .	Grassy places	Perennial.
, sylvestris .	Woods and thickets .	"
	Boggy meadows	"
" palustris . maritimus	Boggy meadows Pebbly sea-shores	"
" palustris .	Pebbly sea-shores	and the second
	Malva rotundifolia , moschata . Lavatera arborea . Althæa officinalis . Hypericum calycinum . , quadrangulum . , quadrangulum . , quadrangulum . , quadrangulum . , quadrangulum . , quadrangulum . , guadrangulum . , nerforatum . , unifusum . , bumifusum . , linarifolium . , pulchrum . , guadrangulum . , nelodes . , pratense . Geranium Robertianum . , nolle . , rotundifolium . , rotundifolium . , rotundifolium . , rotundifolium . , rotundifolium . , rotundifolium . , maritimum . [Impatiens Noli-me- tangere . ] Oxalis corniculata . Ulex nanus . Genista Anglica . , tinctoria . , tinctoria . , medium . , medium . , medium . , medium . , stellatum . , corniculatus . , stellatum . , corniculatus . , stellatum . , corniculatus . , stellatum . , corniculatus . , medium . , ochroleucum . , stellatum . , corniculatus . , stellatum . , corniculatus . , stellatum . , corniculatus . , medium . , ochroleucum . , stellatum . , corniculatus . , pratense	Malva rotundifolia       Roadsides and waste places         , moschata       Hedges and borders of fields         Lavatera arborea       Backs and cliffs on seaschore. Rare.         Althœa officinalis       Marshes near sea

#### AUGUST-PLANTS.

## PLANTS (continued).

Popular Name.	Scientific Name.	Localities.	Duration.
Meadow Sweet, or)	Spiræa Ulmaria	Damp meadows	Perennial.
Queen of the Mea-			I CICIIIIai.
Common Avens, or	" Filipendula .	Dry pastures	"
Herb Bennet . 5	Geum urbanum	Hedges and thickets . Meadows and waysides .	"
Creeping Cinquefoil . Hoary do	Potentilla reptans	Pastures. Local	**
White Rock do Bramble, or Blackberry	Rubus fruticosus	Mountains	Shrub.
Dewberry	" cæsius	{ Thickets and borders }	
Agrimony	Agrimonia Eupatoria .	Waste ground	Perennial.
Common Lady's Mantle Alpine do.	Alchemilla vulgaris . " alpina	Hilly pastures Mountains	"
Field do	arvensis . Sanguisorba officinalis .	A common weed Damp meadows	Annual. Perennial.
Burnet	Poterium sanguisorba .	Dry do	12 - Subscreen State
Trailing Dog Rose . Great Hairy Willow	Rosa arvensis	Woods and hedges	Shrub.
Herb	lium )	Wet places	Perennial.
Broad-leaved do	montaneem	{ Dry banks and hilly }	"
Square-stalked do.	, tetragonum.	Wet places.	"
Narrow-leaved do.	" palustre .	Do	"
Evening Primrose .	Œnothera biennis	{Waste ground and } sandy coasts . }	Biennial.
Enchanter's Nightshade Alpine do. do.	Circœa Lutetiana	Damp shady places Mountainous woods	Perennial.
Spiked Water Milfoil .	Myriophyllum spicatum	Stagnant water	"
Purple Loosestrife, or ) Willowstrife	Lythrum Salicaria.	Watery places	"
Hyssop-leaved Purple ) Loosestrife	" hyssopifolia .	Do. Rare	Annual.
Water Purslane	Peplis Portula	Watery places	Devenuial
White Bryony Water Blinks	Bryonia digica Montia fontana	Hedges	Perennial. Annual.
Strapwort	Corrigiola littoralis . Herniaria glabra .	Sandy wastes. Rare . Sandy places	Perennial.
Four-leaved All-seed .	(Polycarpon tetra-)	South coast	Annual.
Wall Pennywort	Cotyledon Umbilicus	Damp rocks and walls .	Perennial.
Glaucous Stonecrop . Starry Saxifrage .	Sedum glaucum Saxifraga stellaris.	Walls and dry places . Mountains	.,,
Alpine do	" nivalis	_ Do	** **
Yellow Marsh do Yellow Mountain do	" Hirculus . " aizoides	Bogs . (Boggy places on moun-)	"
Drooping do	compare	{ tains ∫ Mountain rocks	**
Alpine Brook do	,, rivularis .	Damp rocks	**
Field Eryngo Water Hemlock, or ?	Eryngium campestre . Cicuta virosa	Waste ground. Rare . Ditches	"
Cowbane			"
Smallage	Apium graveolens	Marshes	Biennial.
Corn Parsley	Petroselinum segetum . Helosciadum nodi/lorum	Chalky fields	Perennial.
Creeping do	Æthuša Cynapium.	Watery places A common weed	Annual.
Fennel	Fæniculum vulgare	{ Chalky fields and way- }	Perennial.
Mountain Stone Parsley		Chalky hills	
Pepper Saxifrage Samphire	Silaus pratensis Crithmum maritimum .	Damp meadows	
Sea Hog's Fennel	Peucedanum officinale .	Rocky sea-shores	
Sea-side Carrot Venus's Comb. or	Daucus maritima	South coast	Biennial.
Shepherd's Needle 5	Scandix Pecten-Veneris.	A common weed	Annual.

### PLANTS (continued).

Popular Name,	Scientific Name.	Localities.	Duration.
Vallow Pod strow	Calina roman	Dur folds	Dansarial
Yellow Bed-straw	Galium verum	Dry fields	Perennial.
White Water do	" palustre	Haatha	,,
Smooth Heath do	" saxatile	Heaths	"
Rough Marsh do	" uliginosum .	Champ 0,13- Dama	Annual
Rough-fruited do	" saccharatum . " pusillum	Limestone hills	Annual. Perennial.
Great Hedge do.	Mallaina	Hadron	Perenniai.
Goose-grass, or Cleavers	A sea constraint of a	Hedge-banks	Annual.
Field Madder	Sherardia arvensis	Fields	,,
Red Valerian	Valeriana rubra .	$\left\{\begin{array}{c} Chalky \ banks \ and \ old \\ walls \ . \ . \ . \ \end{array}\right\}$	Perennial.
Small Teazle	Dipsacus pilosus	Damp shady places	Biennial.
Devil's-bit Scabious .	Scabiosa succisa	Heaths and pastures .	Perennial.
Small do	., columbaria .	Pastures	Biennial.
Yellow Succory	Picris Hieracioides .	Road-sides	
Blue Sow-thistle	Sonchus alpinus	Scottish mountains	Perennial.
Corn do	" arvensis	Corn-fields	A
Common do	, oleraceus	A common weed	Annual.
Wild Lettuce	Lactuca virosa	Hedge-banks	Biennial.
Prickly do	" Scariola	Waste places	"
Small do.	" saligna	Near the sea Walls and cliffs	Perennial.
Ivy-leaved Wall Lettuce	Prenanthes muralis .	Near Forfar	Annual.
Hawk-weed do	hieracifolia Leontodon Taraxacum.	A common weed	Perennial.
Dandelion		Manutaina	
" Hawk-bit .	Apargia Taraxaci.	25.2	"
Autumnal do	Thrincia hirta	Meadows	"
Hairy do		Mountains.	"
Alpine Hawk-weed .	Hieracium alpinum . Pilosella .	Dry places.	
Mouse-ear do	aumanticioum	Northern woods	**
Orange do	Lasnooni	Mountains.	"
Glaucous do	11 0110/01/01/011/011	Dry woods and walls .	"
Wall do	andmation	Dry woods.	,,,
Succory-leaved do.	malaidaanim	Shady places	
Soft do.	anollo	Northern woods	,,
Shrubby Hawk-weed .	", sabaudum .	Woods	
Narrow-leaved do.	". umbellatum .	Dry woods	
Smooth Hawk's-beard .	Crepis tectorum	Walls and dry places .	Annual.
Spotted Cat's-ear	Hypochæris maculata .	Dry pastures	Perennial.
Smooth do	", glabra .	Do	Annual.
Long-rooted do	radicata .	Meadows	Perennial.
Nipple-wort	Lapsana communis .	A common weed	Annual.
Chicory, or Succory .	C' I minu Intubus	{ Chalky or dry fields } and way-sides . }	Perennial.
	Arctium Lappa	} Waste places and }	Biennial.
Burdock	Serratula tinctoria	Voods	Perennial.
Saw-wort	Saussunga almina	Damp mountain rocks .	,,
	Candarare martane	Waste ground	Annual.
	Cnicus lanceolatus	Do	Biennial.
Marsh do.	malaiotrio	Marshes	,,
		[[Limestone pastures]]	Perennial.
Woolly-headed do	" eriophorus	and waste places f	
Tuberous Plume do	h at man haillain	Woods	"
Dark do. do	" heterophyllus .	Waste places	Biennial.
Cotton Thistle	Onopordum Acanthum.	Ditches	Annual.
Nodding Bur Marigold	Bidens cernua	Do	
Common do	(Funatorium canna-)		*
Hemp Agrimony	{Eupatorium canna-}	Do	Perennial.
Goldilocks	Chrysocoma Linosyris .	Cliffs on south coast .	,,
Cotton Weed .	Diotis maritima	Sandy shores	,,
Tansy	Tanacetum vulgare .	Fields	,,
Field Southernwood .	Artemisia campestris .	Dry heaths · · ·	
Wormwood	Absinthium .	Waste places	"
Mugwort	milannis	Hedge-banks	"
	erenal evens	Sea-coast. Doubtful	
Lavender do	, coracoccas.	$ \{$ native $\ldots $	Section Strength

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#### AUGUST-PLANTS.

### PLANTS (continued).

Popular Name.	Scientific Name.	Localities.	Duration.
Pearly Everlasting .	SAntennaria marga-	{ Damp meadows. Not }	Perennial.
	ritacea J	1 native	
Jersey Cudweed	Gnaphalium luteo-album		Annual,
Highland do	" sylvaticum.		Perennial.
Transf day	a Participante	Watery places	Annual
Marsh do	Call'autom	Dry fields. Rare	and the second sec
Least Cudweed	". " minimum .	Dry ground	"
Canada Flea-bane .	Erigeron Canadense .	Waste ground	and the second se
Blue do	., acre	Dry pastures	Biennial.
Groundsel	Senecio vulgaris	A common weed	Annual.
Stinking do	" viscosus	Waste ground	,,
Inelegant Ragwort . Hoary do.	" squalidus	Walls and waste places .	Perennial.
Common do.	" tenuifolius " Jacobæa	Banks and waysides . Dry places	C. C
Marsh do.	a mar a ki man	Wet places	,
Broad-leaved do	" Saracenicus .	Damp meadows. Rare .	**
Sea Starwort, or Sea )		( Muddy sea-shores and )	,,
Aster	Aster tripolium	a salt marshes . (	**
Golden Rod	Solidago virgaurea .	Woods and heaths	,,
Elecampane	Inula Helenium	Damp pastures	,,
Flea-bane	Pulicaria dysenterica .	Ditches	
Small do	Limbarda Crithmoides.	Sandy heaths	Annual.
	( Deven in the Think	Salt marshes	Perennial
Common Leopard's-bane	anches	Damp woods	,,
Daisy	Bellis perennis	Pastures	
Corn Marigold	(Chrysanthemum Leu-)		. "
	Canthemum	Corn-fields	Annual.
Corn Feverfew	Pyrethrum inodorum	Fields	"
Wild Chamomile	Matricaria Chamomilla	Corn-fields.	
Common do	Anthemis nobilis	Dry pastures	Perennial.
Dx-eye do.	" Cotula	A common weed	Annual.
Sneeze-wort, or Goose- )	" tinctoria	Dry fields. Rare	Biennial.
wort	Achillea Ptarmica.	Damp pastures	Perennial.
Serrated Milfoil	" serrata	Near Matlock, Derby .	
Yarrow, or Milfoil .	" millefolium .	Pastures and way-sides .	"
Jolden Milfoil	tomentosa.	Dry hill-pastures, Scarce	**
Brown Knapweed .	Centaurea Jacea	Pastures	"
Corn-flower, or Blue-	" nigra	Pastures and way-sides .	"
bottle	" Cyanus	Corn-fields	Annual.
reat Knapweed	Caubian		
Common Star Thistle .	calaitmana	Corn-fields and pastures Waste places. Local .	
fellow do	" solstitialis	Waste places	Annual.
Bur-weed	Xanthium strumarium	Do	"
Blue-bell, or Hare-bell .	Campanularotundifolia	Heaths	Perennial.
Rampion Bell-flower .	" Rapunculus .	Banks and fields	Biennial.
breeping do.	" latifolia	Shady places	Perennial.
Vettle-leaved do.	" rapunculoides.	Northern corn-fields .	,,
lustered do	" Trachelium .	Woods and hedges	,,
vy-leaved do.	" glomerata " hederacea	Chalky pastures	,,
orn do.	hathanida	Bogs Corn-fields	4
tampion.	Phyteuma orbiculare	Chalk hills. Local	Annual. Perennial
piked do.	.; spicatum .	Hedges Raro	rerenniaL
ross-leaved Heath	Erica Tetralix.	Heaths	Shrub.
ommon do.	" cinerea	Do.	
ringe-leaved do.	" vagans	Cornwall heaths	"
ing, or Heather .	callana endersis	Do	,,
t. Dabeoc's Heath	Calluna vulgaris	Heaths and moors .	"
tound-leaved Winter-	Menziesia polifolia .	West of Ireland	
Green	Pyrola rotundifolia .	Damp woods. Rare .	Perennial.
entaury.		Dama and a former	and the second se
Iarsh Gentian, or Ca-)	the second se		Annual.
lathian Violet .	Gentiana Pneumonanthe	wet heaths. Local.	Perennial.
mall Alpine do.		A REAL PROPERTY OF THE PROPERTY OF	

#### PLANTS (continued).

Popular Name.	Scientific Name.	Localities.	Duration.
Autumn Gentian, or }	Gentiana Amarella .	Limestone pastures.	Annual
Calathian Violet ∫ Field do	" campestris .	{Hill pastures, espe- { cially on chalk . }	"
Yellow-wort Fringed Water Lily .	Chlora perfoliata Villarsia nymphæoides.	Chalky hills Pools and slow rivers	Perennial.
Marsh Felwort	Swertia perennis	∫ Mountain bogs. Doubt- )	
Great Bind-weed	Convolvulus Sepium .	ful native	"
Greater Dodder	Cuscuta Europæa	(Parasitic on thistles)	Annual.
		and other plants.	and the second
Common do	", Epithymum .	{ thyme 5	Perennial.
Viper-grass	Echium vulgare [ Lithospermum pur-]	Dry fields	Biennial.
Creeping Gromwell .	₹ puro-cæruleum.	Fields and waste places.	Perennial.
Forget-me-not	Myosotis palustris	Ditches	"
Field do	" arvensis	Dry places	Annual.
Early do	,, collina Symphytum officinale .	Dry fields and walls . Watery places	Perennial.
Tuberous do	., tuberosum.	Do. Rare	Biennial.
Borage	Borago officinalis Datura Stramonium .	Waste ground Do. Not native	Annual.
Woody Nightshade, or }	Solanum Dulcamara .	Hedges	Perennial.
Garden do	, nigrum ; ;	A common weed	Annual.
Clove-scented Broom-	{Orobanche caryophyl-}	On roots of bedstraw .	Perennial.
Tall do	,, elatior	{On knapweeds and } other plants . }	"
Ivy do	", Hederæ	Ivy roots	Annual.
Branched do Spiked Speedwell	,, ramosa Veronica spicata	On Hemp Dry meadows	Perennial.
Alpine do	" alpina	Mountains	"
Marsh do	" scutellata . " officinalis	Bogs	"
Ivy-leaved do	" hederifolia .	A common weed	Annual.
Germander Chickweed Grey Speedwell	" agrestis " polita	Do	"
	Buxbaumii .	Fields	,,
Marsh Painted-cup . Red Eye-bright	Bartsia viscosa ,, Odontites	Damp meadows A common weed	
Common do	Euphrasia officinalis .	Dry pastures	"
Large Yellow Rattle . Yellow Cow-wheat .	Rhînanthus major Melampyrum pratense.	Corn-fields	and the second se
Snapdragon	Antirrhinum majus .	Old walls. Not native .	Perennial. Annual.
Calfs-snout Ivy-leaved Snap-	" Orontium.	Corn-fields. Scarce . Walls. Not native	Perennial.
dragon, or Toad-flax )	Linaria Cymbalaria .	and the second s	Annual.
Fluellen, or Toad-flax . Sharp-leaved do	" spuria " Elatine	Dry fields	
Creeping Toad-flax .	, repens	Rocks near the sea	Perennial. Annual.
Mudwort Cornish Money-wort .	Limosella aquatica . Sibthorpia Europæa .	Muddy places Damp places. Local .	Perennial.
Great Mullein	Verbascum Thapsus .	Hedge-banks	Biennial. Perennial.
Dark do	association	Do	Biennial.
Moth do.		Do. Do	Annual. Perennial.
Gipsy-wort	and the second sec	Ditches and pool-sides . ) Dry fields and hedge- )	
Wild Clary		Damp ground	"
Horse Mint	rotunditolia .	De	"
Spear do	, viridis	Do	
Pepper do. Bergamot do.	oitrata .	Wet places. Rare :	
Water, or Hairy do	hirsuta	Wet places	"
Sharp-leaved do Bushy Red do	gentilis	Pools	"
Dubity Rou dos			

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### AUGUST-PLANTS.

P	L.	A	N	T	S	(conti	inued	).

