

~~Apoc~~ Lamiaceae

Classification:- Kingdom - Plantae
Division - Magnoliophyta
Class - ~~Magnoliophyta~~ Magnoliopsida
Order - Lamiales
Family - Lamiaceae

Habit:- Plants are mostly aromatic herbs or shrubs (Leonotis, Pogostemon). Tree habit is found in the Brazilian genus Elyptis and climbing habit in American species of Scutellaria.

Root:- Tap, branched, rarely adventitious (Mentha).

Stem:- Aerial, herbaceous, rarely woody, erect or prostrate, quadrangular, hairy, branched, solid or hollow, sometimes underground suckers (Mentha).

Leaves:- Opposite decussate, rarely whorled, simple, petiolate or sessile, crestipulate, hairy with aromatic smell, entire, unicostate reticulate venation.

Floral characters:-

Inflorescence:- very commonly verticillate consisting of a pair of condensed dichasial cymes at each node, often the verticillasters are grouped together in a thyrsus form; rarely solitary (Scutellaria).

Flower:- Pedicellate or sessile, bracteate, complete, zygomorphic rarely actinomorphic (Mentha, Elyptis, hormaphrodite, rarely unisexual (Nepeta, Thymus).

pentamerous hypogynous.

Calyx:- Sepal 5, gamosepalous, bilabiate (Salvia, Thymus) complicate (Teucrium), persistent, valvate or imbricate aestivation. When a bilabiate calyx is present the arrangement of the sepals may be (1/4) as in ocimum or (2/3) as in Calamintha.

Corolla:- The Corolla possesses a tubular base which widens towards the mouth. Petals generally 5, gamopetalous and the five teeth are sub-equal and mostly bilabiate. In mentha a few lobed corolla arises due to the fusion of two upper teeth.

Androecium:- Typically only 4 stamens, didynamous (2+2) and posterior stamen is reduced or represented by a staminode, in Calamintha only two perfect stamens are found, two are imperfect and the fifth reduced.

Gynoecium:- Bicarpellary, syncarpous, superior, situated on hypogynous honey secreting disc, bilocular become tetrilocular by the formation of false septum. axile placentation, one ovule in each loculus. style gynobasic, stigma bilobed.

The gynoecium character is thus uniform without any variation.

Fruit :- Usually schizocarpic carcerulus or achenes or nutlets rarely drupaceous.

seed :- Non endospermic

Floral - Formula :-

Br % ♀ $K_{(3/2) \text{ or } 5}$ $\overset{\text{C}}{\text{---}} \overset{\text{A}}{\text{---}} \overset{\text{G}}{\text{---}}$
 $(2/3) \text{ or } (4/1)$ $\underline{2+2}$ $\underline{\underline{1(2)}}$

Economic Importance :-

Food :- Leaves of *Mentha viridis*, *Acimum basilicum*,
Melissa officinalis et.

Medicinal :-

Ajuga reptans,
Leucas cephalotes } fever
Mentha piperata,
Thymus serpyllum