M0013064: Structural formulae diagrams

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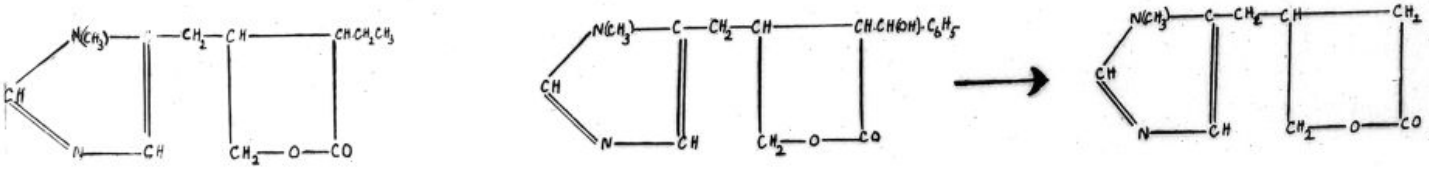
Alkaloids of Jaborandi Leaves.



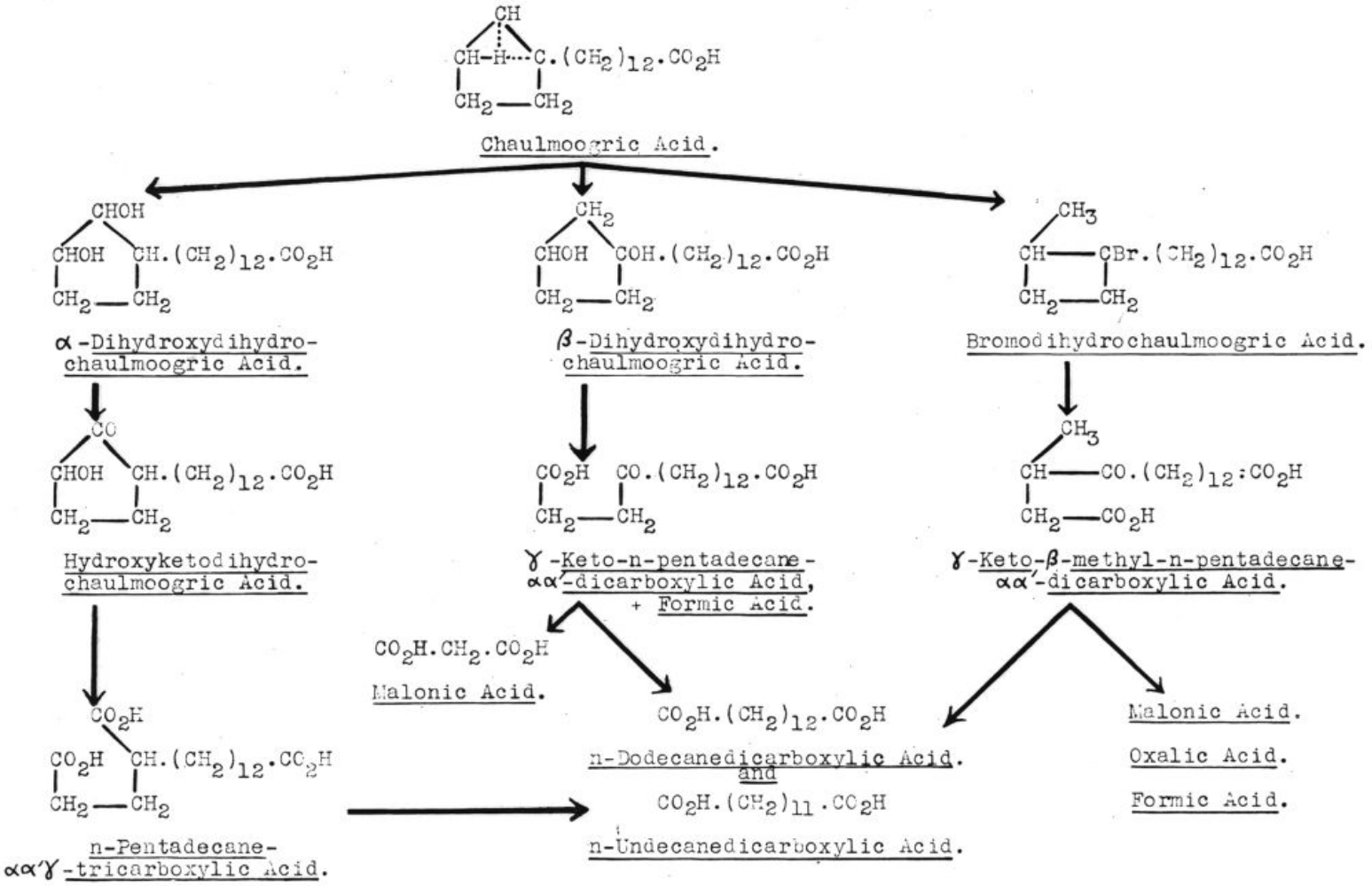
Pilocarpine Pilosine Pilosinine

The dimethylglyoxaline obtained by Jowett from pilocarpine has been shown by Pyman to be 1:5 dimethylglyoxaline by comparison of its fission products with those of the 1:4-isomeride.

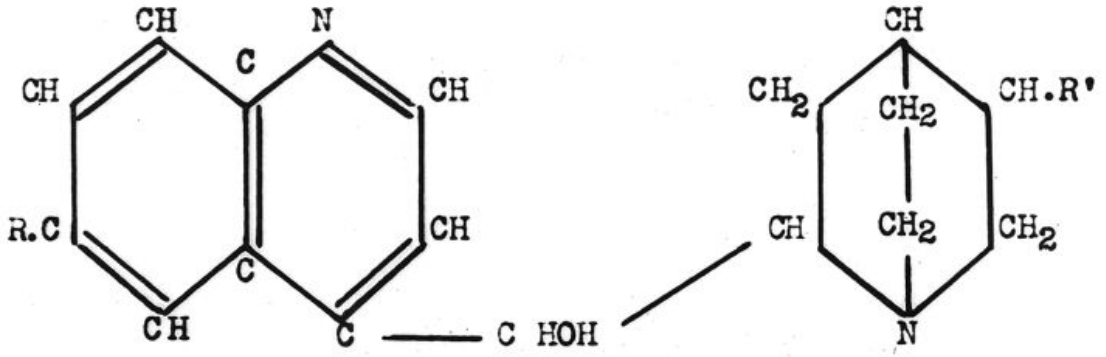
1:5-dimethylglyoxaline
↓
4-nitro-1:5-dimethylglyoxaline
↓
dl-N-methylalanine

1:4-dimethylglyoxaline
↓
5-nitro-1:4-dimethylglyoxaline
↓
dl-alanine-N-methylamidine
↓
dl-alanine

DIAGRAM ILLUSTRATING THE WORK OF DR. F.B. POWER AND MR. BARROWCLIFF ON THE CONSTITUTION OF CHAULMOOGRIC ACID.
(Journal of the Chemical Society, 1907, Vol. 91, p.557)



GENERAL FORMULA FOR CINCHONA ALKALOIDS



In cinchonine and cinchonidine, R = H. R' = .CH:CH_2

In cupreine, R = .OH. R' = CH:CH_2

In quinine and quinidine, R = .OCH_3. R' = .CH:CH_2

In the hydro- bases, R' becomes .CH_2.CH_3

In the alkylcupreines, R becomes .OAlk (homologues of quinine)

In the alkylhydrocupreines, R becomes .OAlk and R' becomes .CH_2.CH_3 e.g. in hydroquinine and hydroquinidine (both methylhydrocupreines) R becomes .OCH_3 and R' is .CH_2.CH_3

In quitenine, R is .OCH_3 and R' becomes .COOH

In alkylquitenines, R is .OCH_3 and R' is .COOAlk.