Lesser do.,, minorDo.,, "BladderwortIntermediate do.,, intermediaSamall do,, intermediaSow BreadSow BreadSow BreadGlaux maritimaWood PimpernelLysimachia nemorumScarlet doSook WeedBrook WeedSea ThriftArmeria maritimaSea LavenderStatice LimoniumMatted do. do				1
Walforam       Criganum vulgare.       Hedge-banks       "         Germander, or Wood       Teuerium Scorodonia       Woods and commons       "         Germander, or Wood       Teuerium Scorodonia       Woods and commons       "         Back Horehound       Chamesdrys       Oid walls. Naturalised.       "         Motherwort       Eolida nigra       Hedge-banks       "         Motherwort       Eolida nigra       Dyr fields       Annual.         Dwarf do.       "       willosa       Sandy fields       "         Common do.       "       tetrakit       Fields       "       "         Bee Nettle       "       maculatum       Hedge-banks       Perennial.         Spotted do.       "       maculatum       Hedge-banks       Perennial.         Warsh do.       "       "       perenniac.       "         Betonica officinatis       Woods       Perennial.       "         Orman do.       "       "       "       "         Corn do.       "       "       "       "         Betonica officinatis       Woods       Hedge-banks       Perennial.         Corn do.       "       "       "       "	Popular Name.	Scientific Name.	Localities.	Duration.
Walforam       Criganum vulgare.       Hedge-banks       "         Germander, or Wood       Teuerium Scorodonia       Woods and commons       "         Germander, or Wood       Teuerium Scorodonia       Woods and commons       "         Back Horehound       Chamesdrys       Oid walls. Naturalised.       "         Motherwort       Eolida nigra       Hedge-banks       "         Motherwort       Eolida nigra       Dyr fields       Annual.         Dwarf do.       "       willosa       Sandy fields       "         Common do.       "       tetrakit       Fields       "       "         Bee Nettle       "       maculatum       Hedge-banks       Perennial.         Spotted do.       "       maculatum       Hedge-banks       Perennial.         Warsh do.       "       "       perenniac.       "         Betonica officinatis       Woods       Perennial.       "         Orman do.       "       "       "       "         Corn do.       "       "       "       "         Betonica officinatis       Woods       Hedge-banks       Perennial.         Corn do.       "       "       "       "		. Mentha arvensis	Corn-fields	Perennial.
MarjoramOriganum vulgare.[Hedge -banks and [Teuerium Scorodonia]Woods and commons.SageTeuerium ScorodoniaWoods and commons."Mald do.Ballóta nigra.Old walls. Naturalised."Mark Horehound.Ballóta nigra.Old walls. Naturalised."Jack Horehound.Ballóta nigra.Old walls. Naturalised."Red Henp Nettle.Galeopsis Ladame.Dry fields."Red Henp Nettle.Cannual and the second secon	Penny Royal	· " Pulegium	Wet places. Naturalised.	,,
Germander, or Wood SageTeuerium ScorodoniaWoods and commonsWall do."ChamachysOld walls. Naturalised.MotherwortEallota migraHedgesand waste groundMotherwort"Leonurus CardiacaMotherwort"Calcopsiz LadanumHed Hemp Nettle""Gateopsiz LadanumDry Bields.Annual.Dommono""Ported do.""White Dead NettleLamium albumHedges and way-sidesPetenica officinatis"WoodsPetenica officinatisWoodsPerennial.Hedge WoundwortStackys sylvaticaHedge-banksHedge WoundwortStackys sylvaticaHedge-banksMarsh do.""marsh do."germanicaPale do."germanicaPale do."germanicaPale do."germanicaPale do."manuaMarsh do."germanicaPale do."manualMarsh do."germanicaPale do."manualBaldderwortUtricularia culgariaWild BasiChamitha acinosStaul CapScuellaria gelicinatisStaul CapScuellaria gelicinatisStaul CapScuellaria gelicinatisStaul CapScuellaria gelicinatisWood Sing Capitant startina"Wild Basi"Corn dol Gala"BaldderwortUtricularia tulgaria <td></td> <td></td> <td>(Heaths and hedge-banks</td> <td>,,</td>			(Heaths and hedge-banks	,,
Germander, or Wood SageTeuerium ScorodoniaWoods and commonsWall do."ChamachysOld walls. Naturalised.MotherwortEallota migraHedgesand waste groundMotherwort"Leonurus CardiacaMotherwort"Calcopsiz LadanumHed Hemp Nettle""Gateopsiz LadanumDry Bields.Annual.Dommono""Ported do.""White Dead NettleLamium albumHedges and way-sidesPetenica officinatis"WoodsPetenica officinatisWoodsPerennial.Hedge WoundwortStackys sylvaticaHedge-banksHedge WoundwortStackys sylvaticaHedge-banksMarsh do.""marsh do."germanicaPale do."germanicaPale do."germanicaPale do."germanicaPale do."manuaMarsh do."germanicaPale do."manualMarsh do."germanicaPale do."manualBaldderwortUtricularia culgariaWild BasiChamitha acinosStaul CapScuellaria gelicinatisStaul CapScuellaria gelicinatisStaul CapScuellaria gelicinatisStaul CapScuellaria gelicinatisWood Sing Capitant startina"Wild Basi"Corn dol Gala"BaldderwortUtricularia tulgaria <td>Marjoram</td> <td>. Origanum vulgare</td> <td>bushy places</td> <td></td>	Marjoram	. Origanum vulgare	bushy places	
ParticleChamaedrysOld walls. NaturalisedMack HorehoundBallida nigraHeiges and waste groundMack HorehoundEallida nigraHeiges and waste groundMack HorehoundGaleopsis CardacaBandy fieldsMark HorehoundGaleopsis CardacaBandy fieldsOmmon do." tetrahitFieldsWhite Dead Nettle" eerstolorSpotted do." maculatumPerennial.Hedge-banks. HareHedge WoundwortBathitsBetonyBetonica oficinatisWoods" germanicaBetonyBetonica oficinatisWoods" germanicaCorn do." germanicaCat Mint.Nepeta CatariaHedge Woundwort" arreensisCorn do." arreensisCorn do." arreensisCalamint.Clinopodium vulgareHadlerwortUtricularia culgarisBaall ThymeClinopodium wulgareBaall do." intermediaSow BreadCyclame hederioliumSow BreadCyclame hederioliumSoa Mitted do." spathulta.Saa Mikwort.Glaux maritimaSea LavenderStatice LimoniumStatice LimoniumSea-colifsSaa Mikwort.Glaux maritimaSea Lavender" staticularStatice LimoniumSea-colifsSaa Mikwort.Glaux maritimaSea-Colifs" maritimaSea-Colifs" maritimaSea-Colifs" maritimaSea-Colifs" spathulta. </td <td>Germander, or Wood</td> <td>Tenerium Scorodonia</td> <td></td> <td>and the second second</td>	Germander, or Wood	Tenerium Scorodonia		and the second second
Black Horehound.       Ballota nigra       Hedges and waste ground         Motherwort       Galeopsis Ladanum       Dry fields       Annual.         Red Hemp Nettle       , tetrahit       Fields       Sandy fields       , "         Common do.       , tetrahit       Fields       Sandy fields       , "         White Dead Nettle       Lamium album       Hedges and was-sides       Perennial.         Red do.       , "       purpureum       A common weed       Annual.         Red do.       , "       purpureum       A common weed       Annual.         Marsh do.       , "       germanica       Fields       Annual.         Pale do.       , "       germanica       Fields       Annual.         Orn do.       , "       germanica       Fields       Annual.         Pale do.       , "       germanica       Fields       Fields       Annual.         Corn dol.       , "       germanica       Fields       Annual.       Perennial.         Marsh do.       , "       germanica       Fields       Annual.       Perennial.         Marsh do.       , "       germanica       Fields       Annual.       Perennial.         Marsh do.       Corn-fields <td>Sage</td> <td>(It and the set</td> <td></td> <td></td>	Sage	(It and the set		
MotherwortLeonarus CardiacaHedge-banksAnnualDwarf do."""Common do."""Bee Nettle"""Prennial.Hedges and way-sidesPerennial.Spotted do."""Perennial."Hedges and way-sidesPerennial.Perennial."maculatumHedge-banks. Rare"Perennial."maculatumHedge-banks.Perennial.Perennial."maculatumHedge-banks."Perennial.Stachys sylecticaHedge-banks"Powny do.""permanicaFields."Cat MintStachys sylecticaHedge-banks""Cat MintMarrubium ritaHedge-banksPerennial.HorehoundMarrubium ritaHedge-banksPerennial.Acaminta conodium vulgarisStallesPerennial.Skull CapScuttellaria galericulataWay-sidesPerennial.Skull CapCuricularia vulgarisStagenant water"Staul CapCuricularia vulgarisStagenant"Sow BreadCuricularia vulgarisAcommon weed"Sow BreadCuricularia vulgarisAcommon weed"Samolus Kalerandi"""Sow BreadCuricularia vulgarisAcommon weed"Static Limonium"Sea-coast"Sea MilkwortGlaux maritimaDo."Sea Mi	Black Horehound	Ballota nima	Hedges and waste ground	
Red Hemp NettleGalcopsis LadanumDry fieldsAnnual,"Common do.", "tetrahitFields.",""Common do.", "tetrahitFields.","White Dead NettleLamium albumHedge-banks. Rare","White Dead Nettle"," purpurcumA common weedAnnual,Red do."," purpurcumA common weedRed do."," purpurcumA common weedMarsh do."," germanicaFieldsOrn do."," germanicaFieldsPale do."," annuaFieldsPale do."," annuaFields.AnnualPale do."," annuaMarrubium vulgareWaste placesWild BasilCitingo digriculatisWaste places","Som BreadCyclicine heder/foitumStagnant water","Som BreadCyclicine heder/foitumStagnant water","Som BreadCyclicine heder/foitumYacer. Rare","Som BreadCyclicine heder/foitumYacer. Rare","Som BreadCyclicine heder/foitumYacer. Ra	Motherwort	. Leonurus Cardiaca .	Hedge-banks	
Common do., iterahit.Fields., iterahit.White Dead NettleLamium albumHedges and way-sidesRed do., maculatumHed do., maculatumHedge WoundwortStachys sylvaticaMarsh do., germanicaOwny do., germanicaPale do., annuaiPale do., annuaiMarribium vulgareWaste placesBadi ThymeClinopodum vulgareSkull CapScutcllaria galericulataMild BasilClinopodum vulgareSca Mikwort.Glaux maritimaSea Mikwort.Glaux maritimaSea AustenderStatice LimoniumSea LavenderStatice LimoniumSea Lavender, maculatuSea Lavender, maculatuSea do., maculatuMatted do., polyspermumMatted do., maculatuMatted do., polyspermumMatted do., maculatumMatted do., polyspermumStatice LimoniumSaacostisMatted do., maculatum </td <td>Red Hemp Nettle.</td> <td>. Galeopsis Ladanum .</td> <td>Dry fields</td> <td></td>	Red Hemp Nettle.	. Galeopsis Ladanum .	Dry fields	
Bee Nettle, versicolorCorn-fields, versicolorSpotted do, maculatumHedges and way-sidesPerennial.Red do, purpurumA. common weedAnnual.Betony, germanicaWoodsPerennial.Betony, palustrisWed places, "Downy do, germanicaFields, "Con do, arrensisCorn-fields, "Cat Mint, pepta CatariaHedge-banksPerennial.Basil Thyme, arrensisCorn-fields, "Cat Mint, germanicaFields, "Catamint, arrensis, arrensis, arrensisCatarint, arrensisDry fields, "Basil Thyme, arrensia agalericultaWet places, "Badderwort, "minor, Boo on moors, "Bladderwort, terndia, ", "Sow Bread, terndia, ", "Sow Bread, terndia, ", "Bog do, " macinima, ", "Sea Thirit, " macinimaSee-coast, "Borok Weed, " macinima, ", "Borok Weed, " macinima, ", "Sea Thorit, " macinima, ", "Borok Weed, " macinima, ", "Borok Weed, " macinima, ", " <td>Dwarf do</td> <td>,, villosa</td> <td>Fields</td> <td></td>	Dwarf do	,, villosa	Fields	
White Dead Nettle Spotted do.Lamium album macuidatum marendatum prepuraum A common weedPerennial. A nniual Betony A common weedPerennial. A nniual Perennial Hedge-banks. Rare A common weedPerennial. Perennial Betony a count of the discovery in the discovery intermediate do.Hedge-banks in the discovery intermediate do.Perennial. intermedia interm		. versicolor .	Corn-fields	"
Spotted do., maculatumHedge-banks. RareAnnual.BetonyBetonyHedge WoundwortMarsh doDowny doTorn doPale doCat MintCat MintCat MintCalamintGalamintWild BasilWild BasilStall CapSwall CapSwall CapSwall CapSwall CapSwall CapSwall CapBadderwortWild BasilSwall CapSwall CapSwall Cap <td>White Dead Nettle</td> <td>. Lamium album</td> <td>Hedges and way-sides .</td> <td>Perennial.</td>	White Dead Nettle	. Lamium album	Hedges and way-sides .	Perennial.
BetonyBetonyBetonica officinalisWoodsPerennialMarsh do., palustrisWet places, "Marsh do., palustrisWet places, "Oorn do., permanicaFields, "Corn do., annuaFields, "Cat MintNepeta CatariaHedge-banksPerennial.Marsh do., annuaFieldsAnnual.CataminMarrubium vulgareWaste placesPerennial.Basil ThymeCalamint a cinosDry fieldsAnnual.CalaminWild BasilClinopodium vulgareWaste places,"Skull CapSkull CapSmall do., intermediaSmall do., intermediaSow BreadSow BreadMood PimpernelLos and this arrensisSoa ThritBrook WeedSaarot doSaarot doSaarot doSaarot doSaarot doSaarot do. <t< td=""><td>Spotted do</td><td></td><td>Hedge-banks. Rare .</td><td>,,,</td></t<>	Spotted do		Hedge-banks. Rare .	,,,
Hedge Woundwort Marsh do.Stachys sylvatica powny do.Hedge-banks powry do."Downy do."paleacs"Downy do."germanicaFields"Pale do."arvensisCorn-fieldsAnnual.Pale do.""Fields.RareCat MintMarrubium vulgareWaste places""HorehoundMarrubium vulgareWaste places""HadlerwortClamintha acinosDry fields.Annual.Calamint.Clamintha acinosDry fields."CalamintaClinojodium vulgareHimestone hills"Lesser do."""BladlerwortUtricularia vulgarisStagnant water"Swall do."""Sow BreadCyclamen hederifoliumWoods. Local"Sow BreadCyclamen hederifoliumWoods. Local"Bog do."tenellaBogs"Sea UnriftArmera maritimaScaecolift"Sea do."""Marrow-leaved do.""Marrow-leaved do.""Marrow do.""Marrow do.""Marrow do.""Book WeedSamolus Valerandi"Sea do.""Marrow leaved do.""""Marrow leaved do."""""" <t< td=""><td>Betony</td><td>Retonica officinalis</td><td>A common weed</td><td></td></t<>	Betony	Retonica officinalis	A common weed	
Marsh do., palustris .Wet places ., "Downy do., germanicaFields .Annual.Corn do., germanicaFields .Annual.Corn do., germanicaFields .Annual.Cat Mint .Nepieta CatariaHedge-banks .Perennial.Hasil Thyme .Catamintha acinosDy fields .Annual.Rasil Thyme .Catamintha acinosDy fields .Annual.Kull Cap .Scutellaria galericulataWay sides .Perennial.Badderwort .Utricularia vulgare .Stagnant water ."Bladderwort .Utricularia vulgaris .Stagnant water ."Small do, minor .Stagnant water ."Sow Bread .Cyclame hederifolium .Stagnant water ."Searlet do, timestnes"Bog doAnnualScarlet doBrook Weed .Samolus Valerandi .BogsSea LavenderStatice Linonium .Sca-coastBord doMarrow leaved do. doMarrow leaved doMarted do doGreater PlantainHoary doBuck's Horn doMarred doMarred eaved doMaplelaeved doMaplelaeved do<	Hedge Woundwort	Stachys sylvatica	Hedge-banks	
Downy do., germanicaFieldsAnnualPaie do., arvensis.Corn-fieldsAnnualPaie do., arvensis.Fields. RarePerennial.HorehoundMarrubium vulgareWaste places.Perennial.Horehound.Marrubium vulgareWaste placesBasil ThymeCalamintMild BasilSkull Cap	Marsh do	, palustris	Wet places	
Pale do.", annuaFields. Rare",Cat MintMarrubium vulgareHedge-banksPerennial.HorehoundMarrubium vulgareWaste placesAnnual.Basil ThymeCalamintha acinosDry fields.Annual.Calamint.officinalis.Way-sides.Perennial.Skull CapScutellaria galqareWater baces","Skull CapScutellaria galqareStagnant water","BladerwortUtricularia vulgarisStagnant water","Jutermediate do., intermediaStagnant water","Sow BreadCyclamen hederifoliumSea-shores and salt-","Sea MilkwortGlaux maritimaGasshores and salt-","Bog do., intermediaBogsPerennial.Brook WeedSamolus ValerandiWater places,"Sea LavenderStaffic LimoniumSea-coast","Sarow-leaved do., matrimaSea-coast","Matted do., matrimaCoast of Norfolk","Matted do., matrimaMudy sea-sones,"Breek's Horn do., olidum,"Mudy sea-sones,"Breek's Horn do., olidum,"Naroathus BiltumWaste places,"Brubby Goosefoot, nurate,"Mudy sea-sones,"Staffanach, water futura,,,,Mild AmaranthAmarathus BiltumWaste ground,","Breek' Horn do., nurate <td< td=""><td>Claum da</td><td></td><td>Fields.</td><td></td></td<>	Claum da		Fields.	
Cat Mint.Nepta CatariaHedge-banksPerennial.HorchoundMarrubium vulgareWaste placesAnnual.Calamint.Citamintha acinosDry fieldsAnnual.Calamint.Citamintha acinosUimestone hills"Skull CapScutellaria galericulataWay-sides.Skull CapScutellaria galericulataUimestone hills"BladderwortUtricularia vulgarisIntermediate do."""Sow BreadCyclamen hederifoliumSea-thores and salt-"Sow BreadCyclamen hederifoliumSea-shores and salt-"Sea Milkwort.Glaux maritimaSea-shores and salt-"Sea InifitAnagallis arvensisA common weedAnnual.Sea tharifffenelaBogs.Perennial.Boys.galthulataDo"Sea thariffMatted do. doMatted do. doBack's Horn doBarded do <td< td=""><td>Dala da</td><td></td><td>Fields Rare</td><td>Annual.</td></td<>	Dala da		Fields Rare	Annual.
Basil ThymeCalamintha acinosDry fieldsAnnmal.Wild BasilClinopodium vulgareWaysidesPerennial.Skull CapScutellaria galericulataWaysides	Cat Mint.	Nepeta Cataria	Hedge-banks	Perennial.
Calamint"officinalisWay-sidesPerennial.Skull CapScutellaria galericulataLimestone hills"Skull CapScutellaria galericulataWet places"Lesser do."minorDo."Intermediate do."intermediaDo."Small do.""intermediaBook"Sow BreadCyclamen hederifoliumWoods. Local""Sow BreadCyclamen hederifoliumSea-shores and salt-"Sea MilkwortGlaux maritimaSea-shores and salt-"Scarlet do.Augalits arvensisWoods"Bog do."tenellaBogsPerennial.Sea LavenderStatiee LimoniumSea-coast"Sea Lavender"statiee LimoniumSea-coast"Marted do. do.""media"Greater PlantainPlandago majorMuddy sea-shoresPerennial.Beet.Beta maritimaMuddy sea-shoresPerennial.Shrubby GoosefootChenopoliumfruticosumMuddy sea-shoresPerennial.Shrubby Goosefoot"murban"Muld Spinach"""Muld Spinach"""Muld Spinach"""Muld Spinach""Muld Spinach""Muld Spinach""Muld Spinach""Muld Spinach""Muld Sp	Domil /III mana a		Waste places	
Wild BasilClinopodium Tulgare scutellaria galericulata minor intermediate do.Limestone hills""BladderwortUtricularia vulgaris minor intermediate do.Limestone hills""BladderwortUtricularia vulgaris minor intermediate do.Stagnant water Wet places""Sow BreadCyclamen hederifolium minor scarlet do.Glaux maritima tenellaWoods. Local marshes""Wood PimpernelLysimachia nemorum tenellaSea-shores and salt- marshes""Sow BreadCyclamen hederifolium tenellaWoods.Annual. Sea-shores and salt- tenellaSea flikwort.Glaux maritima tenellaSea-shores and salt- tenella""Sea tavenderSamolus Valerandi tenellaWatery places""Sea tavenderStatice Limonium tenellaSea-coast""Sea do." metia""""Matted do. do" maritimaCoast of Norfolk""Sea do." maritima""""Sea do." maritima""Muddy sea-coasts""Buck's Horn do." maritima""""Sharbeleved do." maritima""""Sharbeleved do." maritima""""Sharbeleved do." maritima""""Sharbeleaved do." maritima""""Sharbeleaved do." maritima""""Sharbeleaved do." mariale""""Sharbeleav	Calamint		We are all a second	
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Lesser do.minorDo.Do.BladderwortUtricularia vulgarisStagnant water"Small do.""Sow BreadCyclamen hederifoliumWoods. LocalSea Milkwort.Glaux maritima"Searlet do.Anagallis arvensisScarlet do.Anagallis arvensisSearlet do."Searlet do."Searlet do."Searlet do."Searlet do."Scarlet do."Searlet do."Searlet do."Searlet do."Searlet do."Searlet do."Searlet do."Searlet do."Statice LimoniumSea-coastSearlet do."Searlet do."Statice LimoniumSea-coastSearlet Plantain"Plantago majorA common weed""Matted do. do."""""Buck's Horn do."""Sharbeleot"Shrubby GoosefootChenopodium fruticosumSharb-leaved do."""""Sharb-leaved do."""""""Shrubby Orache, orSharb-leaved do."""""""""""""<	Skull Cap	Scutellaria galericulata	Wet places	
Intermediate do., intermedia iminor.Water Rare"Small dominor.Pools on moorsSow BreadGlaux maritimaSea MilkwortGlaux maritimaWood PimpernelLysimachia nemorum Anagallis arvensisMoodsBog doBrook WeedSamolus Valerandi tenellaWater placesBrook WeedSamolus Valerandi tenellaWater placesNarrow-leaved doMatted do. doMatted do. doMatted do. doMatted do. doGreater PlantainPlantago majorA common weedMatted do. doSea ThriftBrow low doSea tavender<	Lesser do	minor	Do	
Sow BreadCyclamen hederifoliumPools on moorsSea Milkwort.Glaux maritima{Sea-shores and salt-}Sea Milkwort.Glaux maritimaSea Milkwort.Lysimachia nemorumWoodd PimpernelLysimachia nemorumScarlet do.Anagallis arvensisSea floreAnagallis arvensisBog do.TenellaBogs do.Samolus ValerandiBrook WeedSamolus ValerandiBrook WeedSamolus ValerandiWatery placesPerennial.Brook WeedspathulataBrook Weed"Sea LavenderStatice LimoniumSea LavenderspathulataMatted do."Matted do.""Plantago majorA common weed"Hoary do.""maritimaBuck's Horn do."""BeetBeta maritimaBroud-leaved do."""Nuild Spinach"""Wild Spinach"""Wild Spinach"""""""""Wild Spinach""""""""""""""""""""""""""""	Intoma diata da	Otricularia vulgaris .	Stagnant water	"
Sow BreadCyclamen hederifoliumWoods. Local"Sea Milkwort.Glaux maritima $\{Sea-shores and salt\}$ "Wood PimpernelLysimachia nemorumMoods"Scarlet do.Anagallis arvensisA common weedAnnual.Bog do.Samolus ValerandiWatery places"Brook WeedSamolus ValerandiWatery places"Brook WeedSamolus ValerandiWatery places"Brook Weedstatice LimoniumSea-chiffs"Sea ThriftArmeria maritimaSea-cliffs"Sea LavenderStatice LimoniumSea-coast"Matted do. do"""Greater PlantainPlantago majorA common weed"Plantago majorA common weed""Sea do.""maritimaDo.Buck's Horn do.""CoronopusDry placesBrubby GoosefootChenopodium fruticosumMatdy sea-shoresPerennial.Stinking do.""narathimaMatdy sea-shoresStinking do."""Do."Muld Spinach""nuruleWaste places and sea-Wild Spinach"""Do."Muldy Spinach"""Do."Muldy Spinach"""Do."Muldy Spinach"""Damp places"Muldy Spinach"""" <t< td=""><td>C</td><td>minor .</td><td>Pools on moons</td><td></td></t<>	C	minor .	Pools on moons	
Sea Milkwort.       Glaux maritima       Seashores and salt- marshes       "         Wood Pimpernel       Lysimachia nemorum       Woods       "         Bog do.       anagallis arvensis       A common weed       "         Brook Weed       Samolus Valerandi       Watery places       "         Brook Weed       Samolus Valerandi       Watery places       "         Sea Lavender       Statice Limonium       Sea-coast       "         Sea Lavender       "       statice Limonium       Sea-coast       "         Matted do. do       "       spathulata       Do.       "         Matted do. do       "       "       maritima       Muddy sea-coasts       "         Buck's Horn do.       "       "       "       Muddy sea-coasts       "         Beet       "       "       maritima       Muddy sea-shores       Perennial.         Stinking do.       "       "       "       "       Annual.         Statig do.       "       "       "       "       "         Beet       "       "       "       "       "       "         Shrubby Goosefoot       "       "       "       Do.       "       "		Cyclamen hederifolium	Woods. Local	
Wood PimpernelLysimachia nemorumWoodsAmualScarlet do.Anagallis arvensisA common weedAmual.Bog do.Samolus ValerandiWatery placesPerennial.Brook WeedSamolus ValerandiWatery places"Sea LavenderStatice LimoniumSea-coast"Narrow-leaved do. do."spathulata.Do."Matted do. do""reticulataCoast of Norfolk"Greater PlantainPlantago majorA common weed""Hoary do.""mactimaMuddy sea-coasts"Buck's Horn do.""macranthus BiltumWaste places"Wild AmaranthAmaranthus BiltumWaste places""Beet."olidumSouth coast"Stinking do.""olidumSouth coast"Wild Spinach""muraleWaste ground"Wild Spinach"""Do."Matte do."""Do."Narp-leaved do.""""Matte do.""""Sharp-leaved do."""Mite do."""Sharp-leaved do."""Matte do."""Prig-leaved do."""Matte do."""Muid Spinach"""<	Sea Milkwort	Glaux maritima		
Scarlet do.Anagallis arvensisA common weedAnnual.Bog dotenellaBogs.Perennial.Brook WeedBogs.Perennial.Brook WeedSea-cliffsSea ThriftSea-cliffsSea LavenderSea-cliffsNarrow-leaved do. doSea-cliffsMatted do. doMatted do. doMatted do. doGreater PlantainHoary doSea doBuck's Horn doBuck's Horn doBuck's Horn doBuck's Horn doStarbleaved doBuck's Horn doStarbleaved doWild Spinach </td <td>Wood Pimpernel .</td> <td></td> <td>( marsnes )</td> <td>"</td>	Wood Pimpernel .		( marsnes )	"
Bog do."tenellaBogsPerennialBrook WeedSamolus ValerandiWatery places"Sea ThriftArmeria maritimaSea-coast"Sea LavenderStatice LimoniumSea-coast"Marrow-leaved do. do.", spathulataDo."Matted do. do", reticulataCoast of Norfolk"Greater PlantainPlantago majorA common weed"Hoary do.", mediaChalk hills"Sea do.", maritimaMuddy sea-coasts"Buck's Horn do.", coronopusDry placesAnnual.Buck's Horn do.", olidumWaste places"BeetEta maritimaMuddy sea-shoresPerennial.Sharp-leaved do.", acutifoliumDo."Sharp-leaved do.", acutifoliumDo."Wild Spinach", acutifoliumDo."White do.", albumA common weed"Matted do.", albumA common weed"Matted do.", albumA common weed"Sharp-leaved do.", albumA common weed"Matted do.", albumA common weed"Matted do.", albumA common weed"Sharp-leaved do.", albumA common weed"Matted do.", albumA common weed"Shrubby Orache, or", albumSandy places"Shrubby Orache, or", albumSandy places" <t< td=""><td>Scarlet do</td><td>Anagallis arvensis</td><td>A company and a set of the set of</td><td>Annual</td></t<>	Scarlet do	Anagallis arvensis	A company and a set of the set of	Annual
Sea Thrift       Armeria maritima       Sea-cliffs       "         Sea Lavender       Statice Limonium       Sea-coast       "         Narrow-leaved do. do       ", spathulata       Do       "         Matted do. do       ", reticulata       Coast of Norfolk       "         Greater Plantain       Plantago major       A common weed       "         Hoary do       ", media       Chalk hills       "         Sea do       ", media       Chalk hills       "         Buck's Horn do       ", maritima       Muddy sea-coasts       "         Buck's Horn do       ", maritima       Muddy sea-shores       Perennial.         Shubby Goosefoot       Chenopodium fruticosum       South coast       "         Shurby Goosefoot       ", olidum       Waste places and sea-       "         Sharp-leaved do       ", acutifolium       Do       "         Wild Spinach       ", murale       ", warbicum       Waste ground       "         Wild Spinach       ", album       Bonus Henricus       Do       "       "         Matteleaved do       ", album       A common weed       "       "       "         Matteleaved do       ", album       A common weed       "	Dog do	, tenella	Bogs	Perennial
Sea LavenderStatice LimoniumSea-coast"Narrow-leaved do. do., spathulataDo."Matted do. do, reticulataCoast of Norfolk"Greater PlantainHoary do., media.Coast of Norfolk"Sea do, mediaBuck's Horn do., maritimaMuddy sea-coasts.Wild AmaranthBeetShrubby GoosefootStatking doShrubby GoosefootShrubby GoosefootShrubby GoosefootShrubby GoosefootShrubby GoosefootWild SpinachWild SpinachWild SpinachWild SpinachWild SpinachWhite doStatue doStatue doStatue doStatue doMuld SpinachWild SpinachMapel-leaved doMapel-leaved doSea Purslane <t< td=""><td>Class Miles 184</td><td>Samolus Valerandi .</td><td>Watery places</td><td></td></t<>	Class Miles 184	Samolus Valerandi .	Watery places	
Narrow-leaved do. do." spathulata.Do."Matted do. do." reticulataCoast of Norfolk"Matted do. do." reticulataCoast of Norfolk"Matted do. do." reticulataCoast of Norfolk"Matted do. do." maritimaMuddy sea-coasts"Hoary do." maritimaMuddy sea-coasts"Buck's Horn do." CoronopusDry places.Buck's Horn do." CoronopusDry places.BeetBeetShrubby GoosefootStinking do." olidumBould Spinach" olidumWild Spinach" muraleWhite do." muraleMatte-leaved do." murale." murale" glaucum.Strike do." glaucumMatte do" glaucumSea Purslane<	Sea Lavender	Statice Limonium	Pagagat	
Greater Plantain       Plantago major       A common weed       ""         Hoary do.       " media       Chalk hills       ""         Sea do.       " maritima       Muddy sea-coasts       ""         Buck's Horn do.       " maritima       Muddy sea-coasts       ""         Buck's Horn do.       " coronopus       Dry places       Annual.         Wild Amaranth       Amaranthus Blitum       Waste places       Perennial.         Beet       Beta maritima       Muddy sea-shores       Perennial.         Shrubby Goosefoot       Chenopodium fruticosum       South coast       "         Stinking do.       " olidum       South coast       "         Waste places and sea- (coast       "       Annual.         Sharp-leaved do.       " acutifolium       Do.       "         Wild Spinach       " acutifolium       Do.       "         Wild Spinach       " album       Acommon weed       "         Maple-leaved do.       " nurale       Waste ground       "         Maple-leaved do.       " flcifolium       Maste ground and fields       "         " glaucum       Sandy places       "       "         Shrubby Orache, or       " glaucum       Sandy places       "	Narrow-leaved do. do	" spathulata.	Do	
Hoary do.""mediaChalk hills"Sea do.""maritimaMuddy sea-coasts"Buck's Horn do.""CoronopusDry placesAnnual.Buck's Horn do.""CoronopusDry places.Buck's Horn do.""CoronopusDry places.BeetBeta maritimaWaste places."BeetShrubby GoosefootPerennial.Stinking doStinking doStinking doStinking doStinking doStinking doRound-leaved doWild SpinachWild SpinachWild SpinachMaple-leaved doSige-leaved doStriple-leaved do<	Matted do. do	pin reticulata	Coast of Norfolk	
Sea do."""maritimaMuddy sea-coasts""Buck's Horn do."""""""""""""""""""""""""""""""""			A common weed	
Back's Horn do."CoronopusDry placesAnnual.BeetAmaranthus BlitumWaste placesBeetBeta maritima.Muddy sea-shores.Shrubby GoosefootChenopodiumfruticosumSouth coast.Stinking doStinking doStinking doStinking doStinking doStinking doStinking doSharp-leaved doWild SpinachWild SpinachWild GoosefootWild GoosefootWild doWhite doSig-leaved doMaple-leaved doSea PurslaneSea PurslaneStrubby Orache, orSea PurslaneSea PurslaneShrubby Orache, orSea PurslaneShrubby Orache, or. <td>Sea do.</td> <td>an another as</td> <td>Muddy sea-coasts</td> <td>"</td>	Sea do.	an another as	Muddy sea-coasts	"
With AnnarantinBeta maritimaMuddy sea-shoresPerennial.Shrubby GoosefootChenopodiumfruticosumMuddy sea-shoresPerennial.Stinking do., olidum, Waste places, annual.Round-leaved do., polyspermumWaste ground, annual.Sharp-leaved do., acutifolium, Do., "Wild Spinach, urbicum, bo., "Upright Goosefoot, urbicum, bo., "Witte-leaved do., murale, Waste ground, "White do., murale, Waste ground, "Wind Spinach, ground, ", "Witte-leaved do., murale, Waste ground, "White do., glaucum, A common weed, "Gig-leaved do., glaucum, Sandy places, "Sea Purslane, erecta, erecta, Waste ground. Rare, "Jarsh do., geduculata, marshes, "Triangular-leaved do, deltoidea, ", *	Buck's Horn do	" Coronopus	Dry places	Annual.
Shrubby Goosefoot       Chenopodiumfruticosum       South coast       "         Stinking do.       "       olidum       South coast       "         Round-leaved do.       "       polyspermum       South coast       "         Sharp-leaved do.       "       polyspermum       Waste places and sea-       "         Wild Spinach       "       "       Do.       "       "         Upright Goosefoot       "       "       "       Do.       "       "         Wild Spinach       "       "       "       Do.       "       "       Perennial.         White Goosefoot       "       "       "       "       Do.       "       "       Perennial.         Maple-leaved do.       "       "       "       "       Do.       "       "       "       Perennial.         Manual.       "		Amaranthus Blitum .	Waste places	
Stinking do.       ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	Shrubby Goosefoot	Chenopodium fruticosum	South coast	Perennial.
Round-leaved do.       ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Stinlein a de	alidum		and the second sec
Sharp-leaved do.       " acuiffolium"       Do.       " Do.         Wild Spinach       " Bonus Henricus       Do.       Do.         Upright Goosefoot       " urbicum       Do.       Do.         Nettle-leaved do.       " murale       Do.       Do.         Maple-leaved do.       " murale       Waste ground       " "         White do.       " album       Damp places. Local       " "         Maple-leaved do.       " ficifolium       Waste ground and fields       " "         Dak-leaved do.       " ficifolium       Waste ground and fields       " "         Shrubby Orache, or       " glaucum       Sandy places       " "         Spear-leaved do.       " erecta       Waste ground. Rare       Annual.         " rass-leaved do.       " pedunculata       Marshes       " "         " urbicum       " deltoidea       " Waste ground. Rare       " "			Coast (	Annual.
Wild Spinach       ,, Bonus Henricus       Do.       Perennial.         Upright Goosefoot       ,, urbicum       Do.       Annual.         Nettle-leaved do.       ,, hybridum       Damp places. Local       ,, ''         Maple-leaved do.       ,, album       A common weed       ,''         State-leaved do.       ,, ficifolium       Waste ground and fields       ,''         Dak-leaved do.       ,, ficifolium       Sandy places       ,''         Shrubby Orache, or       ,       erecta       Waste ground. Rare       ,''         Spear-leaved do.       ,''       littoralis       Salt marshes       ,''         Jarsh do.       ,''       pedunculata       Marshes       ,''         Waste ground.       ,''       ''       ''         Waste ground.       ,''       ''       ''         Marsh do.       ,''       erecta       ''       ''         Waste ground.       ,''       ''       ''       ''         Waste ground.       ,''       ''       ''       ''         Waste ground.       ''       ''       ''       ''         Waste ground.       ''       ''       ''       ''         Waste ground.	Sharp-leaved do.		Waste ground	"
Upright Goosefoot       ,, urbicum       {Dunghills and waste}       Perennial.         Nettle-leaved do.       ,, murale       Waste ground       Annual.         Maple-leaved do.       ,, hybridum       Damp places. Local       ,,         White do.       ,, album       A common weed       ,,         Sig-leaved do.       ,, ficifolium       Waste ground and fields       ,,         Oak-leaved do.       ,, glaucum       Sandy places       ,,         Shrubby Orache, or       Atriplex portulacoides.       Sea-shores.       Perennial.         Spear-leaved do.       ,, erecta       Waste ground. Rare       Annual.         Jarsh do.       ,, pedunculata       Marshes       ,,         Waste ground.       ,,       ,,       ,,	Wild Spinach	", Bonus Henricus		Domonatal
Nettle-leaved do.       ,, murale       ,, wurale       ,, waste ground       ,, murale         Maple-leaved do.       ,, hybridum       Damp places. Local       ,, murale       ,, murale       ,, murale       ,, murale       ,, murale       ,, waste ground       ,, murale       ,, murale       ,, murale       ,, murale       ,, waste ground       ,, murale       ,,		ambian		
Maple-leaved do.       ", hybridum       Damp places. Local       ",         White do.       ", album       A common weed       ",         Fig-leaved do.       ", ficifolium       Waste ground and fields       ",         Oak-leaved do.       ", ficifolium       Waste ground and fields       ",         Shrubby Orache, or       ", glaucum       Sandy places       ",         Sea Purslane       *,       erecta       Waste ground. Rare       Perennial.         Spear-leaved do.       ", littoralis       Salt marshes       ",         Jarsh do.       ", gedunculata       Marshes       ",         Waste ground.       ",       ",       ",		manual a	( ground f	Annual.
White do.       "," album.       "," Acommon weed.	Maple-leaved do.		Damp places Local	"
Orde-leaved do.       ", ficifolium       Waste ground and fields       ", glaucum         Oak-leaved do.       ", glaucum       Sandy places       ", Perennial.         Shrubby Orache, or       Atriplex portulacoides .       Sea-shores       Perennial.         Spear-leaved do.       ", erecta       Waste ground. Rare       Annual.         Jarsh do.       ", pedunculata       Marshes       ", erecta         Triangular-leaved do.       ", deltoidea       Waste ground. Rare	White do.	" album	A common weed	
Shrubby Orache, or Sea Purslane       "," glaucum       Sandy places       "," Perennial.         Spear-leaved do.       "," erecta       Waste ground. Rare       "," Perennial.         Jarsh do.       "," pedunculata       Marshes       "," "," glaucum       "," Perennial.         Triangular-leaved do.       "," erecta       Waste ground. Rare       "," "," "," "," "," "," "," "," "," ","	Jak-leaved do.	" ficifolium	Waste ground and fields	
Sea Purslane       full plex portulacoides       Sea-shores       Perennial.         Spear-leaved do.       ,, erecta       Waste ground.       Rare       Annual.         Transplar-leaved do.       ,, pedunculata       Marshes       ,, marshes       ,, marshes         Triangular-leaved do       ,, deltoidea       ,, deltoidea       Waste ground.       ,, marshes       ,, marshes	shrubby Orache or		Sandy places	
Spear-leaved do.       "       erecta       Waste ground. Rare       Annual.         Grass-leaved do.       "       littoralis       Salt marshes       "       "         Jarsh do.       "       pedunculata       Marshes       "       "         Triangular-leaved do       "       deltoidea       Waste ground       "       "	Sea Purslane	Atriplex portulacoides.	Sea-shores	
Marsh do. ", pedunculata . Salt marshes ", Triangular-leaved do . ", deltoidea Waste ground "	pear-leaved do.		and the second	Sector Sector Sector
riangular-leaved do . "," pedunculata . Marshes	Marsh do	" littoralis	Salt marshes	
" THOLO STUTIU		" pedunculata .	Marshes	
		»	waste ground	

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# PLANTS (continued).

Popular Name,	Scientific Name.	Localities.	Duration.
Glasswort	Salicornia herbacea .	{Salt marshes and }	
Creeping do	and the second	1 muddy shores .	Annual.
Perennial Knawel .	Scleranthus nerennis	Muddy sea-shores	Perennial.
Bistort, or Snakeweed.	Polygonum Bistorta .	Damp meadows	"
Knot-grass	, aviculare .	A common weed	Annual.
Buckwheat	,, maritimum . ,, Fagopyrum .	Sandy shores	Perennial.
Black Bindweed, or)	Clauser 1		Annual
Climbing Buckwheat ) Copse do.		A common weed	"
Water Persicaria, or	" dumetorum .	Woods	,,
Water Bistort .	" amphibium .	Ponds and wet places .	Perennial.
Spotted do	" Persicaria .	Damp ground	Annual.
Pale Flowered do	" lapathifolium	{Dunghills and waste}	
Lax Flowered do	,, mite	Waste ground	
Small Creeping do	" minus	wet places	39 31
Great Water Dock	, Hydropiper . Rumex Hydrolapathum	Do. Ditches	Dering intel
Curled Dock	,, crispus	A common weed	Perennial.
Fiddle do	" pulcher	Waste ground	" "
Golden do	" maritimus	Marshes	**
Birthwort	Aristolochia Clematitis	(Ruins and thickets.)	"
		Naturalised.	"
Annual Mercury Purple Spurge	Mercurialis annua . Euphorbia Peplis .	Waste ground	Annual.
Sun do., or Wart-weed	" Helioscopia	A common weed .	""
Broad-leaved do	, platyphylla.	Fields	"
Sea do	" Paralias . " Portlandica	Sandy shores	Perennial.
Petty do.	Penlus	A common weed	Annual
Spring Water Starwort	Callitriche verna	Pools	.,
Stalked do. do	" pedunculata " autumnalis	De	
Spiny-fruited Hornwort	(Ceratophyllum de-)		
	l mersum	Do	Perennial.
Small Nettle	Urtica urens	Waste ground Way-sides and fields	Annual Perennial
Pellitory	Parietaria officinalis .	Old walls	and the second second
Water Thyme	Eudorea Canadensis .	Canals	"
Frog-bit	{Hydrocharis Morsus-}	Ponds and streams	,,
Lizard Orchis	Orchis hircina	Chalky thickets	,,
Fragrant do	Gymnadenia conopsea .	Chalk hills	"
Creeping Goodyera .	Goodyera repens	Highland forests	"
Lady's Tresses	Neottia spiralis	1 tures	"
Mountain Tway-blade .	Listera cordata	Mountains	**
Helleborine	Epipactis latifolia ,, purpurata	Woods	"
Bog Orchis	Malaxis paludosa .	Peat bogs	"
Stinking Iris	Iris fætidissima	Pastures and thickets .	"
Asparagus	Asparagus officinalis .	Sea-shores	"
Garlic )	Allium Ampeloprasum	C Severn	**
Scottish Asphodel	Tofieldia palustris .	Boggy places on mountains .	. "
Pipewort	Eriocaulon septangulare	Mountain lakes. Rare .	**
Bog Asphodel	Narthecium ossifragum	Bogs	"
Small Sea-Rush Black-headed Jointed)	Juncus maritimus.	Salt marshes	"
Rush	" nigritellus	Wet places in Scotland.	"
Blunt-flowered do. do	" obtusiflorus .	Marshes	
Round-fruited Rush . Toad do.	" compressus " bufonius	Do	Annual.
Two-flowered do	" biglumis	Mountain rills	Perennial
Three-flowered do	,, triglumis	Do	33

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#### AUGUST-PLANTS.

### PLANTS (continued).

Popular Name.	Scientific Name.	Localities.	Duration.
Floating Water-Plan-	Alisma natans .	Lakes. Local	Perennial
tain 5			1 Or Chimian
Lesser do	" ranunculoides	Dools in Walsa	,,
Arrow-head	Sagittaria sagittifolia	Ditches and pools	
Arrow-grass	Triglochin palustre	Boggy meadows	**
Sea-side do	" maritimum	(Salt marshes and)	
		( Intuduy Shores . )	**
Bull-rush, or Cat's-tail. Floating Bur-reed	Typha latifolia	Pools	"
Red Pond-weed	Sparganium natans Potamogeton rufescens	Pools	**
Shining do.	, lucens	Do	**
Lanceolate do	" lanceolatus		33 31
Perfoliate do	" perfoliatus		,,
Long-leaved Pond-weed Horned do.	Zani in longifolius		
	Zanichellia palustris .	Shallow bays and salt )	Annual.
Grass-wrack	Zostera marina	ditches	Perennial.
Sweet Cyperus	Cyperus longus	Bogs	
Twig-rush	Cladium mariscus	Do	**
Chocolate Spike-rush .	Eleocharis pauciflora .	Moors.	
Least do	" acicularis .	Wet places	"
Club-rush	Scirpus lacustris	Ditches and pools	,,
Least Club-rush	" setaceus	Watery places	
Triangular do	" triquetor	River-banks	"
Blunt do	" carinatus	Do	,,
Sea do	Elyna caricina :	Sea-shores .	,,
Straight-leaved Moun-)		Moors .	"
tain Sedge (	Carex aquatilis	Scotch marshes	,,
Rock Sedge	" rupestris	Rocks in Scotland	
Close-headed Moun-	" Vahlii	Rooks	"
tain do			"
Slandor Fox tail (Image )	" speirostachya .	Bogs	,,
or Black Bent .	Alopecurus agrestis .	Waste ground	Annual.
Floating do. do.	" geniculatus.	Wet places	Perennial.
Canary-grass	Phalaris Canariensis .	(Uncultivated places)	
		( Naturalised	Annual.
	Gastrium lendigerum . Polypogon monspe-)	Fields near the sea	,,
Turner Dourd Pruss .	liensis .	Way-sides	,,
Bristle-leaved Bent-	Agrostis setacea	Thursday 1 - 41	
Set (400 +		the second se	Perennial.
line do.	vulgaris	Pastures	"
Frey Hair-grass	Aria Canescens Melica cærulea	Sandy fields near sea	,,
	Kæhleria cristata :	Heaths	,,
leed Meadow-grass .	Poa aquatica	Dry pastures	"
teflexed do.	" distans	Pastures : : : :	"
ea do.	" maritima.	Salt marshes	"
rocumbent do.	" procumbens	Do	Annual.
lpine do.	" compressa	Dry places	Perennial.
nnual do.	" alpina	Mountains.	
Vood do,	" nemoralis		Annual. Perennial.
weet-grass	" fluitans	Ditches and pool margins	
ock's-foot-grass 1	Dactylis glomerata.	Fields.	"
iant Fescue-grass	estuca gigantea .	Shady places	
ye do.	Bromus asper	Woods	Annual.
ield do	" secalinus	Fields	"
Vood Barley I	Iordeum sylvaticum		Perennial.
usny wheat-grass	riticum junceum .	Sand-dunes : :	
ouch-grass, or Dog-		A common wood	"
		San accent	"
	epturus incurvatus		Innual.
	partina stricta	Salt marshes I	Perennial.

### PLANTS (continued).

Popular Name,	Scientific Name.	Localities.	Duration.
Many-spiked Cord- )	Spartina alterniflora .	Salt marshes	Perennial
grass ) Dog's-tooth-grass	Cynodon dactylon	Sandy shores	
Hairy Finger-grass .	Digitaria sanguinalis '.	Fields. Rare	Annual.
Finger-grass	,, humifusa .	Do	.,,
FERNS.			
	Polypodium vulgare .	∫Mossy banks, damp )	Perennial
Welsh do:	agambarianan	Trocks, &c	1 Cremma
SmoothThree-branched			"
do., or Oak-Fern.	" Dryopteris.	Damp places. Local	"
Alpine do Rock Brakes, or (	" alpestre .	Scotch mountains (Stony hills. Rare and )	"
Mountain Parsley	Allosorus crispus	l'iocal	**
Alpine Shield Fern, )		(Mountain rocks, espe-)	
or Holly Fern	Polystichum Lonchitis .	and Ireland.	**
Prickly do. do	aculeatum		**
Marsh Buckler Fern .	Lastrea palustris	Marshes	.,
Male-fern	", Filix-mas	Shady places	"
Crested Buckler Fern .	" cristata	and local	,,
Broad do. do	" dilatata	Wet shady places	,,
Triangular do. do	" æmula	{Damp woods and } { shady banks.	,,
	(Asplenium Filix-)		
Lady-Fern	formina )	Wet shady places	**
Forked Spleenwort .	,, septentrionale .	(Shady rocks in Scot-)	,,,
Alternate do	" alternifolium .	and and Lake Dis-	,,,
		( trict. Rare )	
Rue-leaved do	" Ruta-muraria .	Shady rocks	"
Green do	,, viride	in Scotland and	,,
		(Wales )	
Maidenhair do	" Trichomanes .	Shady rocks	"
Sea do	" marinum	(Mountain rocks. Very)	"
Smooth Rock do	, fontanum	( buarco · · · )	
Lanceolate do	lanceolatum . Adiantum-nigrum	Rocks. Local Shady places	"
Black Maidenhair do	( Scolopendrium offici-)		"
Hart's-tongue	1 narum )	Damp do do and mans.	,,
Scale Fern	Ceterach officinarum . Pteris aquilina .	Limestone rocks Heaths and woods	
Bracken, or Brakes .	Adiantum Capillus-	Rocks. Local	"
Maidenhair Fern	Veneris )		"
Brittle Bladder Fern .	Cystopteris fragilis .	Walls	**
Alpine Woodsia	Woodsia hyperborea .	i rocks. Rare	" "
Flowering Fern	Osmunda regalis	Shady bogs	,,
Bristle Fern	Trichomanes brevisetum		"
Tunbridge Film Fern .	{HymenophyllumTun- bridgense	Damp rocks	.,
Wilson's do	Wilsoni	Do	
Moonwort	Botrychium lunaria	Hill pastures. Local	"
Adder's tongue	Ophioglossum vulgatum	pastures	

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### 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 pupp 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.

Popular Name.	Scientific Name.	Ova.	Larva.	Pupa.	Food-plants.
BUTTERFLIES.					(Tumin ashbasa fa
Small White	Pieris rapæ	5 & 8	6 & 9	7&9-4	{Turnip, cabbage, &c., and nasturtium.
Brimstone, or Sul-}	$Gone ptery x\ rhamni$	4	6, 7	7	Buckthorn.
Clouded Yellow H	Colias Edusa	9-5	6, 7	8	{ Lucerne, Dutch clover, trefoils, &c.
Pale do. do H	" Hyale	5	7	8	Melilot, clover, lucerne.
Queen of Spain } Fritillary	Argynnis Latona .	8, 9	8-5	6, 7	{Dog and sweet violets, wild heartsease, sain- foin, borage.
Comma H	Vanessa C-album .	5 & 7	5 & 8	6 & 9	{Nettle, elm, willow, hop, sloe, & currant.
Small Tortoise-}	" urticæ .	4, 5 & 7	5,6&8	6 & 8	Nettle.
Large do H	" polychloros	5 s 10	s 10-5, 6	7	{ Elm, aspen, osier, wil- low and fruit trees.
Camberwell Beauty H}	" Antiopa .	5	6, 7	7	{Birch, poplar, willow, and nettle.
Peacock H	" Io	4-5	6, 7	7	Nettle.
Red Admiral . H	" Atalanta .	5	6,7	7 7-9	Do. ∫Thistles, nettle, mal-
Painted Lady . H	,, cardui . (Cænonympha)		6-9		low, and scarlet bean.
Small Heath	2 Pamphilus. 5	5	5,6 & 8	4 & 7	Grasses.
Small Copper	{Polyommatus Phlæas }	6 & 10	5-8 & 10-4	4 & 10	Ragwort, dock, sorrel.
Long-tailed Blue . Common do	Lycæna bætica ,, Alexis	5 & 9	7-9 4 & 8	5 8 8	Bladder senna. Birdsfoot trefoil.
MOTHS.					
Convolvulus Hawk	Sphinx convolvuli .	-	7	-	Small convolvulus and balsam.
Spotted Elephant?	Deilephila Eu- }	-	8, 9	-	Cypress spurge and sea spurge.
do	, phorbiæ . 5 ,, lineata	-	6, 7	-	Bedstraws.
Sharp-winged do Oleander do	Chærocampa celerio nerii.	-	8, 9	=	Do. Oleander.
Humming - bird	Macroglossa stel-}	5	8, 9	-	Hedge bedstraw.
do H) Crimson - speckled } Footman	Deiopeia pulchella.	-	7		{ Field forget-me-not, or scorpion-grass.
Vapourer	Orgyia antiqua .	9-7	7-9	8, 9	Willow, oak, rose, fruit trees, &c.
Grey Eggar	Trichiura cratægi.	9-3	5, 6	7	{Hawthorn, sloe, sallow, oak, birch, plum.
Brimstone	Rumia cratægata .	4 & 9	6 & 9-3	-	Hawthorn, sloe.
Large Thorn	Ennomos alniaria .	9-5	7,8	8	{Alder, birch, beech sallow.
Canary - shoul- dered do.	" tiliaria .	9-5	6, 7	8	Oak, birch, sallow, alder
Dusky do	" fuscantaria	9-5	6, 7	87	Ash, privet. Oak, birch, &c.
September do	" erosaria . " angularia .	9-5 9-4	6 6-8	6, 7	Oak, ash, birch, beech.
Belted Beauty	Nyssia zonaria .	-	5, 6	6-9	Sea reed. Yarrow, mugwort
Mullein Wave	Acidalia promutata	-	7-5	5 5	{ creeping cinquefoil. Knotgrass.
Lesser Cream do Belle	,, immutata. Sterrha sacraria .	8	8-5 6 & 9	-	Dock, chamomile.
Autumnal	{Oporabia fili- grammaria }	9-2	2-4	-	Sallow, bilberry.
Pine Carpet Bedstraw Chalk do.	Thera firmata . Melanippe galiata	=	4, 5 7 & 9	8 & 9-4	Larch and Scotch fir. Smooth heath bedstraw
Gem H	{Camptogramma } {fluviata . }	7	8	9	{Spotted persicaria groundsel.
Many-lined	S Phibalapteryx 2	-	-	-	The second s
Silky Tissue . H	) polygrammata § Scotosia dubitata .	4	6	7	Buckthorn.

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### INSECTS.

### SEPTEMBER-INSECTS.

### INSECTS (continued).

Popular Name.	Scientific Name.	Ova.	Larva.	Pupa.	Food-plants.
MOTHS.	1.1.1				
Parrot Carpet. H	Cidaria psittacata.	-	7, 8	9	Oak, lime, apple, rose. Oak, birch, alder,
Autumn Green }	" miata .	-	8	9	? willow, poplar.
do H5 Dark Marbled do	" immanata	8-3	5-7	7, 8	Birch, alder, bilbenty, strawberry.
Agate	. testata .	8-4	5	6	Birch, poplar, sallow.
Mallow	Eubolia cervinaria	10-4	6, 7	8	Mallow, hollyhock. (Perforated St. John's-
Treble-barred	Anaitis plagiata .	-	7 & 10-4	-	l wort.
Streak	Chesias spartiata .	10-4	5, 6	-	Broom. S. a cannibal in confinement.
Scalloped Hook-}	certula )	6 & 9	6 & 9		Birch.
Figure of 8	{Diloba cæruleo-} { cephala . }	9	5, 6	7, 8	Hawthorn, sloe, appre.
Lesser Lutestring .	{Cymatophora }	-	5, 6	7	Oak, birch.
Marbled Beauty B	Bryophila perla .	-	10-5	• 5, 6	Lichens.
			7-9	8-4	{ Alder, willow, oak, lime, elm, nut, beech,
Alder	Acronycta alni .	-		1.37.1	C birch, &c.
Yellow Wainscot .	Leucania vitellina.	-	10-2	-	Grasses. S Plantain, chickweed,
Ochreous Brown .	", lithargyria	-	1-5	5, 6	{ grasses, &c.
Lunar White-spot .	" albipuncta.	-	=	-	THE CONTRACTOR OF THE OWNER OWNE OWNER
Peppered Wainscot Pure do.	" extranea . " L-album .	-	=	=	
	Nonagria fulva .	-	5, 6	-	In stems of reed, meadow-grass, and
Bullrush	" typhæ .	-	7,8	8	( sedge. In stems of reed mace.
	7.4	9	10-6	7	JIn stems of reed below
Large Wainscot .	" tutosa .	5	10.0		(In stems of burdock,
Frosted Orange .	Gortyna flavago .	9	7, 8	8, 9	thistles, foxglove, alder, &c.
Golden Ear	Hydræcia nictitans	-	5, 6	7	Roots of coltsfoot, rush.
Butter-bur	" petasitis	-	6, 7	7,8	{In stems and roots of butter-bur & burdock.
Rosy Rustic	" micacea.	- 1	5-7	7,8	Sedge and roots of horsetail and dock.
Feathered Brindle .	{Aporophyla aus-} tralis}	10	10-4	-	Annual meadow-grass
Willow }	Laphygma exigua.	7	8-9	-	Plantain.
Feathered Gothic .	{Heliophobus popularis }	-	4, 5	6, 7	Roots of grasses.
Beautiful do	" hispidus .	-	11	-	{Plantain, lettuce, grasses.
Antler B	Charæas graminis.		6	7,8	Roots of grasses.
Lesser Flounced	Luperina testacea .	-	3	-	Grass-stems.
Turf Rustic	,, cespitis .	-	4-6	-	Grasses.
Rosy Minor	Miana literosa .	-	5,6	-	Slender foxtail grass.
Haworth's do	Celæna Haworthii.	-	6,7	7,8	Cotton grass.
Mottled Beauty .	( cularis . )	8	9-4	5-7	Grasses, &c.
Dart }	Agrotis puta	8	9-12	-	{Dandelion, knotgrass, lettuce, &c.
Dark Sword-grass H	" suffusa .	4	5-7	-	Roots of lettuce and spinach.
Pearly Underwing.	" saucia .	_	11-1&	_	CPlantain, dock, and
White-lettered Dart			7,8	6, 7	{ other low plants. Heather.
					(Sea sandwort, chick
Portland	,, præcox .	-	5-7	7	weed, and dwarf willows.
Autumnal Rustic .	Noctua glareosa .		6	-	Broom, dock, sorrel.

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Popular Name.	Scientific Name.	Ova,	Larva.	Papa.	Food-plants.
MOTHS.					
Setaceous Hebrew ?	Noctua C-nigrum	_	4 & 10	_	SPea-stems and low
Character . Bj Barred Chestnut .	" Dahlii.	_	9-5	=	l plants. Low plants.
Neglected Rustic .	" neglecta .	-	10-5	-	Birch, sallow, heath.
Square-spot do	", xanthographa	8, 9	10-5	6, 7	Plantain and many low
Red-line Quaker . Yellow Line do.	Orthosia lota macilenta	10	4-6	7,8	l plants. Willow and sallow.
Flounced Rustic .	Anchocelis rufina .	-	4, 5	6-8	Birch, beech. Oak.
Pale - headed Chestnut . }	" pistacina	-	4-6	6-8	Dock, buttercups, &c.
Lunar Under-wing.	" lunosa .	10	10-4	-	Grasses.
Brown-spot Pinion.	" litura .	-	5, 6	7, 8	{Oak, willow, alder,
Chestnut H	Cerastis vaccinii .	-	6, 7	-	{ meadow-sweet. Oak, elm, willow, sallow.
Dark do H	" spadicea.	-	5, 6	-	{Hawthorn, sloe, and honeysuckle.
Red-headed do. H	, erythrocephala	-	5	-	Low plants.
Large do H	{ Scopelosoma sa-}	3	5, 6	7,8	Oak. A cannibal in confinement.
Dotted do H	{Dasycampa rubi- ginea	3	5-7	-	Apple and low plants.
Orange Upper-}	Hoporina croceago	4	5, 6	7	Oak.
Orange Sallow .	Xanthia citrago .	-	5, 6	8	Lime.
Lemon do Pink Barred do	" cerago . " silago .	Ξ	4, 5	8	Sallow. Do.
Barred do	" aurago .	-	5, 6	8	Beech.
Ruddy do	" gilvago .	-	5, 6	8	Wych elm. Sallow, wych elm,
Mottled do	,, ferruginea	-	4-6	7, 8	( aspen.
Centre-bar do	{Cirrhædia xe-} {rampelina .}	8, 9	10-7	7, 8	Ash.
Small Olive Angle - striped )	Tethea retusa	9	5, 6	6, 7	Poplar, willow, sallow.
Sallow }	Euperia fulvago .	-	6	7	Oak, birch.
Dusky Sallow . B	{Eremobia ochro-}	-	5, 6	6, 7	Cocksfoot grass.
July Chi	Polia chi	-	4, 5	6	Sallow, hawthorn, hawkweed, dock, let- tuce, sow-thistle.
Black-banded	{ ", xanthomista } { "(nigro-cincta N) }	-	6, 7	7	Campion, harebell, vio- let, and sea-plantain.
Large Ranunculus .	,, flavicincta .	9, 10	6, 7	7,8	{Groundsel, chickweed, mint, and plum.
Olive Rustic . H	Dasypolia templi .	3	4-7	8	Cow-parsley.
Smoky do B	Epunda lutulenta.	10	10-4	-	Corn Gromwell. (Hedge bedstraw, plan-
Dusky Nutmeg . Feathered Ranun-)	,, nigra .	-	5, 6	7	tain, grasses. Ragwort, and low
culus } Green - Brindled }	" lichenea . Miselia orracantha	10	11-7	6, 7 8	{ plants on coast.
Crescent 5	Miselia oxyacanthæ Agriopis aprilina .	-	5-7	7-9	Hawthorn, sloe. Oak.
Marvel-de-jour . Angle-shades	S Phlogophora me-	-	6, 7 11-4		Broom and many low
Scarce do	( ticulosa )	9, 10	11-4	_	} plants. Pilewort.
Great Brocade	Aplecta occulta :	5, 10	4, 5	6	Plantain, primrose.
Brindled Green .	Hadena protea .	-	5, 6	7	Oak. Goosefoot and prickly
Scarce Shears	,, peregrina. (Cloantha solida-)	-	5-7	7	altwort. Bilberry, hawthorn.
Shepherd's Purse .	l ginis S		5, 6	7	Poplar, and various
Red Sword-grass H	Calocampa vetusta	3, 4	4-6	8	(Scabious, rest-harrow
Common do H	,, exoleta .	4	4-7	8	¿ campion, dock.
Obscure Dagger .	Xylina zinckenii .	-	5, 6	- 1	Sweet gale.

### INSECTS (continued).

#### SEPTEMBER-PLANTS.

Popular Name. Scientific Name. Ova. Larva, Pupa. Food-plants. MOTHS. Tawny Pinion H Xylina conformis . 3 5, 6 7,8 Birch and alder. Grey Shoulder- ? 5-7 7,8 rhizolitha Oak. · H ... . knot 8, 9 8, 9 Dark Pinion H Ash and willow. Oak, birch, and lime. 7 5-7 semibrunnea ... Pale do. . Ĥ 5 { Heliothis marpetrificata . Rest-harrow, henbane, Bordered Sallow 7,8 9-6 \_\_\_\_ ginata. sea sandwort. 7, 86, 76-8Bordered Straw peltigera . Rest-harrow, henbane. \_ ., Scarce do. do. . Four Spot. . 7, 8 Wild mignonette. armigera. 6 Acontia luctuosa . Small convolvulus. Nettle, hop, and low Silver Y . Plusia gamma 4-9 -\_ plants. 7,8 Herald H Gonoptera libatrix 6, 7 Poplar, willow, sallow. . {Amphipyra py-} ramidea. Copper Underwing 5, 6 7,8 Oak, elm, willow, birch. Hawthorn and low Mouse . " tragopogonis 5, 5 7, 8 plants. Anomalous . . . Clifden Nonpareil . Red Underwing . 1, 2 Stilbia anomala Grasses. 8 Ash, poplar, Willow, poplar. Catocala fraxini -. 5-7 7, 8 nupta ,, .

INSECTS (continued).

#### PLANTS.

Popular Name.	Scientific Name.	Localities.	Duration.
Pheasant's Eye	Adonis autumnalis	Cornfields	Annual.
Pale Hairy Buttercup .	Ranunculus hirsutus	(Meadows and waste)	Aunuca.
Shepherd's Purse		ground j	"
Purple Sea Rocket	Capsella Bursa-pastoris Cakile maritima	A common weed Sandy sea-shores	,,
Wart Cress, or Swine's )			"
Cress	Senebiera coronopus .	A common weed	>>
Lesser do. do. Creeping Yellow Cress.	didyma	Do	_ "
Annual do. do.	Nasturtium sylvestre .	Watery places .	Perennial.
Wall Rocket	Diplotaxis tenuifolia .	Walls, quarries, &c.	Annual. Perennial.
Pansy, or Heartsease	Viola tricolor	Cultivated fields .	Annual.
Grass of Parnassus	Parnassia palustris .	Bogs	Perennial.
Six-stamened Water-	Elatine hexandra	(Wet sandy places and )	Annual.
Eight-stamened do.	,, Hydropiper .	bo. Rare	annuun.
Soapwort	Saponaria officinalis .	Cultivated ground	Perennial.
Sea Campion	Silene maritima	(Sea-shore and moun-)	r or on minan.
Spurrey		i tain streams .	"
Chickweed .	Spergula arvensis	Cornfields	Annual.
	sicuria meara	(Limestone mountains)	,,
Fringed Sandwort	Arenaria ciliata	in Ireland. Very	Perennial.
Sea do.		( rare )	- or cannan
Narrow-leaved Mouse-	" marina	Sandy sea-shores	Annual.
ear	Cerastium viscosum .	Fields and roadsides .	Perennial.
Broad-leaved Moun-	Tatifalian	35	
tain Chickweed .	" latifolium .	Mountains	"
Dwarf Mallow	Malva rotundifolia .	{Roadsides and waste }	Annual.
Tronda		Rocks and cliffs on	annual.
Tree do	Lavatera arborea	{Rocks and cliffs on { sea-coasts. Rare	Biennial.
Marsh do.	Althæa officinalis	Marshes near sea	Perennial.
Large - flowered St. }	Hypericum calycinum .	Bushy places	- or
			"
Bearded do	" barbatum .	{Perthshire. Doubtful }	

### PLANTS (continued).

Popular Name.	Scientific Name.	Localities.	Duration.
Herb Robert	Geranium Robertianum	Road-sides and hedges .	Annual
Shining Crane's-bill .	,, lucidum .	Walls and stony places .	,,
Small-flowered do Stork's-Bill	Erodium cicutarium	Fields and waste places.	,,
		Do ∫ Sandy sea-shores, and į	"
Sea do	" maritimum .	at Dartmoor. Scarce f	Perennial.
Yellow Wood Sorrel .	Oxalis corniculata .	{Damp places in West } of England. Rare }	Annual.
Dwarf Furze Hairy Greenweed	Ulex nanus Genista pilosa	Heaths	Shrub.
Rest Harrow	Ononis spinosa	J Heaths and dry com-	". Perennial.
White or Dutch Clover, }		1 mons 5	
or Trefoil	Trifolium repens	Meadows	"
Purple do	" pratense .	Do	"
Hare's-foot Trefoil	" arvense	fields	Annual.
Dropwort	Spiræa Filipendula .	Dry pastures	Perennial.
White-rock Cinquefoil. Burnet	Potentilla alba Sanguisorba officinalis.	Mountains Damp meadows	,,
Evening Primrose.	Enothera biennis	Waste ground	Biennial.
Strapwort	Corrigiola littoralis .	Sandy wastes. Rare .	Annual.
Rupture-wort	Herniaria glabra	Sandy places	Perennial.
Yellow Mountain ) Saxifrage	Saxifraga aizoides	Boggy places on mountains .	,,
Alpine Brook do.	., rivularis .	Damp rocks	,,
Sea Hog's Fennel	Peucedanum officinale .	Salt marshes. Rare .	,,
Smooth Heath Bed-	Galium saxatile	Heaths	"
Small Teazle	Dipsacus pilosus	Damp shady places	Biennial.
Devil's-bit Scabious .	Scabiosa succisa	Heaths and pastures .	Perennial
Sow Thistle	Sonchus oleraceus	A common weed	Annual.
tuce	Prenanthes hieracifolia	Near Forfar	,,
Dandelion	Leontodon Taraxacum.	A common weed	Perennial.
Autumnal Hawk-bit . Shrubby Hawkweed .	Apargia autumnalis . Hieracium sabaudum .	Meadows	"
Narrow-leaved do.	umbellatum.	Dry woods.	"
Smooth Hawk's Beard .	Crepis tectorum	Walls and dry places .	Annual.
Long-rooted Cat's Ear .	Hypochæris radicata .	Meadows	Perennial.
Chicory, or Succory .	Cichorium Intybus	and way-sides .	,,
Saw-wort	Serratula tinctoria .	Woods	
Nodding Bur Marigold.	Bidens cernua	Ditches	Annual.
Common do Goldilocks	,, tripartita Chrysocoma Linosyris .	Do	Perennial.
Cotton-weed	Diotis maritima	Sandy shores	,,
Sea Wormwood	Artemisia maritima	Sea-shore	Annual
Marsh Cudweed	Gnaphalium uliginosum Conyza squarrosa	Watery places	Annual. Biennial.
Spikenard Canada Flea-bane	Erigeron Canadense .	Waste ground	Annual.
Groundsel	Senecio vulgaris	A common weed	D. P. Lat
Marsh Ragwort	" aquaticus	Wet places	Perennial
Sea Starwort, or Sea	Aster tripolium	salt-marshes	; "
Golden-rod	Solidago virgaurea .	Woods and heaths	,,,
Flea-bane	Pulicaria dysenterica .	Ditches	Annual.
Small do.	(Doronicum Parda-)		I and the second
Common Leopard's-	lianches S	Damp woods	Perennial
Daisy	Bellis perennis	Pastures	Annual
Corn Feverfew	Pyrethrum inodorum . Anthemis nobilis	Fields	Perennial
Common Chamomile .		(Dry hill - pastures.)	
Golden Milfoil		Scarce S	"
Brown Knapweed .	mirma	Pastures and way-sides .	"
Black do	Calaitrana	Waste places. Local .	Annual.
Star Thistle	" cucurupte .		

#### SEPTEMBER-PLANTS.

### PLANTS (continued).

Popular Name,	Scientific Name,	Localities.	Duration.
Burweed	Xanthium strumarium.	Waste places	Annual.
Blue-bell, or Hare-bell.			Perennial.
Acrid Lobelia	Lobelia urens	Devonshire heaths	AND DESCRIPTION OF
Cross-leaved Heath .	Erica Tetralix	Heaths	Shrub.
Common do Ling, or Heather	Calluna vulgaris	Do	>> >>
St. Dabeoc's Heath .	Menziesia polifolia .	West of Ireland	
Strawberry Tree	Arbutus unedo	South of do.	Tree.
Centaury	Erythræa centaurium . Gentiana Amarella .	Dry pastures Limestone pastures	Annual.
T21-13 3-		Hill-pastures, espe- )	"
Yellow-wort		Challen bills	"
Comfrey	Chlora perfoliata Symphytum officinale .	Chalky hills	Perennial.
Thorn Apple	T. 1	{ Waste ground. Not }	Annual.
		a native	Annual.
Garden Nightshade . Branched Broom Rape.	Solanum nigrum Orobanche ramosa	A common weed	Perennial.
Germander Chickweed	Veronica agrestis	A common weed	Annual.
Grey Speedwell	" polita	Do	**
Red Eye-bright	, Buxbaumii . Bartsia Odontites .	Fields .	"
Common do.	Euphrasia officinalis .	A common weed Dry pastures	"
Snapdragon	Antirrhinum majus .	Old walls. Not native .	Perennial.
Ivy-leaved do., or Toad-flax	Linaria Cymbalaria .	Do. do	
Fluellen, or Toad-flax .		Dur flalds	", Annual.
Sharp-leaved do.	", Elatine .	Dry neids	Annual
Creeping do	repens	Rocks near sea	Perennial.
Mudwort	Limosella aquatica .	Muddy places .	Annual.
Dark Mullein	Sibthorpia Éuropæa . Verbascum nigrum	Damp places. Local . Hedge banks	Perennial.
Moth do	Blattaria	Do. Rare	Annual.
Gipsy-wort	Lycopus Europæus.	Ditches and pool-sides .	Perennial.
Wild Clary	Salvia verbenaca	{ Dry fields and hedge- }	,,
Horse Mint	Mentha sylvestris	banks	
Round-leaved do	" rotundifolia .	Do	"
Spear do	" viridis	Do	**
Bergamot do.	,, piperita	Do Wet places. Rare .	"
Water, or Hairy do.	" hirsuta	Wet places. Rare .	"
Red do	" rubra	Do	"
Bushy Red do.	" gentilis	Pools	"
Penny-royal	,, arvensis ,, Pulegium	Cornfields . Wet places Naturalised	,,
Wild Thyme	Thymus Serpyllum.	{Heaths and hedge- }	"
	ingmus scrpyttum	{ banks }	"
Germander, or Wood ) Sage	Teucrium Scorodonia .	Woods and commons .	"
Wall do.	,, Chamædrys .	Old walls. Naturalised .	
Red Hemp Nettle	Galeopsis Ladanum .	Dry fields	Annual.
White Dead Nettle . Spotted do.	Lamium album	Hedges and waysides	Perennial.
Red do.	" maculatum . " purpureum .	Hedge-banks. Rare . A common weed .	Annual
Downy Woundwort	Stachys Germanica	Fields.	Annual. Perennial.
Pale do.	" annua .	Do. Rare	Annual.
Cat Mint	Nepeta Cataria Marrubium vulgare	Hedge-banks	Perennial.
Calamint.	Calamintha officinalis .	Waste places	"
Intermediate Bladder-	Utricularia intermedia.		**
Small do.		Water. Rare	**
Sow-bread	Cyclamen hederifolium.	Pools on moors	,,
Scarlet Pimpernel.	Anagallis arvensis.	Woods. Local	Annual.
Beet	Beta maritima	Muddy sea-coasts	Perennial.
Upright Goosefoot	Chenopodium urbicum .	(Dunghills and waste)	Annual.
Clustered do		Sandy places. Rare	aunual.
	" ootryoides	sandy places. Rare .)	

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### PLANTS (continued).

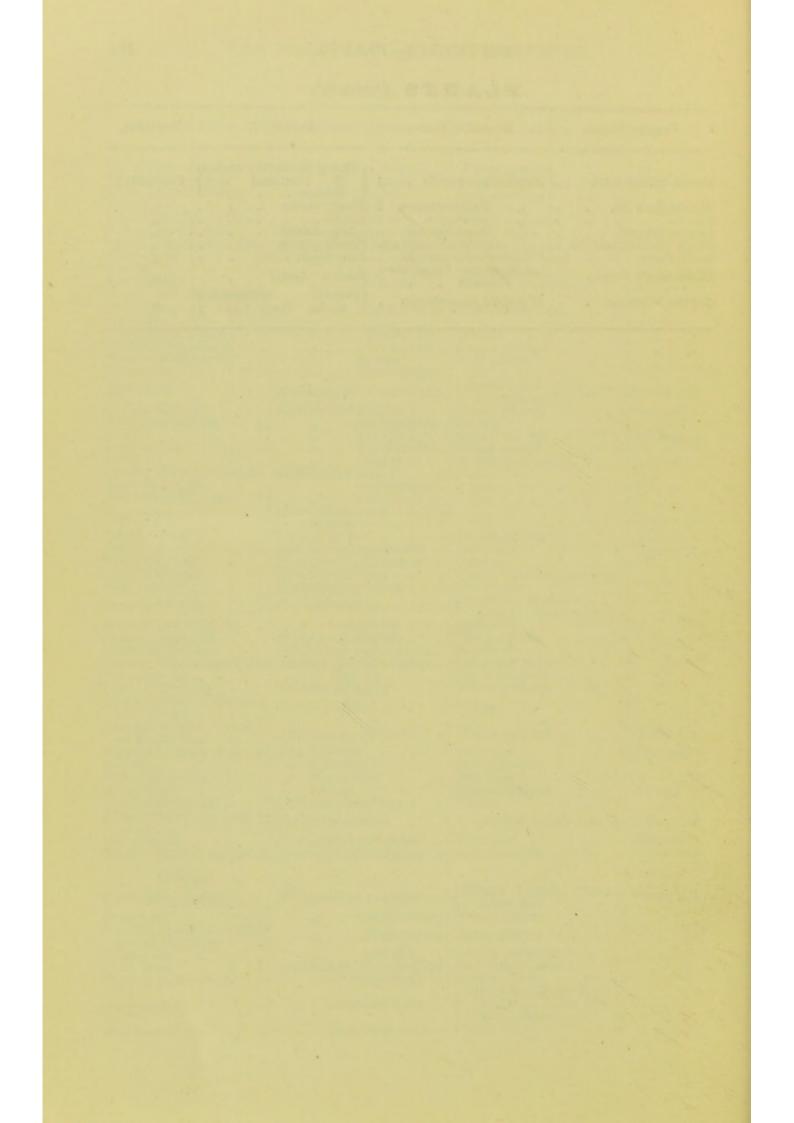
Popular Name,	Scientific Name.	Localities.	Duration.
	<u></u>		
Nettled-leaved do.	Chenopodium murale .	Waste ground	Annual.
White do	Atriplex littoralis	A common weed Salt marshes	,,
Marsh do.	Arripiex intoraits	Manahan	,,
Triangular-leaved do.	" pedunculata . " deltoidea	Waste ground	,,
Perennial Knawel.	Scleranthus percnnis	Sandy fields	Perennial.
Bistort, or Snakeweed .	Polygonum Bistorta .	Damp meadows	rerenman
Knot-grass	ani ani ana	A common weed	Annual.
Sea do.			Perennial.
Buckwheat	", Fagopyrum	Fields. Naturalised .	Annual.
Black Bindweed, or Climbing Buck-	Connolmularo	A common weed	
wheat ) Copse Buckwheat	dumatamum	Woods	"
Spotted Persicaria	", Persicaria .	Damp ground	**
Small Creeping do	" minus	Wet places	
Biting do	" Hydropiper.	Do	
71 (1)		(Ruins and thickets.)	Perennial.
Birthwort	Aristolochia Clematitis.	i Naturalised 5	Perenniai.
Purple Spurge	Euphorbia Peplis	Sandy shores	Annual.
Broad-leaved do	" platyphylla.	Fields	- "
Sea do	" Paralias .	Sandy shores	Perennial
Portland do	" Portlandica	South coast	4
Petty do.	" Peplus	A common weed	Annual.
Spring Water Starwort		Pools	,,
Stalked do. do	, pedunculata	Do	**
Autumnal do. do	, autumnalis.	Do	,,
Hornwort	{Ceratophyllum sub-}	Do	Perennial
Small Nettle	Urtica urens	Waste ground	Annual.
Th-1174	Parietaria officinalis	Old walls	Perennial.
Water Thyme	Eudorea Canadensis .	Canals	17
Lady's Tresses	Neottia spiralis	Chalk hills and pastures	
Bog Orchis	Malaxis paludosa	Peat-bogs	
		(Saffron - Walden, )	
Saffron Crocus	Crocus sativus	{ Essex. Naturalised )	"
Naked-flowering do	" nudiflorus	Meadows	**
Autumnal Squill	Scilla autumnalis	Dry pastures	,,
Meadow Saffron	Colchicum autumnale .	Meadows	.,,
Lesser Water-Plantain	Alisma ranunculoides .	Bogs and pools	"
Creeping do	,, repens	Pools in Wales	"
Least Club-rush	Scirpus setaceus	Watery places	"
Close-headed Moun-	Carex Vahlii	Rocks	"
Slender Foxtail Grass,	Alopecurus agrestis .	Waste ground	Annual.
or Black Bent . )	Poa distans	Pastures	Perennial
Reflexed Meadow-grass	manitima	Salt marshes	,,
Sea do	0.000000000	Dry places.	
Annual do.	,, compressa	Waste ground	Annual.
Rye Brome-grass .	Bromus Secalinus	Fields	"
Couch-grass, or Dog-}	Triticum repens	A common weed	Perennial
grass ) Hard-grass	Lepturus incurvatus .	Sea-coast	Annual.
Many-spiked Cord-grass	The second second second	Salt marshes	Perennial
FERNS.		(Mossy banks, damp)	Perennial
Common Polypody .	Polypodium vulgare .	7 rocks, &c	rerennia
Welsh do.	cambricum.	Shady banks	.,
Smooth three-branched	Duvonterio		A PARTY OF
do., or Oak-fern .	" Dryopteris.		"
Alpine do	" alpestre .	Scotch mountains	"
Lady-fern	Asplenium Filix-famina	Wet shady places	"
Forked Spleenwort .	" septentrionale .	ROCKS, Rare	"
- or new operation of the		(Shady rocks in Scot-)	1000
	alternifolium .	} land and Lake Dis- {	
Alternate do	. Ruta-muraria .	( trict. Rare )	

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#### SEPTEMBER-PLANTS.

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

PLANTS (continued).



## 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.

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

INSECTS.

#### Popular Name. Scientific Name. Ova. Larva, Pupa, Food-plants. BUTTERFLIES. Elm, aspen, osier, wils. 10-5 Large Tortoise-7 Vanessa polychloros 5, 8 10 shell . . H & 6 low, and fruit trees. Camberwell Birch, poplar, willow, 6, 7 Antiopa 5 7 ,, HS Beauty and nettle. . Peacock 6, 7 77 Nettle. H Io 4, 5 ,, 6, 7 Red Admiral Atalanta H 5 Do. ... f Thistles, nettle, mallow, Painted Lady . H 6 6-9 7-9 cardui ,, and scarlet bean. 5-8 & Polyommatus B 6 & 10 Small Copper . 4 & 10Ragwort, dock, sorrel. Phlæas. 10-4 MOTHS. Death's-head Hawk Acherontia Atropos 9, 10 9-6 Potato. {Macroglossa stel-} {latarum . } Humming-bird do. . . . H 5 8, 9 Hedge bedstraw. Willow, oak, rose, fruit 7 - 9Vapourer . Orgyia antiqua 9-78, 9 . . trees, &c. Alder, birch, beech, 7,8 8 9-5 Large Thorn . Ennomos alniaria. sallow. Feathered do. . 5 8, 9 10-4Oak, hawthorn. Himera pennaria . 5, 6 H 6-9 Sea-reed. Belted Beauty . Nyssia zonaria 8 6 & 9 Dock, chamomile. Belle . . Sterrha sacraria { Hibernia auran-} 11-3 6, 7 7-9 Oak, birch, hawthorn. Golden Umber . tiaria . JOak, nut, sloe, haw-" defoliaria . 11-3 5 7-11 E Mottled do. thorn, elm, birch. Northern Winter? 11-3 6 Birch. Cheimatobiaboreata Moth 5, 6 November Moth Oporabia dilutata. 11-3 7 - 10Oak. 8, 9 Juniper. Thera juniperata 9 Juniper Carpet . Camptogramma Spotted persicaria, 7 8 9 Gem . . groundsel. . fluviata 6 7 Buckthorn. Silky Tissue Scotosia dubitata 4 . 7,8 Oak, lime, apple, rose. Cidaria psittacata. 9 Parrot Carpet . Oak, birch, alder, wil-low, poplar. 8 9 miata. Autumn Green do. . 10-4 6, 7 8 Mallow, hollyhock. Eubolia cervinaria Mallow Broom. S. a cannibal 10 - 45, 6 Chesias spartiata . Streak in confinement. Petasia cassinea 11-4 5, 6 7 - 10Oak. Sprawler . . Ptilophora plu-} Maple, sycamore. 11-4 5, 6 Plumed Prominent ---migera. Leucania vitellina. 10-2Grasses. Yellow Wainscot -S Plantain, chickweed, 1-5 5, 6 " lithargyria Ochreous Brown H grasses, &c. -L-album . \_ Pure Wainscot .. In stems of reed below 7 10-69 Nonagria lutosa Large do. . ground. Sedge, and roots of Hydræcia micacea. 5-7 7,8 -Rosy Rustic . horsetail and dock. {Aporophyla aus-} Annual meadow-grass, 10 10-4Feathered Brindle . tralis . . succory. Small Mottled Wil- ? Plantain. 7 8, 9 \_ Laphygma exigua. 10W . {Caradrina cubi-. . 8 5-7 Grasses, &c. 9-4 Mottled Beauty Roots of lettuce and 4 5-7 Agrotis suffusa spinach. Dark Sword-grass H (Plantain, dock, and 11-1 & \_ saucia other low plants. Pearly Under-wing ... 7,8 7.8 Willow and sallow. 10 Orthosia lota Red Line Quaker . Birch, beech. 4, 5 6-8 macilenta . \_ Yellow Line do. Oak. Anchocelis rufina . Flounced Rustic Pale-headedChest-6-8 Dock, buttercups, &c. 4-6 pistacina \*\* nut . Grasses. 10-4 10 lunosa . Lunar Underwing . ...

#### INSECTS (continued).

#### OCTOBER-PLANTS.

Ι	N	S	E	C	T	S	(	cont	inu	ed)	
-		~	-	~	-	~					

Popular Name,	Scientific Name.	Ova.	Larva.	Pupa,	Food-plants.
BUTTERFLIES.				-	
Chestnut H	Cerastis vaccinii .	-	6, 7	-	Oak, elm, willow, sallow
Dark do H	"spadicea	-	5, 6	-	S Hawthorn, sloe, and
Red-headed do. H	., erythrocephala	_	5	_	l honeysuckle. Low plants.
Large do H	{Scopelosoma sa-}	3	5, 6	7, 8	{Oak. A cannibal in { confinement.
Dotted do H	{Dasycampa rubi- ginea }	3	5-7	-	Apple and low plants.
wing H	Hoporina croceago	4	5, 6	7	Oak.
Pink Barred Sallow	Xanthia silago .	-	4-6	8	Sallow.
Barred do	" aurago .	-	5,6	8	Beech.
Dive Rustic . H	, ferruginea Dasypolia templi .	3	4-6 4-7	7,8	Sallow, wych elm, aspen. Cow-parsley.
Dusky Nutmeg .	Epunda nigra .	-	5, 6	7	{Hedge bedstraw, plan- tain, grasses.
Crescent . }	{Miselia oxya-} {canthæ . }	-	5-7	8	Hawthorn, sloe.
farvel-de-jour .	Agriopis aprilina .	-	6, 7	7-9	Oak.
ingle-shades	{Phlogophora me-}	-	11-4	-	{Broom, and many low plants.
carce do	" empyrea .	9, 10	11-5	-	Pilewort.
ted Sword-grass H	Calocampa vetusta	3, 4	4-6	8	Poplar, and various plants.
ommon do H	" exoleta	4	4-7	8	Scabious, rest-harrow,
awny Pinion. H	Xylina conformis .	3	5, 6	7,8	( campion, dock. Birch and alder.
knot H	" rhizolitha .	-	5-7	7.8	Oak.
ark Pinion . H	" semibrunnea	_	7	8,9	Ash and willow.
ale do H	" petrificata .	5	5-7	8,9	Oak, birch, and lime.
ilverY	Plusia gamma .	-	4-9	-	SNettle, hop, and low
erald H	Gonoptera libatrix.	_	6, 7	7,8	C plants. Poplar, willow, sallow.

#### PLANTS.

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

### PLANTS (continued).

Popular Name.	Localities.	Scientific Name,	Duration.
Groundsel Marsh Ragwort	Senecio vulgaris	A common weed Wet places	Annual. Perennial.
Designe	Bellis perennis	Pastures	,,
Golden Milfoil	Achillea tomentosa.	Dryhill pastures. Scarce	.,
Yellow Star-thistle . Common Heath	Centaurea solstitialis . Erica cinerea	Waste places	Annual.
Ling, or Heather	Calluna vulgaris .	Heaths and moors .	Shrub.
Strawberry-tree	Arbutus Unedo	South of Ireland .	Tree.
Ivy - leaved Snap- )	Linaria Cymbalaria .	Walls. Not native	Perennial
dragon, or Toad-flax ∫	and the second se		Ferenman
Cornish Money-wort	Sibthorpia Europæa . Verbascum nigrum .	Damp places. Local .	.,,
Dark Mullein Moth do	Blattaria .	Hedge-banks Do. Rare	Annual.
		f Dry fields and hedge- )	
Wild Clary	Salvia Verbenaca	banks	Perennial.
Wall Germander	Teucrium Chamædrys .	Old walls. Naturalised.	
Red Hemp-nettle White Dead-nettle .	Galeopsis Ladanum .	Dry fields	Annual. Perennial.
Spotted do	Lamium album maculatum .	Hedge-banks. Rare .	and the second se
Red do	, purpureum .	A common weed	Annual.
White Goose-foot	Chenopodium album .	Do	,,
Grass-leaved Orache .	Atriplex littoralis	Salt-marshes	,,
Triangular-leaved do	,, deltoidea	Waste ground	Perennial.
Perennial Knawel . Knot-grass	Scleranthus perennis . Polygonum aviculare .	Sandy fields	Annual.
Sea do.	, maritimum	Sandy shores	Perennial.
Copse Buckwheat	dumetorum	Woods	Annual.
Spotted Persicaria .	, Persicaria.	Damp ground	**
Broad-leaved Spurge .	Euphorbia platyphylla.	Fields	"
Petty do Spring Water Starwort	Callitriche verna	A common weed Pools	**
Stalked do. do.	, pedunculata		
Autumnal do. do	autumnalis.	Do	,,
Small Nettle	Urtica urens	Waste places	n "
Pellitory	Parietaria officinalis .	Old walls	Perennial.
Water Thyme. Proliferous Lady's	Eudorea Canadensis .		"
Tresses	Neottia gemmipara .	Ireland	**
Naked-floweringCrocus	Crocus nudiflorus	Meadows	,,
Meadow Saffron	Colchicum autumnale .	Do	,,
Round - headed Club-	Scirpus Holoschænus .	Sea-shores	,,
Rush			Annual
or Black Bent	Alopecurus agrestis .	Waste ground	Annual.
Reflexed Meadow-grass	Poa distans	Pastures	Perennial.
Sea do	" maritima	Salt marshes	Annual.
Annual do	" annua	Waste ground	Amuai
FERNS.			
	Polypodium vulgare .	Mossy banks, damp	Perennial
		rocks, &c	
Welsh do	cambricum		"
Forked Spleenwort .	Asplenium septen-	THUCKS. THULO	**
	(	(Shady rocks in Scot-)	1
Alternate do	", alternifolium .	} land and Lake Dis-	
	Desta annuale	Shady rocks	
Rue-leaved do.	" Ruta-muraria " Trichomanes	De	,
Maidenhair do.	an comination	Rocks.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Black Maidenhair do.	Adiantum-nigrum	a Shady places	,
Scale Fern	. Ceterach officinarum	. 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 caeh 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 eggpiles 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.

#### Popular Name. Scientific Name. Ova. Larva. Pupa. Food-plants. BUTTERFLIES. Brimstone, or Sul-} phur . . H} Gonepteryx rhamni 4 6. 7 7 Buckthorn. Clouded Yellow H Lucerne, Dutch clover, Colias Edusa . 9-5 8 6. 7 trefoils, &c. Melilot, clover, lucerne, Pale do. do. H Hyale . 5 7 8 ... &c. Nettle, elm, willow, Comma . H Vanessa C-album . . 5 8 7 5 & 8 6 & 9 hop, sloe, and currant. Small Tortoiseн} urtica . 4, 5 & 7 5, 6 & 8 6 & 8 shell Nettle. ... . Large do. . f Elm, aspen, osier, wil-H polychloros 5, s10 s.10-5,6 7 12 low, and fruit trees. Camberwell Birch, poplar, willow, and nettle. Antiopa 5 7 6, 7 Beauty . HÌ •• Peacock н 6, 7 6, 7 777 Io. 4, 5 Nettle. ... Red Admiral . H Atalanta 5 Do. 29 Thistles, nettle, mallow, Painted Lady . H Cardui 6 6-9 7-9 ... and scarlet bean. MOTHS. Humming-bird н} § Macroglossa stel-5 8, 9 Hedge bedstraw. latarum Hawk December Moth Feathered Thorn Pæcilocampapopuli Poplar, oak, ash, lime. 11-38-10 5, 6 Himera pennaria . 10-48, 9 6-9 Oak, hawthorn. 5 Belted Beauty . H Nyssia zonaria 5, 6 Sea-reed. { Hibernia auran-) Golden Umber 11-3 6, 7 7 - 9Oak, birch, hawthorn. tiaria . Oak, nut, sloe, haw-Mottled do. " defoliaria . 11-35 7-11 thorn, elm, birch. ( Cheimatobia bru-) Oak and many other Winter Moth . 11-3 5, 6 7-12 . mata trees. Northern do, do, boreata 11-3 Birch. 6 . November Moth Oporabia dilutata. 11-3 5, 6 7 - 10Oak. Camptogramma Spotted persicaria, H Gem . 7 8 9 fluviata . Scotosia dubitata groundsel. Silky Tissue H 4 7 Buckthorn. 6 Parrot Carpet . H Cidaria psittacata ġ 7,8 -Oak, lime, apple, rose. GOak, birch, alder, wil-Autumn Green do.H miata 9 8 low, poplar. Sprawler . Petasia cassinea 11-4 Oak. . 7 - 105, 6 {Ptilophora plu-} Plumed Prominent 11-4 5, 6 Maple, sycamore. migera. Yellow Wainscot . Leucania vitellina. 10-2Grasses. Plantain, chickweed. Ochreous Brown H lithargyria 5, 6 ... 1-5 grasses, &c. Roots of lettuce and Dark Sword-grass H Agrotis suffusa 4 5.7 spinach. Cerastis vaccinii Chestnut . H . 6, 7 \_ Oak, elm, willow, sallow. \_\_\_\_ {Hawthorn, sloe, and honeysuckle. Dark do. . H " spadicea . 5, 6 Red-headed do. H "erythrocephala 5 Low plants. {Scopelosoma sa-} { tellitia . . . . } Oak. A cannibal in H 3 Large do. . 5, 6 7, 8 confinement. Dasycampa rubi-) 5 H Dotted do. 3 5-7 Apple and low plants. ginea . н} Orange Upper-Hoporina croceago 4 7 Oak. 5, 6 wing Olive Rustic H Dasypolia templi . 3 4-7 8 Cow-parsley. (Poplar and various Red Sword-grass H Calocampa vetusta 4-6 8 3, 4 plants. Scabious, rest-harrow, Common do. . H exoleta 4 4-7 8 •• campion, dock. Tawny Pinion. Xylina conformis . H 3 5, 6 7,8 Birch and alder. Grey Shoulder-H rhizolitha 5-7 7,8 Oak. \_\_\_\_ knot Dark Pinion H semibrunnea 7 8.9 Ash and willow. ., Pale do. . 5-7 H petrificata . 5 8, 9 Oak, birch, and lime. 7, 8 6, 7 Poplar, willow, sallow. H Gonoptera libatrix. Herald \_

#### INSECTS.

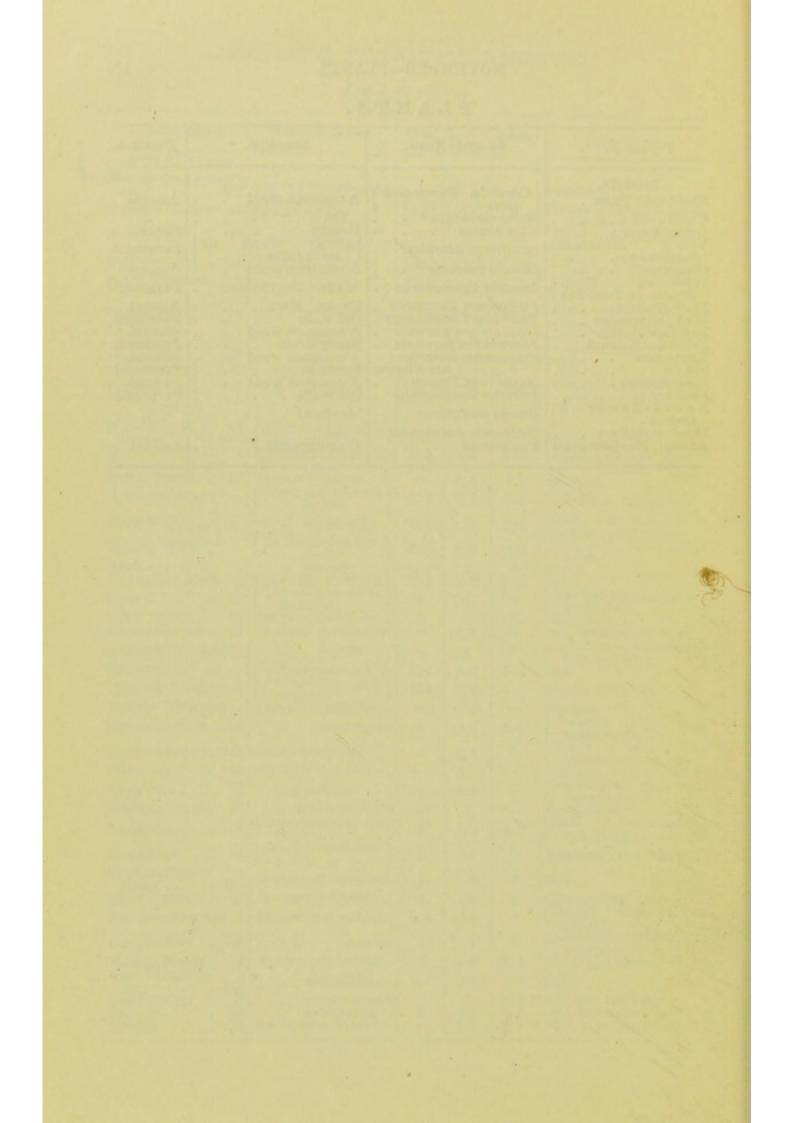
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#### NOVEMBER-PLANTS.

PLANTS.

Popular Name.	Scientific Name.	Localities.	Duration.
MOTHS. Shepherd's Purse Chickweed Dwarf Furze Yellow Mountain Saxifrage Groundsel Ivy-leaved Snap- dragon, or Toad-flax Moth Mullein Wall Germander Wall Germander Wall Germander Wall Germander Perennial Knawel Sea do Petty Spurge	{Capsella Bursa-pas- toris	A common weed Do	Annual. Shrub. Perennial. Annual. Perennial. Annual. Perennial. Annual. Perennial. Annual. Perennial. Annual. Perennial. Manual. Perennial. Manual.



#### 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 (*Pacilocampa 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.

Popular Name,	Scientific Name.	Ova.	Larva,	Pupa.	Food-plants.
BUTTERFLIES.					
Brimstone, or Sul-) phur H}	Gonepteryx rhamni	4	6, 7	7	Buckthorn.
Clouded Yellow H	Colias Edusa	9-5	6, 7	8	{Lucerne, Dutch clover trefoils, &c.
Pale do. do H	" Hyale	5	7	8	{ Melilot, clover, lucerne
Comma H	Vanessa C-album .	5 & 7	5 & 8	6 & 9	{Nettle, elm, willow hop, sloe, and currant
shell H	" urticæ .	4,5&7	5,6&8	6 & 8	Nettle.
Large do H	" polychloros	5, s. 10	s.10-5,6	7	{Elm, aspen, osier, wil low, and fruit trees.
Beauty H}	" Antiopa .	5	6, 7	7	Birch, poplar, willow and nettle.
Peacock H Red-Admiral . H	" Io . " Atalanta :	4, 5	6, 7 6, 7	77	Nettle.
Painted Lady . H	" Cardui .	6	6-9	7-9	Do. { Thistles, nettle, mallow and scarlet bean.
MOTHS.					c and scarlet bean.
Hawk H	{ Macroglossa stel- ? latarum	5	8, 9	-	Hedge bedstraw.
Belted Beauty. H	Pæcilocampa populi Nyssia zonaria	11-3	5, 6 5, 6	8-10 6-9	Poplar, oak, ash, lime. Sea-reed.
Early Moth . E	{Hibernia rupica-}	2	5	7-1	Oak, hawthorn, sloe.
fottled Umber .	" defoliaria .	11-3	5	7-11	(Oak, nut, sloe, haw-
Vinter Moth	{Cheimatobia bru-}	11-3	5, 6	7-12	thorn, elm, birch. Oak and many other
orthern do. do lovember Moth B	,, boreata Oporabia dilutata :	11-3	6	-	trees. Birch.
lem H	Camptogramma	11-3	5,6	7-10 9	Oak. § Spotted persicaria.

INSECTS.

Popular Name.	Scientific Name.	Ova.	Larva.	Pupa,	Food-plants.
MOTHS.	18 - 19 - 19 - 19 - 19 - 19 - 19 - 19 -				
Silky Tissue . H Parrot Carpet . H	Scotosia dubitata . Cidaria psittacata	4	6	7 9	Buckthorn.
Autumn Green do.H		_	7,8	9	Oak, lime, apple, rose.
	,, miata , Petasia cassinea ,	11.4	1000		low, poplar.
Sprawler	{Leucania lithar-}	11-4	5, 6	7-10	Oak. S Plantain, chickweed
Ochreous Brown H	{ gyria }	-	1-5	5, 6	C grasses, &c.
DarkSword-grassH	Agrotis suffusa .	4	5-7	-	Roots of lettuce and spinach.
Chestnut H	Cerastis vaccinii .	-	6, 7	-	Oak, elm, willow, sallow.
Dark do H	" spadicea	-	5, 6	-	{Hawthorn, sloe, and honeysuckle.
Red-headed do. H	"erythrocephala	-	5	_	Low plants.
Large do H	{Scopelosoma sa-}	3	5, 6	7, 8	Oak. A cannibal in confinement.
Dotted do H	{Dasycampa rubi- ginea	3	5-7	-	Apple and low plants.
Orange Upper-	Hoporina croceago	4	5, 6	7	Oak.
Olive Rustic . H	Dasypolia templi .	3	4-7	8	Cow-parsley.
Red Sword-grass H	Calocampa vetusta	3, 4	4-6	8	{Poplar and various
Common do H	" exoleta	4	4-7	8	Scabious, rest-harrow campion, dock.
Tawny Pinion. H	Xylina conformis .	3	5, 6	7,8	Birch and alder.
Grey Shoulder- knot H}	" rhizolitha .	-	5-7	7,8	Oak.
Dark Pinion . H	,, semibrunnea	-	7	8, 9	Ash and willow.
Pale do H	" petrificata .	5	5-7	8,9	Oak, birch, and lime.
Herald H	Gonoptera libatrix.	-	6, 7	7,8	Poplar, willow, sallow.

## INSECTS (continued).

PLANTS.

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

# INSECTS.

# LOCALITIES AND CAPTURING.

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

Popular Name,	Scientific Name.	Where Found.
BUTTERFLIES.		
Scotch do	Erebia Medea	Mountains and moors in the North.
Speckled Wood .	Satyrus Ægeria	Woods and lanes.
Wall Butterfly .	" Megæra .	Lanes and fields.
Grayling	" Semele	Hillsides, heaths, &c. Very local.
Meadow Brown .	" janira	Meadows, hillsides, and roadsides. Comes to
Large Heath, or } Gatekeeper.	" Tithonus .	Heaths, dry fields, lanes, hedgerows, &c. Comes to bramble fl.
Ringlet	" hyperanthus	Woods, shady lanes, &c. Comes to fl. of bramble. *
Marsh do	Canonympha Davus	
Small Heath	Damahilara	Heaths, meadows, downs, &c. Fond of fl.
	" Pamphilus	{ of bramble.
Green Hairstreak.	Thecla rubi	Hedges, woods, &c.
Purple do	" quercus .	Oak woods. Flies high up, round tops of trees. Woods, &c. Fond of fl. of bramble and
White Letter do	", W-album .	anarjoram. Local.
Black do	" pruni	Woods. Local.
Brown do	" betulæ	Oak woods. Local.
Large Copper .	[ Polyommatus ]	Formerly in Cambridgeshire and Hunting-
Small do	Hippothoe ) Phlæas	donshire fens. Probably now extinct. Common everywhere.
Long-tailed Blue .	Lycæna bætica :	Has been recently taken near Brighton.
Silver-studded do.	"Ægon .	Heaths, commons, downs, &c. Local.
Scotch Argus	,, Artaxerxes	Not uncommon at Arthur's Seat, Edinburgh.
Brown do	" Agestis .	Hills, fields, railway banks, &c.
Common Blue . Adonis do	" Alexis . " Adonis .	Fields, lanes, open spaces in woods, &c. Chalk downs and limestone hills.
Chalk-hill do.	Considon	Do. do.
Mazarine do	" Acis	Has been taken near Leominster. Very scarce.
Little, or Bedford )	Alono	Railway banks, chalky downs, &c.
do )	Annialus	Woods and hedges. Fond of holly fl.
Holly, or Azure do.		(Dry fields, stone-quarries, &c. May be taken
Large do	" Arion	at fl. of bugle and thyme. Very local.
Duke of Burgun- )	Nemeobius Lucina.	Woods. Fond of fl. of spurge. Local.
dy Fritillary		
Grizzled Skipper .	Syrichthus alveolus	Open spaces in woods, roadsides, &c. (Hill-sides, dry banks, chalk pits, railway
Dingy do	Thanaos tages .	banks, &c.
Chequered do	Hesperia paniscus	Woods, Local.
Large do	,, sylvanus	Grassy places in woods, roadsides, &c.
Silver-spotted do	" comma .	Hills, &c. Local.
Small do	" linea .	Woods, fields, &c.   Lulworth Cove, The "Burning Cliff" and
Lulworth do	" Actæon .	Sidmouth, Devon.
MOTHS.		
Eyed Hawk	(Smerinthus ocel-)	On tree trunks and palings. Comes to light.
Lifeti Itana	l latus .	(Tree-trunks and palings. Comes to light,
Poplar do	populi .	and may be taken commonly at street
ropar do		lamps.
Lime do	, tiliæ .	Tree-trunks and palings. Comes to light.
Death's Head do		I LAWARY AVAR HOWERS ESDECIALLY DELUNIAS, 34
Convolvulus do	Sphinx convolvuli .	D dusk. S. comes to light.
Privet do	" ligustri .	Palings, and hovering over flowers. Is fond of fl. of honeysuckle.
Spotted Elephant	(Deilephila Eu-)	
do	phorbia )	On the coust
Madder do	, galii .	Do. S. comes to light. (Has been taken hovering over flowers at
Silver-striped do	,, lineata.	dusk. Very rare.
Sharp-winged do.	(Charocampa ce-)	Do. do.
Commence of the second second	The second secon	(Hovers over fl. at dusk, especially valerian
Small Elephant do.		a stand of the stands Comon to light
Large Elephantdo.		Hovers over howers at dusk. Comes to hand Has only been taken two or three times in
Oleander do	, nerii .	Great Britain.

# INSECTS-LOCALITIES AND CAPTURING. 139

Popular Name,	Scientific Name.	Where Found,
MOTHS.		(Flies in day and evening, Hovers over
Humming-bird do.	[ Macroglossa stel- ]	Flies in day and evening. Hovers over flowers. Comes to light.
Broad-bordered )	latarum )	Flies in sunshine, and hovers over flowers.
Bee do J	" fuciformis .	Files in sunshine, and novers over no wers
Narrow-bordered )	" bombyliformis.	Do. do.
Apple Clearing .	Sesia myopæformis	( On apple and pear trees, &c., and on ground
	Construction of the second	and palings near. S. comes to fl. of privet.
Red-belted do	" culiciformis .	(Flies in sunshine in or near osier beds.
Willow do	" formicæformis.	Sometimes sits on leaves.
Ruby do	" chrysidiformis.	Flies in sunshine on S.E. coast. May be taken at fl. of Viper's Bugloss.
and the second se	( interment )	
Ichneumon do	1 formis 5	On rushes, &c. Hovers over fl.
Yellow-belted do	,, cynipiformis .	On oak, at rest.
Thrift do	" muscæformis .	Among sea pink, on coast.
Currant do	" tipuliformis .	Among currant bushes. Flies in sunshine. S. comes to fl. of privet.
Orange-tailed do	" andreniformis.	Has been occasionally beaten from bushes, &c.
Orange do	. scoliæformis .	On birch trunks.
Sphex do	" sphegiformis .	On alder, and hovers over fl. Has been occasionally beaten from bushes, &c.
Dusky do Lunar Hornet do.	", asiliformis . ", bembeciformis .	Among sallows and osiers.
Hornet do	" apiformis	On poplars. Looks very like a hornet.
Dood Math	(Macrogaster)	Among reeds. Emerges from the pupa about 10 p.m., and may then be found sitting on
Reed Moth	l arundinis . J	the reed-stems.
Wood Leopard .	Zeuzera Æsculi .	On tree-trunks and palings. Flies at dusk.
	and the second se	Comes to light.
Goat Moth Golden Swift	Cossus ligniperda . Hepialus hectus	On tree-trunks and palings. Flies at dusk.
Livid do.	", lupulinus	Flies at dusk. Comes to light.
Orange do	" sylvinus .	Do. do.
Northern do Ghost do	, velleda . 	On walls and birch trunks. Flies at dusk, in fields, &c.
Tinsel Moth	Limacodes asellus .	New Forest.
Festoon Moth .	" testudo.	Can be beaten from oak. & flies in sunshine.
Green Forester . Scarce do.	Procris statices .	Borders of woods and in damp meadows.
Blue-green do.	" geryon " globulariæ.	Grassy hill-sides. Flies in sunshine. Grassy places. Very local.
Transparent Bur- )	Zygæna minos.	files in sunshine. Rests on flowers. Very
Irish do		local
	" nubigena .	Flies in sunshine. Very local. Scotland. Very local. Has been most com-
Scotch do	" exulans .	monly taken on high ground near Perth.
Trefoil do New Forest do	" trifolii .	Flies in sunshine.
Five-spot do.	" meliloti . " loniceræ .	New Forest. Flies in sunshine.
Six-spot do	" filipendulæ.	Do.
Handmaid	Syntomis phegea .	Old ramparts.
Ribbon Bar	Naclia ancilla . Nola cucullatella .	Very scarce. In flowery woods. On tree-trunks and palings.
Dotted do	" confusalis .	Do.
Scarce Dotted do	" strigula	On oak trunks.
Scarce Black do	" centonalis .	{ Has been beaten from blackthorn. Very scarce.
Kentish do	" albulalis	Has been taken among young ash-trees in Kent.
Scarce Muslin .	Nudaria senex .	Wet places. Flies after dark.
Muslin	Seting imposella	Beaten from weeds, &c., against stone walls.
Rose Wing .	Setina irrorella . Calligenia miniata	On coast. Beaten from trees.
Four Spotted)	Lithosia mesomella	
Footman . § Pearl do.		On tree-trunks, &c.
	" muscerda .	In fens. { High up on larch trunks. Can also be beaten
	aureola	, and ap on monthemarks. Can also be beaten
Orange do	" aureola .	( from trees.
Small do.	" pygmæola . " caniola	7 from trees. Deal. Kent. Cliffs of Howth. Flies at dusk. Comes to light.

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

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Popular Name,	Scientific Name.	Where Found,
MOTHS. Dark Bordered )	Padana antidauta	flies at dusk along hedges, &c. May be
Beauty . 5	Epione apiciaria .	} beaten during day.
Little Thorn	" advenaria.	In woods. (Hedges, &c. Comes to light. Can be taken
Brimstone Moth .	Rumia cratægata .	on palings.
Spotted Yellow . Orange Moth	Venilia maculata . Angerona prunaria ( Metrocampa )	Woods. Can be beaten from bushes. Woods. Flies in sunshine and at dusk.
Light Emerald .	A margaritata §	Hedges, &c. May be beaten.
Barred Red	Ellopia fasciaria . (Eurymene dolo-)	Can be beaten from fir. Flies at night.
Scorched Wing .	i braria j	Woods. Can be beaten from oak.
Lilac Beauty	Pericallia sy-	Gardens and woods. Can be beaten from bushes. Hovers over flowers at dusk.
Early Thorn Lunar do	Selenia illunaria . ,, lunaria .	At rest, on trees, palings, &c. Comes to light. Woods. Also at rest on palings, &c.
Purple do Scalloped Hazel .	illustraria.	Do. do. On tree-trunks and palings. Comes to light.
Scalloped Oak .	Crocallis elinguaria	f Hedges, tree-trunks, and palings. Comes to
Large Thorn	Ennomos alniaria.	light. Has been taken three or four times only in Great Britain.
Canary-shouldered	tiliania	Tree-trunks, &c. Comes to light.
do	fugaantonia	Do. do.
September do.	,, erosaria .	Do. do.
August do Feathered do	,, angularia .	Do. do.
Pale Brindled	Himera pennaria .	Woods. At rest on trees, &c. Comes to light, Tree-trunks and palings. Comes to light,
Beauty 5	Phigalia pilosaria.	( Y wingless.
Belted Beauty .	Nyssia zonaria .	Very local, having only been taken in two or three localities in Cheshire. $\Im$ wingless.
Beauty }	" hispidaria.	Oak-trunks. 2 wingless.
Brindled Beauty .	Biston hirtaria .	{ Tree-trunks and palings. Comes to light Very common in London squares.
Oak Beauty	(Amphidasis pro-) dromaria	At rest on tree-trunks and palings.
Peppered Moth .	,, betularia.	Tree-trunks and palings. Comes to light.
Waved Umber .	{Hemerophila ab-} ruptaria	Palings, tree-trunks, &c. Comes to light.
Widower	Cleora viduaria .	( On oak-trunks, in the New Forest and in
Dotted Beauty	alabrania	On fir trees, in the New Forest and the Lake
Brussels Lace	,, gabraria .	District. Oak trunks.
Willow do.	Boarmia repandata ,, rhomboidaria	Tree-trunks, palings, &c., and at treacle. Do. Flies at dusk, and comes to light
Satin Beauty	,, perfumaria . ,, abietaria .	Tree-trunks. Do., in pine forests.
Ringed Beauty .	" cinctaria .	Tree-trunks, &c.
Pale Oak do	" roboraria .	Oak-trunks. Local.
Square Spot En- )	( Tephrosia conso-)	Tree-trunks. Local.
grailed §	l naria.	Do. do.
Pale do	" crepuscularia " biundularia.	Palings and tree-trunks. Comes to light. Do. do.
Brindled White	" extersaria .	At Treacle. Local.
Spot f		( m)
Frey Birch	" punctulata .	bushes during day.
Scotch do.	Gnophos obscurata. Dasydia obfuscata.	Flies by day. Local.
Black Mountain )	Psodos trepidaria.	Heaths on Scotch mountains.
Moth f	(Mniophila)	Scotch mountains. Flies by day.
scarce Birch		Very scarce.
	Boletobia fuligi-	, cry bott co.

Popular Name,	Scientific Name,	Where Found,
MOTHS.		
Grass Emerald .	{ Pseudoterpna }	{ Flies at dusk. Can be beaten from broom, &c., in daytime. Soon fades.
Large do	{ Geometra papi- lionaria }	Flies at dusk. Can be beaten from trees and bushes during day. Comes to light. Soon
Essex do	" smaragdaria.	( fades. On Kent and Essex coasts.
Small Grass do	Nemoria veridata .	Fens and New Forest. Flies by day. Comes to fl. of heather.
Clematis do	Iodis vernaria .	Can be beaten from bushes during day.
Little do	., lactearia .	Woods. Flies by day. Soon fades. (Can be beaten from bushes and trees during
Blotched do	{Phorodesma } }	day. Flies at dusk. Comes to light. Soon fades.
Dark do	{Hemithea thy- miaria}	Hedges, &c. May be beaten ; also comes to light. Soon fades.
False Mocha	Ephyra porata .	) Can be beaten from bushes during day. Flies
Maiden's Blush :	" punctaria .	t at dusk. Do.
Clay Treble Lines.	" trilinearia.	Do.
Mocha Dingy do	", omicronaria	Do. Do.
Birch do	", pendularia	Do.
Purple Bordered   Gold	Hyria auroraria .	Fens, &c. Flies in sunshine.
Small Yellow	Asthena luteata .	Woods. Can be beaten from bushes during day. Flies at dusk.
Small White do	" candidata.	Do. do. do.
Waved Carpet . Blomer's Wave .	,, sylvata . ,, Blomeraria	Woods. Flies at dusk about small oak trees. Wooded hill-sides. Local.
Dingy Shell .	{Eupisteria hepa-}	Near alder. Can be beaten during day.
Welsh Wave	{ Venusia cambri- caria	At rest, on rocks in the north.
Brown do	Acidalia ochrata .	On Kent and Essex coasts. Near Redhill.
Tawny Red Wave Single Dotted do	", rubricata . ", scutulata .	Heaths and coast sand-hills. Flies at dusk. Hedges. Also palings.
Treble Brown )	" bisetata .	Do. do.
Spotted do ) Small Bordered do.	twicominata	Palings, &c.
Allied do	contiguaria	Bangor, Conway, &c.
London do	" herbariata.	Has been found in herbalists' shops. (Northfleet, Kent, and Isle of Portland.
Pretty do	" rusticata .	Comes to light.
Bone do	" osseata .	Palings, &c. Flies at dusk about the bottom of hedges.
Dark Cream do Silky do	holosericata	Bristol and Thetford.
Small Dusky do	" incanata .	Palings, walls, &c.
Ringed do	" circellata .	Manchester. Grassy hills.
Lace Border Mullein Wave .	momutata	Woods. Also on palings.
Dotted - bordered )	otraminata	Flies over heaths at dusk. Local
Cream do 5	mancuniata	Flies about hedges at night.
Satin Wave	subsericeata	Beaten from wild rose. Bushes, on hills.
Lesser Cream	immutata	Fens, &c.
Lesser Cream Wave }	memaitata	Woods. Also palings.
Cream do Smoky do	fumata .	Heaths in the North.
Sub-angled do	" strigilata .	Folkestone. Isle of Portland.
Small Blood Vein .	" imitaria .	(Salt marshes of Kent and Norfolk; also in
Pink Wave	" emutaria .	New Forest. Flies at dusk. Woods, &c., and on palings.
Ribbon do	,, aversata . ,, inornata .	At rest on fir trunks. Flies at dusk.
Portland Ribbon	degeneraria	At rest in Isle of Portland.
do	emarginata	May be beaten from bushes, &c.
sman scanop	" enter geneere	and the second se

Popular Name,	Scientific Name.	Where Found.
MOTHS,	( Minn and Ann	(Tanon flolda manda fra Churk hala in t
Blood Vein Common White }	{Timandra ama- taria } Cabera pusaria .	bushes during day. Comes to light. Woods. Can be beaten from bushes during
Round-winged {	" rotundaria .	( day. Among birch trees. Scarce.
White do Dingy White	" exanthemaria	Woods. Can be beaten from bushes during day.
Clouded Silver : Spotted Pinion : Grey Carpet :	Corycia temerata . ,, taminata . Aleucis pictaria .	Do. do. Do. do. May also be taken on palings. At fl. of sloe.
Sharp - angled } Peacock . }	Macaria alternata.	Woods. Local.
Peacock	" notata .	Woods. Can be beaten from bushes during day. Also on palings.
Tawny Barred	" liturata.	Can be beaten from larch and pine.
V. Moth	Halia vauaria Strenia clathrata Panagra petraria Numeria pul-)	Gardens and palings. Flies at dusk. Clover and sainfoin fields. Flies by day. Heaths, &c. Flies by day.
Barred Umber . Grey Scalloped )	l veraria 📜 🖇	Woods. Can be beaten from bushes during day.
Don	Scodinoa belgiaria.	Heaths.
Bordered Grey .	{Selidosema plu- maria }	Do. Local.
Netted Mountain }	Fidonia carbonaria	Among heather, in the North.
Common Heath	" atomaria .	Fields, woods, heaths, &c. Flies in sunshine.
Bordered White . Rannoch Looper . Frosted Yellow .	" piniaria : " pinetaria :	Flies in sunshine, round fir trees. Scotch heaths, Flies in sunshine
Drab Looper	Minoa euphorbiata	On broom. Only found in Suffolk. Woods in the South.
	Scoria dealbata . Sterrha sacraria .	Flies in the sunshine. Local. { Has been taken at fl., at light, and at treacle. { Also flies by day.
- mpro sour · ·	{Lythria purpu-}	Dry hills in the North. Flies by day. Scarce.
	Aplasta ononaria .	Among rest-harrow.
Grass Wave	Aspilates strigil-) laria	Heaths.
Yellow Belle	,, citraria . ,, gilvaria .	Among wild carrot and in clover fields, especially near coast. May be beaten.
Magpie, Currant, or Gooseberry Moth		Gardens, hedges, &c. Also on palings. May be beaten during day.
Clouded Magpie . Scorched Carpet .	Ligdia adustata	Woods, near wych elms. Can be beaten. Woods. Can be beaten from bushes during day.
Clouded Border .	Lomaspilis mar-	Do. do.
Horse Chestnut . {	Pachuenemia him	Among heather. Flies after dark.
Early Moth		Palings and tree-trunks. S comes to light.
Spring Usher	" leucophearia.	Palings, tree-trunks, hedges, &c. Very fond of <i>tarred</i> palings. $\delta$ comes to light, and s.
Golden Umber .	" aurantiaria.	Palings and tree-trunks & wingless.
Dotted Border .	" progemmaria	Palings, tree-trunks, hedges, &c. & comes to light and s. to sallows. & wingless.
Mottled Umber .	" defoliaria .	Palings, tree-trunks, &c. & comes to light.
March Moth {	Anisopteryx æs-}	Palings, tree-trunks, hedges &c f comes to
Winter Moth	Cheimatobia bru-	Palings, tree-trunks hedges fro t comparts
Northern do. do	" mata " §	light. 9 wingless. Among birch. 9 wingless.
November Moth	porabia dilutata .	Palings, tree-trunks, &c. Comes to light.

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

Popular Name,	Scientific Name.	Where Found.
MOTHS. Juniper do Cloaked do Double Striped do V. do Green do. Manchester do. Broom Scallop	, coronata , rectangulata. , debiliata . Collix sparsata	found at flowers. Tree-trunks. Palings, &c. Tree-trunks and palings. Trunks of apple and pear trees, and on palings.
Small Seraphim Seraphim Brindle Barred Yellow	. Lobophora sexalata ,, hexapterata . ,, viretata .	Tree-trunks, &c. May also be beaten. Woods. Sirch and fir trunks. May be beaten. May also be found on palings.
Early Striped. Barred do	, lobulata . , polycommata	Trunks of Scotch fir, &c.
Juniper Carpet Grey do Shaded Broad Bar Pine Carpet . March Highflyer May do	firmata .	( Juniper at night. Palings, &c. Comes to treacle. Among larch. Comes to treacle. Among larch. May be beaten from willows. Among alders at dusk.
July do Blue - bordered	,, elutata . [ [ Melanthia rubi-]	Can be beaten in woods. Flies high and wildly when disturbed. Comes to light.
	, ginata . f	Palings, &c. May be beaten. Do. do.
Beautiful Carpet . Argent and Sable .		Flies at dusk. May be beaten from bushes during day. May be beaten from birch and other trees
Small do. Bordered Chalk	" tristata .	Can be beaten.
Carpet	,, procellata . ,, unangulata ,, rivata	Among clematis. May be beaten from hedges, &c. May be beaten.
Common do	" subtristata	Palings, &c. Can be beaten from bushes,
Silver Ground do. Bedstraw Chalk do.		Woods. Can be beaten from bushes, &c., during day. Do. do.
Garden do Royal Mantle . Rosy Carpet	,, fluctuata . Anticlea sinuata .	Palings, tree-trunks, &c. Can be beaten dur- ing day. Flies at dusk. Cambridgeshire; and Birchwood Kent
Shoulder Stripe do.	" badiata .	Flies at dusk. Palings, &c. Flies at dusk. Comes to light and s. to sallows.
Streamer Barberry Carpet Red-barred do. Flame do. Red Twin-spot do. Dark - barred	,, oeroerata. Coremia munitata. ,, propugnata ,, ferrugata	Palings, &c. Flies at dusk. Among barberry. Local. Can be beaten from bushes, &c., in the North. Woods. Woods. May be beaten. Also on palings.
Twin-spot do. J Large do.	" unidentata . ]	Palings, &c. May also be beaten from bushes. Do. Very local.
Yellow Shell	fluviata	May be beaten from bushes and hedges. Flies at dusk. At ivy blossoms. Comes to light.
Fern Moth Slender - striped )	tersata.	Among clematis.
Carpet } Oblique-striped do.		At Rannoch. Flies at dusk about open drains, &c., in damp
Many Lined . Small Waved Umber .	" polygrammata Ì	meadows. Damp meadows, &c. Local. Among clematis.
Silky Tissue Brown Scallop Buckthorn Umber Tissue	Scotosia dubitata	Comes to light and fl. of heather. Among buckthorn. Do. Comes to light
J J	" certata . F	Palings and among barberry.

Popular Name,	Scientific Name.	Where Found.
MOTHS.		
Scallop Shell	Scotosia undulata.	Woods. Can be beaten.
Parrot Carpet .	Cidaria psittacata	(Comes to light, and ivy blossoms, S. at
		sallows after hibernation. Ivy blossoms. Comes to light. S. at sallows
Autumn Green do.	" miata .	( after hibernation.
Short Cloak do Broken Bar	" picata . " corylata .	Can be beaten from bushes, &c. Woods.
Beautiful Marsh )	pagittata	Fens in Cambridgeshire.
Carpet Marbled do	musoata	Woods, &c. Comes to treacle.
Dark Marbled do	immanata	(Palings, &c. May be beaten from bushes
Water do	ou Primata	} during day. Flies at dusk. Flies at dusk.
Curall Dhennin	pilaggata	(Among willow herb, &c. May be beaten
and the second se	matioulata	{ from bushes near. Comes to fl. of heather. Lake District.
Netted Carpet . Phœnix	, prunata ,	Palings, &c.
Agate	" testata .	{ Tree-trunks, &c. May be beaten from bushes, &c. Comes to fl. of heather.
Clouded Spinach .	" populata .	May be beaten from bushes, &c. Can be found on palings.
Moth }	" fulvata .	Can be beaten from bushes, &c. Flies at dusk
Straw Spinach	" pyraliata.	Gardens and fields. Can be beaten from bushes, &c.
Spinach	" dotata .	Near woods. May be beaten from bushes
Dark do Mallow	Pelurga comitata . Eubolia cervinaria	Comes to light. Comes to light.
Small do	,, mensuraria	Clover fields, &c. Comes to light.
Fortified Carpet . Lead Belle	,, mæniata . ,, palumbaria	Has been beaten from broom. Very scarce. Comes to light.
Chalk Carpet.	, bipunctaria	On chalk and limestone soil.
Oblique Striped . Manchester	, lineolata .	On the coast. Rests on grasses, &c.
Treble Barred	Carsia imbutata .	Manchester, and at Howth, in Ireland.
Treble Barred .	Anaitis plagiata . Lithostege griseata	Palings, &c. On Norfolk coast, among flixweed.
Olive Drab Streak	Chesias spartiata .	Among broom. Comes to light.
Chevron	obliquaria	Do. do. Flies late in the evening.
Chimney Sweep .	{ Tanagra chæro-}	Flies in sunshine, near woods.
Scalloped Hook-tip	(Platypteryx la-)	Can be beaten from birch.
	( certant. )	Very scarce. Has been taken in Leigh
Scarce do	" sicula .	Woods, near Bristol. Can be beaten from birch, &c.
Pebble do	,, falcula . hamula	Palings. Can be beaten from oak. Flies in
Oak do	" namuta " unguicula	{ the daytime.
Beech do Chinese Character	Cilix spinula	Palings, &c. Comes to light.
Scarce Kitten .	Dicranura bicuspis	At rest, on alder, beech, and birch.
Kitten Broad-barred	" furcula.	
Kitten	, bifida .	
Puss Moth	Stauropus fagi	Tree-trunks and palings. Local.
Sprawler	Petasia cassinea .	Comes to light.
Rannoch do Buff Tip	, nubeculosa Pygæra bucephala.	
Chocolate Tip	Clostera curtula .	On tranks of poplars
Scarce do		Scarce. Mostly found in the larval state. ) On willow trunks, and may be beaten from
Small do	,, reclusa .	Willow.
The law The second second	Gluphisia crenata.	Epping, and Halton, Bucks. Very scarce.
Dusky Prominent.		
Dismod de	Ptilophora plu-	Woods and hedges.
Plumed do.	f Ptilophora plu-	Woods and hedges. Comes to light.

Popular Name.	Scientific Name.	Where Found,
MOTHS.		
Birch do	. Notodonta carmelita	Birch trunks, and palings near. Flies in the sunshine.
Swallow do Small Swallow do	. " dictæa " dictæoides .	Tree-trunks, palings, &c. Do. do.
Iron do Dark do	. " dromedarius	Palings. Comes to light.
Pebble do	. " trilophus . " zíczac	Very scarce. On trunks of poplar.
Great do Lunar Marbled	. " trepida	On oak trunks. Comes to light. On oak trunks, and paling near.
Marbled Brown	. " dodonea .	Do. do.
Figure of 8 .	· { Diloba cæruleo-} cephala . }	Comes to light.
Buff Arches .	. Thyatira derasa .	{ Flies at dusk over brambles and low plants, and comes to treacle.
Peach Blossom	, batis .	Comes to treacle. Very shy of the lantern rays.
Lesser Satin Carpe	$\left\{ \begin{array}{c} Cymatophoradu-\\ plaris \end{array} \right\}$	May be beaten from bushes, &c.
Satin	, , fluctuosa .	May be beaten from dwarf birches. Comes to treacle.
Lesser Lutestring . Poplar do.	0.11	Comes to treacle.
Figure of 80	", or	At rest on aspens, &c. Comes to treacle, Comes to treacle occasionally.
Yellow Horned .	" flavicornis	{ Palings and birch trunks and twigs. Comes to light.
Frosted Green .	ridens .	Tree-trunks, &c. Comes to light and treacle.
Marble Green .	{Bryophila gland-}	Old walls. Comes to treacle.
Marbled Beauty . Scarce Marbled )	" perla .	Old walls and fences.
Green (	" algæ .	Very scarce.
Scarce Marvel de	Diphthera Orion .	On oak trunks, &c. Comes to treacle. Local.
Dark Dagger	Acronycta tridens .	Tree-trunks, palings, &c.
Miller	" psi	Do. do. Tree-trunks, &c. Generally high up.
Sycamore do Poplar Grey	" aceris " megacephala.	Sycamore trunks, fences, and brick walls
Streaked	,, strigosa	Tree-trunks, and palings near poplars. Cambridgeshire.
Coronet : : :	", alni. ", ligustri : :	Comes to treacle. Scarce. Trunks of ash trees.
Knot Grass Scarce Dagger .	" rumicis .	Walls and palings.
Light Knotgrass .	" menyanthidis	Comes to treacle. Heaths, &c.
Sweet Gale Powdered Wains-	" myricæ .	Rannoch, Scotland, and at Killarney, Ireland.
cot	Simyra venosa .	In the Cambridgeshire fens.
Mouselet Bright Eye	Synia musculosa . Leucania conigera.	Very scarce. Has been taken at light.
Yellow Wainscot .	,, vitellina .	Comes to light and fl. of ragwort. Very scarce. Has been taken at treacle.
Double Line Ochreous Brown .	" curca	in grassy woods. Local.
Lunar White Spot	" albipuncta .	Comes freely to light and treacle. At fl. Comes to treacle. Scarce.
cot.	" extranea .	At fl. of scabious, and comes to treacle. Very scarce.
Obscure do	" obsoleta {	In marshes, especially on banks of the Thames.
confluant do	" loreyi	A doubtful British species.
Southern do	" putrescens . {	Among grass, especially on the Devonshire
hore do	" littoralis .	On coast sand-hills, Local.
houlder Stripe do.	" pudorina . I	Marshes and fens. Comes to treacle, light, and fl.
treaked do	" L-aloum . 1	A doubtful British species.
moky do.	" straminea .	larshes and fens. At fl. of ragwort.
ommon do. • •	" pallens H	Palings. Comes to treacle.
ale do	", phragmitidis N	darshes and fens. Local.
oast do.	elymi. C	On grass stems. On coast sand-hills.
lame do.	Meliana flammea . 1	darshes and fens. Local.

Popular Name.	Scientific Name.	Where Found,
MOTHS.		
Silky do	Senta ulvæ	Do. do.
Lineated do.	Nonagria despecta	Flies at dusk. Marshes and fens.
Small do	" fulva	Flies at dusk.
Twin Spot Wains- )	" concolor	Cambridgeshire. Fens.
cot )	Hellenanni	
Mere do	maning	Do. In wet places.
		frens, &c. Flies at dusk among reed mace.
Scarce do	" brevilinea .	{ Scarce.
Twin Spotted do	" geminipuncta.	In wet places. Local.
Reed do	" cannæ	Fens and marshes.
Bullrush	" typhæ " lutosa	Do. Do.
Frosted Orange .	Gortyna flavago .	Comes to light. Is apt to fly into the flame.
Golden Ear	Hydræcia nictitans	
		( Tound over n. and on paings,
Butter Bur	" petasitis	Among butter-bur.
Rosy Rustic Clouded Dart	Axylia putris .	Comes to treacle and light; and fl. of ragwort. At roots of trees, &c. Comes to treacle.
Bordered Brindle.	Xylophasia rurea .	Palings. Comes to treacle.
Light Arches	,, lithoxylea.	Palings and tree-trunks. Comes to treacle.
Reddish Light	ouhlaustrio	Do.
Arches )	, polyodon .	Palings and treacle.
Dark Arches Clouded Brindle .	hangting	Comes to treacle.
Slender Clouded )		
Brindle )	,, scolopacina	Grassy places. Local.
Bird's Wing	Dipterygia pinastri	Palings and tree-trunks. Comes to treacle.
Silver Cloud	Xylomiges con-	At rest on tree-trunks. Scarce.
	( Anoronhula aus.)	Converte light Teas
Feathered Brindle	Tralis J	Comes to light. Local.
Small Mottled )	Laphygma exigua .	Gas lamps, &c., and comes to treacle. Very
Willow )	Laphygnia caryaa .	Scarce. Palings, and comes to light. May be taken
Bordered Gothic .	Neuria saponariæ	at fl. of viper's bugloss.
	( Heliophobus po-)	(Common on grass stems at night. Comes to
Feathered do	[ pularis. ]	1) light and fl.
Beautiful do	" hispidus.	Local. On the ground among very short
Dettatina abri		On commons Elies in early morning, May
Antler	Charæas graminis	) be taken at fl. of ragwort.
Fasthand Fan	S Pachetra leu-	
Feathered Ear	() cophæa . )	Comes to treacle and light. Is apt to fly into
Straw Underwing	Cerigo cytherea .	the flame.
Lesser Flounced		
Rustic	Laperence destance.	
Guenée's do	, Guenéei	Very scarce.
Tawny do	,, Dumerili	(Comes to light, May be taken on grass
Turf do	, cespitis	stems at night, and at ragwort fl.
Exile	. Crymodes exulis	A doubtful British species.
Dusky Nutmeg	Mamestra abjecta .	Among grass. Local. (Comes to treacle. May be found on palings
Nutmeg	. " anceps	and at fl. of viper's bugloss.
	alhicolon	On the coast.
Large do.		Grassy places. Comes to light and fl. of
Dusky Brocade	. " furva	·   ragwort.
Cabbage Moth	. " brassicæ	
Dot	,, persicaria	(Palings, The 2 may be taken hying over
Rustic Shoulder	Apamea basilinea	·   wheat-fields. Comes to treacle.
Union Rustic.	., connexa .	Comes to treacle.
Brown Pinion	. , gemina .	Grassy places. Comes to treacle.
Uniform Rustic	. " unanimis	Marshes and fens. Comes to treacle. Do. Comes to light.
Double Lobed	. " ophiogramme fibrosa .	Comes to treacle. Local.
Crescent Common do	: " oculea :	Delings &c Comes to light and treacle.
Marbled Minor	Miana strigilis	Palings, &c. Flies at dusk, and comes to treacle.
mar orea minor		

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Popular Name,	Scientific Name.	Where Found.
MOTHS.		Wanda & Correcto to seads
Middle-barred do.	Litemana	Woods, &c. Comes to treacle. On coast. May be taken at fl. of ragwort.
Rosy do Cloaked do	,, literosa . ,, furuncula .	Flies at dusk, and comes to treacle.
Wood do.	, guruncuta .	Do. do.
Loost do	S Photedes capti-	Darlington.
	A uncula S	Darington,
Haworth's do	Celæna Haworthii.	
Triple Lines	Grammesia tri-	Comes to light.
Gold Line	Hydrilla palustris	Has been taken at light. Very scarce.
Dingy	J Acosmetia caligi-)	Damp woods.
	nosa · · ·	Pump noous
Bordered Rustic .	Caradrina Mor-	Comes to light and treacle.
Dotted do	" alsines .	Do. Also at fl. and treacle.
Powdered do	" blanda .	Do. do.
Mottled Beauty .	", cubicularis	Comes to light and treacle.
Brown Feathered }	Rusina tenebrosa .	Do.
Archer's Dart	Agrotis valligera .	Chiefly on coast. At fl. of ragwort.
Shuttle-shaped do.	" puta	Comes to treacle. May be found on palings.
Dark Sword Grass	" suffusa	Comes to treacle.
Scarce do	" fennica	A doubtful British species.
Pearly Underwing	" saucia	Comes to light and treacle. May also be taken on ivy blossoms.
man in Math		Comes to treacle. Many of this genus may
Turnip Moth	" segetum	be taken at the fl. of bean.
Crescent Rustic .	" lunigera	Comes to treacle and light, and may be
		taken at fl. of ragwort. Local.
Heart and Dart . Heart and Club .	" exclamationis " corticea .	Palings, &c. Comes to treacle. Comes to light and treacle, and to lime blossoms.
Light Feathered }		
Rustic J	" cinerea	Comes to light. Is apt to fly into the flame.
Cloud Dart	" ripæ	On coast. Local.
Veined do	" cursoria	Coast sand-hills. Can be beaten. Comes
Garden Dart	and and a marked	to fl. of ragwort. Comes to treacle and fl. of ragwort.
White Line do.		f Comes to treacle and fl. of heather and rag-
	" tritici	d wort.
Eagle do	" aquilina	Do. Also on palings.
Square Spot do White Letter	" obelisca " agathina .	On fl. of ragwort. Comes to light.
True Lover's Knot	, porphyrea .	Among heath. Comes to light. Among heath.
Portland Moth		) Coast sand-hills. Comes to light and fl. of
	" præcox	ragwort.
Stout Dart	" ravida	Comes to light.
Dotted Rustic.	" helvetina " pyrophila .	A doubtful British species. At fl. Local.
Kidney	" lucernea .	Comes to treacle, flowers, and light.
Welsh Rustic.	" Ashworthii .	Local Comes to troacle
Small Broad-bor-	mutul and the dist	Comes to treacle. Also at fl. May be beaten during day from hedges, &c.
dered Yellow Underwing.	Triphæna janthina	during day from hedges, &c.
Large Broad-bor-		
dered do S	" fimbria .	Treacle and light.
Least Broad-bor-	" interjecta .	Light, and at fl. of ragwort.
dered do 5	" interjecta .	
Crescent do	" subsequa .	Treacle and light. Scarce. Has mostly been
Lesser do	ombong	taken in the New Forest. Comes to treacle and light.
Large do.	" pronuba .	Do.
Autumnal Rustic .	Noctua glareosa .	f On heaths and in woods. Comes to treacle
		( and fl. of heather and ragwort.
Black Spotted .	,, depuncta .	Comes to treacle.
Flame Shoulder	" augur · ·	Do. Do.
Flame		Has once been taken in Isle of Wight at
	" flammatra .	treacle.
		( LICACIO,
SetaceousHebrew }	" C-nigrum .	Comes to treacle and light.

Popular Name.	Scientific Name.	Where Found.
MOTHS.		
	Monter diterranter	Now Ferent Direbored Pro
Scarce Rustic . Double Square )		New Forest, Birchwood, &c.
Spot	" triangulum .	Comes to light.
Clay Rustic	" rhomboidea .	Comes to light and treacle.
Purple Clay	" brunnea	At treacle.
Ingrailed do	" festiva	At treacle and light.
Confluent do	" conflua	Comes to treacle. Local.
Barred Chestnut .	" Dahlii	Comes to treacle and heather fl. Local.
Rosy Marsh Moth	" subrosea	Fens and marshes; comes to treacle. Very scarce. At treacle and light.
Small Square Spot Six-striped Rustic.	" rubi	At fl. of ragwort and comes to treacle.
Dotted Clay	haia	At treacle.
Scotch Rustic	" sobrina	Rannoch. Comes to treacle.
Neglected do	" neglecta	Treacle and fl. of heather.
Square Spot do	and the second to	At treacle, light, flowers, &c. Flies from
and the second		early dusk till late at night.
Pine Beauty	Trachea piniperda	On fir trunks and at sallows.
Mountain Drab .	Pachnobia alpina .	Scotch mountains. (At sallows and treacle. Also tree-trunks
Hebrew Character	{Taniocampa gothica . }	and palings. Comes to light.
White Letter }		
Rustic	" leucographa	At sallows.
Red Quaker	" rubricosa .	At sallows and treacle.
Clouded Drab .	instabilio	f At sallows and treacle. Also on tree-trunks
		and palings. Comes to light.
Northern do	" opima	At sallows.
Intermediate	" populeti .	Do. Comes to light.
Common Quaker .	" stabilis .	At sallows and treacle. Also palings and tree-trunks.
Lead - coloured )		
Drab	" gracilis .	At sallows and treacle.
Blossom Under-	miniosa .	Do.
wing J	" miniosa .	10.
Twin - spotted )	munda .	Sallows, treacle, and palings and tree-trunks.
Quaker J		
Small do	cruda	Do. do. Comes to treacle. Local.
Allied Rustic	Orthosia suspecta . upsilon .	Flies over willows.
Dingy Shears Red Line Quaker .	Tota	At treacle and ivy blossoms. Comes to light.
Yellow Line do.	macilenta	Do. Also at yew-berries.
Flounced Rustic .	Anchocelis rufina .	At ivy blossoms and treacle.
Pale-headed		JIvy - blossoms, yew - berries, and treacle.
Chestnut . 5	" pistacina .	Comes to light.
Lunar Underwing.	" lunosa	Do. do.
Brown Spot Pinion	,, litura	Do. do. (Ivy blossoms and treacle. Sallows in spring
Clashed .	amastis agasinii	after hibernation. May also be taken on
Chestnut	Cerastis vaccinii .	alter inbernation. may also be taken on
Dark do	., spadicea	Do. do. do.
Red-headed do.	", erythrocephala	Very scarce. Has been taken at treacle.
	(Scopelosoma )	(Ivy and treacle. Sallows in spring after
Large do	a satellitia .	hibernation. Comes to light.
Dotted do	(Dasycampa rubi-)	Ivy-blossoms and yew-berries. S. taken at
	( ginea )	allows after hibernation. At ivy and fl. S. taken at sallows after
Orange Upperwing	Hoporina croceago.	hibernation. Local.
0.01110000		Ivy-blossoms and treacle. May be taken at
Orange Sallow .	Xanthia citrago .	fl. of ragwort. Comes to light.
Lemon do	" cerago	Do. do. do.
Pink-barred do.	" silago	Do. do. do.
Barred do	, aurago .	Ivy-blossoms. Local.
Ruddy do	, gilvago .	At fl. and ivy. Local.
Mottled do	,, ferruginea.	Ivy-blossoms and treacle. Comes to light.
Centre-barred do	[ Cirrhædia xer-	On ash-trunks. Comes to light. Local.
Contro burrou uor .	ampelina . \$	( Comes to light and treacle. May be taken on
	Tathen outtaing	the aphis juice on plum-trees.
Olive	Tethea subtusa .	If the aprils Juice on plum-trees.
Read and a second s		Comes to light. Local.
Olive Small do Angle-striped	,, retusa Euperia fulvago .	Comes to light. Local. At fl. of heath. Local.

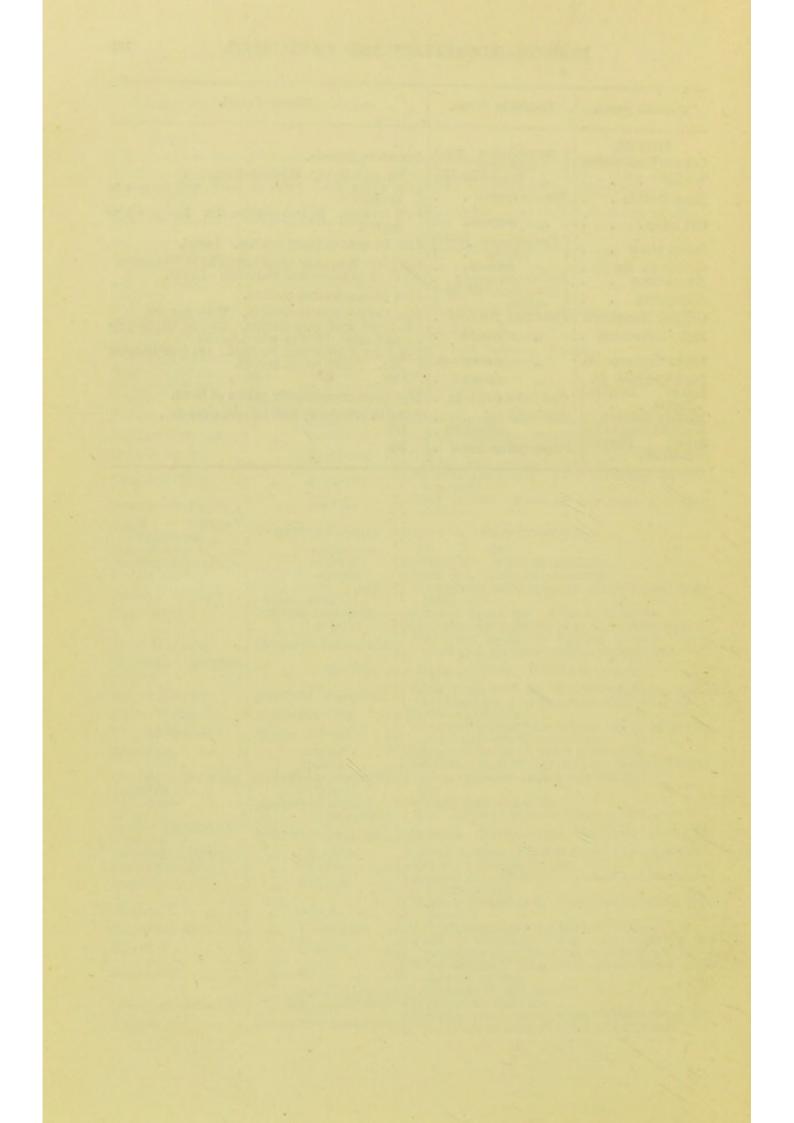
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Popular Name,	Scientific Name,	Where Found.
MOTHS.		and the second se
Heart Moth	Dicycla Oo.	Comes to light. Local. Palings, &c. Comes to light and treacle.
Dunbar Lunar-spotted	Cosmia trapezina .	Comes to treacle. Local.
Pinion )	" pyralina .	Comes to light and treacle.
White-spotted do Lesser-spotted do	", diffinis .	Do.
Dusky Sallow	{Eremobia ochro-}	At fl.; rests on thistles, &c. Local.
Marbled Shears .	{ Dianthæcia irre- }	On tree-trunks, &c. Comes to fl.
Tawny do	,, carpophaga	
Mottled do Lychnis	" capsophila. " capsincola.	Comes to fl. and light. Among campions. At fl.
Campion	,, cucubali .	Among ragged robin. Fies in sunshine.
White - spotted }	" albimacula	At fl.
Marbled do	" conspersa .	Do.
Scarce do Northern Grey .	" compta .	Do. Do.
Dwarf Shears .	Dannattii	(Hill of Howth, Ireland, and Isle of Man.
Ranunculus .	,, Barretti . Hecatera dysodea .	Comes to light. Palings, and at fl. of red valerian. Local.
Broad-barred		Palings and tree-trunks. May be taken at fl.
White f	,, serena . Poliachi	Tree-trunks. Local.
July Chi Black-banded	( , xanthomista)	
	$(nigro-cincta N) \int$	Has been taken at treacle and light.
Large Ranunculus	, flavicincta . Dasypolia templi .	Palings, tree-trunks, and walls. Under stones, in hilly districts. Comes to light.
Smoky do	Epunda lutulenta.	At fl. of heath. Comes to treacle.
Dusky Nutmeg . Minor Shoulder-)	" nigra	At fl. Local.
knot f	" viminalis .	Among sallows, and on palings.
Feathered Ra-	" lichenea .	On coast. Comes to light.
Green-brindled Dot	Valeria oleagina .	Very scarce.
Green-brindled )	Miselia bimaculosa	A doubtful British species.
Crescent . 5	", oxyacanthæ	At treacle and fl. May be found on palings.
Marvel de Jour .	Agriopis aprilina .	At treacle.
Angle Shades	meticulosa	At treacle and ivy-blossoms. Also on palings.
Scarce do	,, empyrea Euplexia lucipara.	At ivy-blossoms. Local.
Green Arches	Aplecta herbida .	Tree-trunks, &c. Comes to light and treacle. Woods. Local.
Freat Brocade .	" occulta .	Flies in early morning. Local.
Frey Arches	,, nebulosa .	Tree-trunks and palings. Comes to treacle. (Tree-trunks, palings, &c. May be taken at
Silvery do	" tincta	( fl. of viper's bugloss.
Brown do	Hadena satura	At fl. Also tree-trunks and palings. Very scarce.
Dark do	" adusta .	Comes to treacle.
Brindled Green .	, protea	On tree trunks and palings. Comes to treacle in the North.
Shears	" dentina .	Palings, &c.
Scarce do	" peregrina . " chenopodii.	Very scarce, Palings &c. Comes to light
Drache	" atriplicis .	Palings, &c. Comes to light. Comes to treacle and light. Local.
Bright Line	" suasa	Palings. Comes to treacle.
Broom Moth	" oleracea . " pisi .	Palings, and at light and treacle. Comes to light.
Pale Shouldered	" thalassina.	Palings, &c. Comes to treacle.
Beautiful do.	" contigua .	On birch trunks. Comes to treacle.
light do	" genistæ .	Palings, &c. Comes to treacle.
Northern do	(Xylocampa litho-)	At rest on stones, &c., in the North.
Early Grey	1 riza 5	Tree-trunks, palings, &c.
Purple Cloud	{ Cloantha perspi-	Very scarce.

Popular Name,	Scientific Name.	Where Found,
MOTHS.		
Shepherd's Purse .	Cloantha solidaginis	Treastruphe at rest and at the
Red Sword-grass .	Calocampa vetusta	(Ivy-blossoms and treacle. Also at f S
Sword-grass	" exoleta	( taken at sallows after hibernation. Do. do. do.
Obscure Dagger .	Xylina zinckenii .	Very scarce. Has once been taken at treacle near Erith, Kent, and occasionally else-
Tawny Pinion .	" conformis .	( where. Ivy-blossoms, and on tree-trunks. Very scarce.
Grey Shoulder- )	" rhizolitha .	Ivy-blossoms, and on tree-trunks.
bark Pinion	" semibrunnea	Ivy-blossoms.
Pale do	" petrificata .	Do.
Mullein	Cucullia verbasci . " scrophulariæ	Among mulleins and on palings. On palings.
Striped Lychnis .	" lychnitis .	Chiefly near Arundel.
Starwort	" asteris " gnaphalii	Flies round flowers. Local.
Wormwood do.	" absynthii .	Flies in the evening. Local.
Chamomile do .	" chamomillæ.	Palings, &c.
Shark	( <i>Heliothis</i> mar-)	Do., and at fl.
Bordered Sallow .	l ginata . j	S. flies in sunshine. Comes to treacle and fl.
Bordered Straw .	" peltigera .	May be beaten from herbage. f Flies over clover and lucerne fields in sun-
Scarce do. do	" armigera .	thine, and comes to treacle.
Marbled Clover .	" dipsacea .	Flies in sunshine. May be taken at fl. of heather.
Scarce Four-spot .	" scutosa .	Near Silloth. Flies by day near the food-
Dark Yellow } Underwing . }	Anarta melanopa .	Rannoch. Flies in sunshine.
Scotch do. do	" cordigera .	Do. do.
Beautiful do. do	myrtilli .	Heaths, &c. Flies in sunshine.
Dwarf do. do	Heliodes arbuti	Fields, &c. Flies in sunshine. Wet places, among small convolvulus. Very
Spotted Sulphur .	) phuralis . §	l local
Four Spot	Acontia luctuosa . ,, solaris .	In clover fields, &c. Flies in sunshine. Has been taken flying over flowers by day.
Rosy Marbled .	Erastria venustula	Has been taken in Epping Forest. Very local and uncertain in its appearance.
Marbled White }	" fuscula.	Among bramble. Comes to treacle.
Silver Barred .	Banksia argentula	[ Irish bogs, and at Whittlesea Mere, Cam-
Silver Hook	Hydrelia unca .	bridgeshire, and Beachamwell, Norfolk. Marshes and fens.
Purple Barred .	Minna optimina	( Sheltered places on coast sand-hills, in Devon-
Small do		shire and Glamorganshire. Sheltered places on coast sand-hills.
	" parva	Has been taken at Freshwater, Isle of Wight.
OrangeUnderwing Light do. do	Brephos parthenias notha	Flies in sunshine round sallows, &c. Do.
Spectacle	Abrostola urtica :	Palings, &c., and at fl.
Dark do	" triplasia	Do. Flies at dusk and comes to fl.
Scarce Burnished	Plusia orichalcea .	On coast. Very scarce. Has been taken at fl.
Burnished Brass . Gold Spangle	", chrysitis . ", bractea	Among nettles. Flies at dusk. Comes to light. Flies over flowers by day.
Gold Spot	" festucas	Among campions, &c. Comes to treacle and fl. of heather.
Galden V	inta	Among ground-ivy. May also be taken over
Desutiful de	T gaungaum	At fl. of campions and viper's bugloss.
	a a a a a a a a a a a a a a a a a a a	(Flies in sunshine. May also be taken on
Silver Y	" gamma	palings, and sometimes at treacle and light. Very scarce. Has been taken flying over
Scarce do	" ni	1 flowers by day.
Northern Silver Y	", verticillata . ", interrogationis	A doubtful British species. On rocks, stumps, &c.
	Gonoptera libatrix	(Palings, trees, out-houses, sheds, cellars, &c.
ficialu	, a onopeer a crouer ac	S. comes to sallows after hibernation.

Popular Name.	Scientific Name.	Where Found.
MOTHS. Copper Underwing Mouse Dark Gothic Old Lady Black Neck Scarce do. do Anomalous Alchymist Clifden Nonpareil Red Underwing . Light Crimson do. Dark Crimson do Lunar Double Stripe Mother Shipton . Burnet Companion Small Purple Barred	{ Amphipyra py- ramidea } ,, tragopogonis Mania typica ,, maura { Toxocampa pas- tinum } 	Comes to treacle. Do, and light. Flies at dusk. On walls, &c. Flies at dusk, and comes to treacle. At treacle. In out-houses, &c. Noisy when boxed. Can be beaten from bushes. Local. Scarce. Has only been taken in Devonshire. At fl. of heather and ragwort. Local. Has been taken at treacle. Has been taken at treacle. Has been taken at treacle. Very scarce. Palings and tree-trunks. Comes to treacle and light. Noisy when boxed. In New Forest and Norfolk. On tree-trunks, &c. Noisy when boxed. Do. do. do. Has been occasionally taken at light. Flies in sunshine, and hovers over fl. Do. Do.



	NESTS	AND EGG:	5.	
Popular Name.	Scientific Name.	Stay in England.	Localities of Nest.	Av. No. of Eggs
Golden Eagle White-tailed do Osprey Peregrine do Hobby	Aquila chrysaëtos . Haliæëtus albicilla Pandion haliæëtus Falco peregrinus . ,, subbuteo .	All the year Do Do Do April–October.	Mountain rocks . Do High trees or rocks . Cliffs and rocks . High trees	$     \begin{array}{c}       2 \\       2 \\       2 \\       2-3 \\       2-5     \end{array} $
Merlin, Stone Fal- ( con, or Blue Hawk ) Kestrel, Wind- )	"æsalon.	All the year .	On the ground	3-5
hover, or Hover- hawk Goshawk	", tinnunculus	Do Do	Trees or rocks High trees	4
Sparrow-hawk . Kite, Glead, Gled, )	Astur palumbarius Accipiter Nisus Milvus vulgaris	Do	Trees	3 4-5 2-3
or Puttock . ) Buzzard Rough-legged do Honey do Marsh Harrier, )	Buteo vulgaris ,, lagopus. Pernis apivorus	Do	Do	2-4 2-4 2
Harpy, or Marsh }	Circus rufus	Do	{On the ground at } { foot of a bush }	3-4
Hen Harrier Ash-coloured, or Montagu's Har- rier	,, cyaneus . ,, cineraceus .	Do Do	Do	4-5 4-5
Long-eared Owl .	Otus vulgaris	Do	Generally a de- serted Crow's or Magpie's nest	4-5
Short-eared do., or }	" brachyotus .	Do	On ground, or in a rabbit burrow (Church towers,)	3
Barn do., or Screech Owl. Tawny do., or )	Strix flammea	Do	dovecots, ruins, }	3-4
Hoot Owl Red-backed do., or	Syrnium stridula .	Do	Hollow trees	3-4
Lesser Butcher	Lanius collurio .	Summer visitor	{High up in thick } bushes }	4-5
or Bee-bird Pied do., or Cold-	Muscicapa grisola.	Do Do	Almost anywhere . Holes in trees	4-5 4-8
Dipper, Water-Ou- zel, or Water- Crow	Cinclus aquaticus .	All the mean	{Holes in stream-}	5-6
Missel Thrush, or Stormcock	Turdus viscivorus .	Do	Trees	4-5
Fieldfare, or Blue-	" pilaris .	Winter visitor .	$\left\{ \begin{array}{ll} \text{Has never been} \\ \text{known to nest in} \\ \text{Great Britain} \end{array} \right\}$	-
Thrush, Throstle, }	" musicus .	All the year .	Bushes and hedges .	4-5
Redwing Blackbird, Black-)	" iliacus .	Winter visitor .	$\left\{ \begin{matrix} \text{Has seldom been} \\ \text{known to nest in} \\ \text{Great Britain} \end{matrix} \right\}$	-
Ouzel, or Amzel, }			Bushes and hedges .	4-5
Ring Ouzel!	" torquatus .	Summer visitor	On or near the ground	3-5

# BIRDS.

NESTS AND EGGS.

Popular Name.	Scientific Name.	Stay in England.	Localities of Nest.	Av. No. of Eggs
Hedge-sparrow, or }	Accentor modularis	All the year .	Hedges and bushes .	4-5
Robin, Redbreast, ) or Ruddock .	Erythaca rubecula.	Do	Almost anywhere .	5-7
Redstart, or Fire-	Phœnicura ruticilla	Do	{Holes in trees, } walls, &c }	4-6
Stonechat	Saxicola rubicola . rubetra .	Do	On or near the ground	5-6 5-6
Wheat-ear	,, enanthe .	Do	Holes in walls, &c .	5-6
Grasshopper War-	Salicaria locustella	Do	{Furze and other}	5-7
Sedge do	" phragmitis .	Do	Bushes, reeds, &c.	5-6
Reed do., or Reed }	" arundinacea	_	Fastened to reeds .	4-5
Wren Nightingale	Philomela Luscinia	April—August . Summer visitor	Hedges and bushes .	4-5 4-5
Blackcap Garden Warbler, )	Curruca atricapilla	the state of the s	Hedges and bushes .	4-6
or Pettychaps §	" hortensis.	Do		
Nettle-creeper	" cinerea .	Do	Bushes and hedges . (Low bushes and)	4-5
Lesser do	" sylviella .	Do	(On the ground)	4-5
Wood Warbler, { or Wood Wren	Sylvia sibilatrix .	Do	amongst grass or weeds	6
Willow Wren, or ) Willow Warbler	" trochilus .	Do	Banks, bank-sides, &c.	5-7
Chiff-chaff, or Les-	,, hippolais .	Do	{On or near the ground on a hedge-bank .	6
Dartford Warbler .	{ Melizophilus provincialis }	Do	(Almost invariably)	-
Golden - crested Wren, or Gold- crest	Regulus cristatus .	All the year .	{ in furze } { Below the branch } { of a spruce fir }	7-8
Fire-crested Regu-	,, ignicapillus	Do	Do	7-8
las, or Fire-crest Great Titmouse, or Tomtit	Parus major	Do	{ Holes in walls and }	6-9
Blue do., Blue-cap, or Blue-tit	" cæruleus .	Do	Do	6-12
Cole do., or Cole-	,, ater	Do	Holes in trees	6-8
Marsh do.	, palustris .	Do	Old willows, &c	5-9
Long-tailed do., or		Do	Trees and bushes	9-12
Bottle-tit . Bearded do.	,, biarmicus .	Do	On or near the ground, near	4-6
Bohemian Wax-		and the second of	( water ) ( Does not nest in )	
wing, or Waxen Chatterer	$\left\{\begin{array}{c}Bombycilla \ gar-\\rula \ \cdot \ \cdot \end{array}\right\}$	Winter visitor .	Great Britain (Holes in banks,	5 -
Pied Wagtail, or Dishwasher.	Motacilla alba	All the year	sheds, haystacks, &c.	4-5
Grey do	. " boarula	. Do	On ground, near water On ground, banks,	5-6
Ray's do	, " flava	. Do	and in holes in	} 4-6
Tree Pipit, Field Lark, or Tree	Anthus arboreus	. Summer visitor	(On ground near	= 15
Lark . Meadow do., or	, pratensis	. All the year	On ground	. 4-6
Titlark Rock do., or Rock	)	_	. Do	. 4-5
Lark Sky Lark, or Field	)	. Do	Do	. 3-5
Lark	) anhouse	Do	. Do insi in	: 4-5
Snow Bunting, or Lapland Bunting	Plectrophanes ni- valis	$\left. \right\} \left  \text{Winter visitor} \right.$	Boes not breed in Great Britain	51 -
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#### BIRDS-NESTS AND EGGS.

Popular Name,	Scientific Name.	Stay in England,	Localities of Nest.	Av. No. of Eggs
Common do., or } Corn do } Black-headed do., }	Emberiza miliaria	All the year .	On or near the ground	4-5
or Water Spar-	" schæniculus	Do	On ground near water	4-5
Yellow Hammer or Ammer, or Yeörling	" citrinella .	Do	{Low thick bushes } on hedge-banks }	3-5
Cirl Bunting Chaffinch	,, cirlus Fringilla Cælebs .	Do Do	Furze, or low bushes { Tree-forks, bushes, } { and hedges . }	4-5 4-5
Mountain Finch, }	" montifringilla	Winter visitor .	{ Does not nest in } Great Britain }	-
Tree Sparrow	Passer montanus .	All the year .	(Holes in trees and) (thatch ) (Thatch, gutters,)	4-5
House or Common }	" domesticus.	Do	holes, deserted nests, trees, &c.	4-6
Greenfinch, or }	$\left\{ \begin{array}{c} Coccothraustes \\ Chloris \end{array} \right\}$	Do	{Hedges, bushes, } and trees . }	4-6
Hawfinch, or Com- mon Grosbeak ) Goldfinch, or	., vulgaris.	Do	Trees and bushes . (Hedges, bushes, or)	4-6
Goldfinch, or) Thistle-finch. Siskin, or Aber-	Carduelis elegans . ,, spinus .	Do Winter visitor .	tree-forks . }	4-5
davine Linnet	,, spinas . Linota cannabina .	All the year .	Great Britain f Thorn-hedges, or furze-bushes	4-6
Mealy Redpole .	" canescens .	Winter visitor .	Does not breed in Great Britain	-
$\left. \begin{array}{c} \text{Lesser or Common} \\ \text{do.} & \cdot & \cdot \end{array} \right\}$	" linaria .	{All year. Winter vi- sitor in S.}	Bushes and stunted	4-5
Mountain Linnet, }	" montium .	All the year .	On ground amongst grass, heather, &c	4-6
Bullfinch, Olph, or }	Pyrrhula vulgaris	D <sub>0</sub>	Thick bushes and	4-5
Common Crossbill .	Loxia curvirostra .	{ Early winter }	Does not breed in Great Britain (Dove-cotes, ruins,)	-
Starling	Sturnus vulgaris .	All the year .	towers, chim- neys, holes in trees, &c.	4-6
Chough	Coracia graculus .	Do	Cliffs, and towers, and castles near sea	4-5
Raven, or Corbie .	Corvus corax	Do	Ruins, rocks, and trees	4-5
Crow. Hooded do. Rook.	,, corone ,, cornix ,, frugilegus.	Do	Forks of large trees . Rocks Trees	4-5 4-5 4-5
Techdom	monadada	De	(Holes and crevices) in rocks, towers,	3-6
	", "moneauaa		Truins, dove-cotes, S	
Magpie Jay	Garrulus glan-	Do Do	High up in trees Tall bushes and trees	
Green Woodpecker	Picus viridis	Do	{Holes in trees. No }	4-1
Great Spotted do Lesser Spotted do Wryneck	,, major ,, minor Yunx torquilla .	Do Do Summer visitor	Do. do	4-5 4-5 6 10
Wryneck	Certhia familiaris.	All the year .	Do. Banks, tree-trunks,	6-10 6-9
Wren	garis f Upupa epops	Do	thatch, walls, &c. )	
Nut-hatch Cuckoo, or Gowk .	Sitta Europæa . Cuculus canorus .	All the year . April—Aug	Holes in trees	
Cucato, or come .	Cucutus cunor us .	Thurnand	( sparrow, Lark, ) Wagtail, &c	1-

				Av.
Popular Name.	Scientific Name,	Stay in England,	Localities of Nest.	No. of Eggs
King-fisher	Alcedo ispida	All the year .	{ Holes in banks of streams, ponds, rivers, &c.	5-6
Swallow Martin	Hirundo rustica . ,, urbica .	April-Oct	Eaves, chimneys, &c. Do.	4-6 5-6
Sand do	", riparia .	MarSept	{ Holes in banks, } { sand-cliffs, &c. } { Towers, steeples, }	4-6
Swift . Night-jar, or Goat-	Cypselus apus. {Caprimulgus Eu- ropæus . }	April—Aug Summer visitor	Towers, steeples, roofs, &c } Hole in ground	2-4 2
Ring-dove, or Wood-pigeon } Stock-dove	Columba palumbus ,, œnas .	All the year . Do	Trees and tall bushes	2 2
Rock-dove	" livia	Do	} Holes and crevices {	2
Turtle-dove	. turtur .	Summer visitor	Trees and bushes	2
Pheasant	{ Phasianus Col-}	All the year .	On ground	10-12
Capercaillie	Tetrao urogallus .	Do	Do	6-12
Black Grouse Red do	Lagopus Scoticus .	Do Do	Do	7-10
Ptarmigan	,, vulgaris .	Do	Do	7-10
Partridge Red-legged do	Perdix cinerea	Do Do	Do	10-13
Quail.	Coturnix vulgaris .	Summer visitor	Do	7-10
Great Bustard	Otis tarda ( Œdicnemus cre-)	-	{ Do. Practically } extinct }	2-3
Great Plover	) pitans J	Summer visitor	Do	2
Golden Plover	Charadrius plu-	All the year .	Do	4
Dotterel Ringed Plover Kentish do	" morinellus. " hiaticula . " cantianus .	Summer visitor	Do	3 4 4
	,, cantanus . Squatarola cinerea	Winter visitor .	(Does not breed in )	1 -
Grey Plover		All the year .	Conground	4
Lapwing, or Peewit	Strepsilas interpres	Winter visitor .	Does not breed in )	_
Turnstone	Calidris arenaria .	Do	Contemporal Contem	-
Sanderling Oyster-catcher	{Hæmatopus os-}	All the year .	On ground	3-4
Heron · · · Bittern · · ·	Ardea cinerea Botaurus stellaris .	Do Do	Trees and rocks On ground	4-5
Curlew, or Whaup.			Do	4
Whimbrel	" phœopus	Winter visitor .	Croat Britain S/	-
Red-shank	Totanus calidris .	Do	Do	4
Green Sandpiper .	" ochropus .	{ Mostly a win- } ter visitor	{On banks near}	4
Wood do	" glareola .	Do	Do	4
Common do.	" hypoleuca .	Summer visitor (Winter visi-)		4
Green-shank		tor, except in Hebrides	On ground ( Holes in ground in )	-
Avocet	$\left\{ \begin{array}{c} Recurvirostra \\ avocetta \end{array} \right\}$	-	On ground in	2
Black-tailed Godwit	Limosa melanura .	The second second	7 marshes, &c	+
Bar-tailed do	" rufa .	Winter visitor .	Does not breed in Creat Britain.	-
Ruff	Machetes pugnax .	Martine and Martine and	shire and Cam- bridgeshire	4
	Scolopax rusticola .	Oct.—April, mostly . Winter visitor .	On ground	4
Great Snipe	, major	, winter visitor .		

#### BIRDS-NESTS AND EGGS.

a company and a second				Av.
Popular Name,	Scientific Name.	Stay in England.	Localities of Nest.	No. of Eggs
Common do	, gallinago .	{Do., some- times re- maining to breed .	Do	4
7. 1. 3.	gallinula .	Winter visitor .	{ Does not breed in }	-
Jack do	, gaunaua . Tringa subarquata	Do	Creat Britain.	-
Curlew Sandpiper . Knot Little Stint	", Canutus . ", minuta .	Do Do	Do	Ξ
Dunlin, Stint, or }	" variabilis .	{Do., some- times re- maining to	On ground	4
	., maritima .	( breed . ) Winter visitor.	[Seldom breeds in ]	-
Purple Sandpiper . Land-rail, or Corn )	, maritima . Crex pratensis ,	Summer visitor	{ Great Britain. ∫ On ground	7-10
Crake		Do	Do. in marshes . Do. do (On banks near)	7-10 6-10
Moor-hen, Water-}	Gallinula chloropus	Do	{ water and small { islands }	6-8
Coot	Fulica atra	Do., generally	Edge of water or small islands.	7-10
Grey Phalarope .	Phalaropus lobatus	Winter visitor .	Does not breed in Great Britain.	-
Grey-legged Goose .	Anser ferus	Do	Do	-
Bean do Pink-footed do	" segetum " brachyrhynchus	Do	Do	-
White-fronted do.	" albifrons	Do	Do	-
Bernicle do	" leucopsis	Do	Do	=
Brent do Hooper	Cygnus ferus .	Do	Do	-
Bewick's Swan .	" Bewickii .	Do Do	Do	-
Mute do	,, olor Tadorna vulpanser	{Do., remain-}	f Rabbit burrows on )	8-14
Shieldrake		{ ing to breed }	Seldom breeds in (	0
Shoveller	Anas clypeata	Winter visitor .	Great Britain.	-
Gadwall	" strepera	Do	Do	-
Pintail Duck	" acuta	Do	Great Britain.	-
Wild do., or Mal-	" boschas	{ Do., remains } to breed }	Among reeds, &c	9-12
Garganey	" querquedula.	Do. do Do., sometimes	Do	8-12 8-12
Teal	" crecca " Penelope	Winter visitor .	(Seldom breeds in)	_
Wigeon	(Somateria mal-)		Great Britain.	
Eider Duck	lissima .	{ ing to breed }	] pices on coast.	5
Velvet Scoter	Oidemia fusca .	Winter visitor .	Does not breed in Great Britain.	-
Common do	nigra .	Do	Do	-
Pochard Scaup Duck	Fuligula ferina . marila .	Do	Do	Z
Tufted do.	" cristata .	Do	Do	100220
Long-tailed do	", glacialis.	Do	Do	-
Golden Eye Smew	Mergus albellus .	Do	Do	=
Red-breasted Mer-	" serrator .	{ Do., remain-} { ing to breed }	{ At foot of a tree, on } small islands . }	6-9
Goosander	" merganser	Do. do	On ground, among bushes, stones, &c.	6-7
Great Crested Grebe	Podiceps cristatus.	Nearly all year.	In rushes, &c., touching water	3-5
Red-crested do	" rubricollis.	Winter visitor .	Does not breed in Great Britain.	-
Sclavonian do.	" cornutus .	Do	Do	-
Little do., or Dab	" minor	∫ Do., remain- )	{Rushes, &c., touch-}	4-6

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Popular Name.	Scientific Name.	Stay in England.	Localities of Nest.	Av. No. of Eggs
Great Northern }	Colymbus glacialis	Winter visitor .	{ Not known to breed } in Great Britain }	-
Black-throated do	" arcticus .	{ Do., remain-} { ing to breed }	On ground, near water	2
Red-throated do Guillemot	" septentrionalis Uria troile	Do. do All the year .	Do. ∫On ledges of rocks)	2
Brunnich's do.	" Brunnichii .	Winter visitor .	and cliffs . { Does not breed in {	-
Ringed do	" lacrymans .	All the year .	Great Britain.	
Black do	" Grylle	Do	and cliffs	2
Tittle Anle	(Mergulus mela-)	Winter visitor .	boes not breed in	4
	l noleucos		Great Britain. (Holes, &c., in rocks)	-
Puffin	Fratercula arctica.	All the year .	and cliffs, also rabbit holes .	1
Razor-bill	Alca torda	Do Do	(On ledges of preci-)	
Shag	<pre>     carbo . ∫     cristatus . </pre>	Do	1 pices, &c	4-0 3-5
Gannet, or Solan) Goose	Sula Bassana	Do	Do	1
Caspian Tern	Sterna Caspia	Winter visitor .	{ Does not breed in } { Great Britain. }	-
Sandwich do Roseate do	", cantiaca . ", Dougallii .	All the year . Summer visitor	Holes in ground	3-4 2-3
Common do., or }	" hirundo .	All the year .	Onground, near water	
Arctic do	" arctica	Do	Do (Holes in ground on )	2-3
Lesser do	" minuta .	Do	Marshy places, on	2-3
Black do	" nigra	Do	(Scoulton Mere,)	4
Black-headed do .	Larus ridibundus .	Do	) Norfolk, near (	3
Kittiwake	,, tridactylus	Do	( pices and chins )	3
Common Gull	" canus	Do	{ High rocks. Some- }	2-3
Lesser Black- ) backed do	" fuscus	Do	Hollows and cre-	2-3
Herring do	", argentatus.	Do	Ledges of rocks	3
Great Black- backed do., or Cob.	" marinus .	Do	Rocky coasts	3
Common Skua .	$\left\{ \begin{array}{c} Lestris & catar- \\ rhactes & . \end{array} \right\}$	Do	Among heath and moss in a hilly island. Shetlands	2
Richardson's do	,, Richardsonii		Onground, in moors ) and marshes .	2
Fulmar Petrel.	{Procellaria gla- cialis }	Do	Ledges of rocks	1
Manx Shearwater .		Do	Holes, in rocks, mostly in unin- habited islands	1
Storm Petrel, or Mother Carey's Chicken.	{ Thalassidroma } }	Do	Holes in cliffs, &c.	1

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## 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 largebodied 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 reset, 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 onethird 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.

## 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.

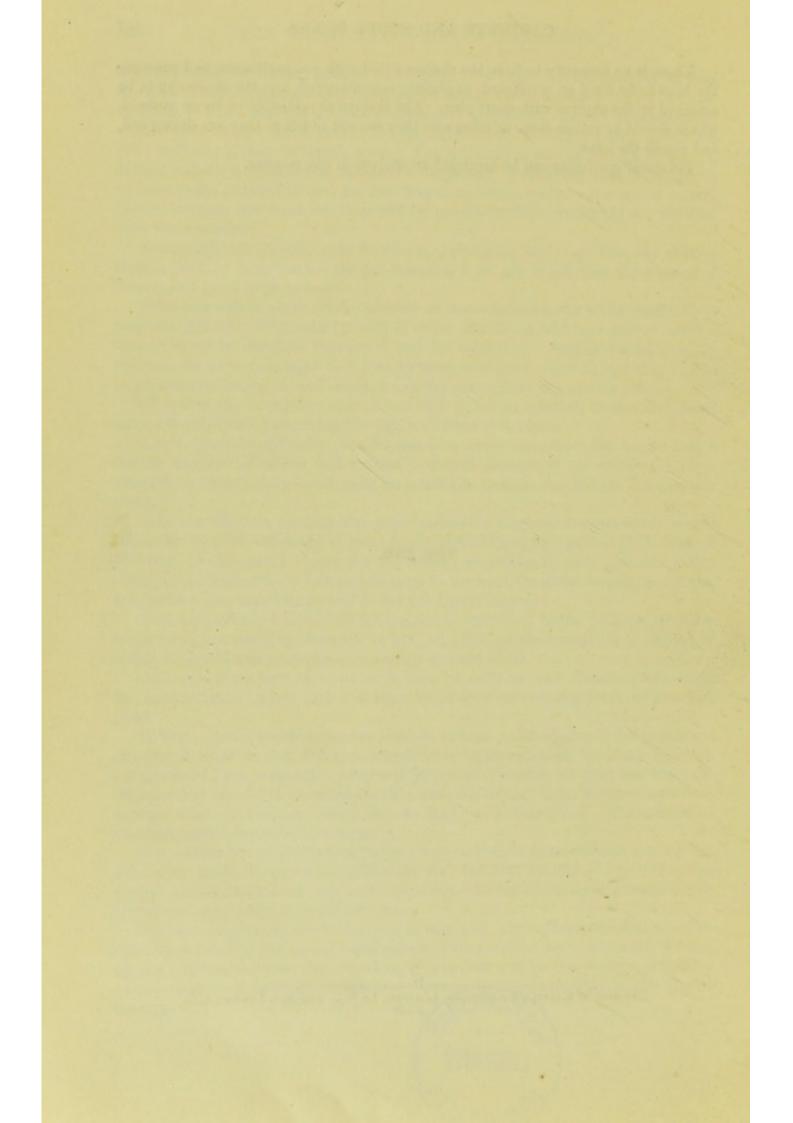
One advantage of proceeding in this way is, that if the collector does at last succeed in setting up a genuine cabinet, he will find that his store-boxes will not be wasted, but will be exceedingly useful as receptacles for the many duplicates which are sure to accumulate in course of time.

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.

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