

* Acanthaceae

Kingdom :- Plantae

Division :- Magnoliophyta

Class :- Magnoliopsida

Order :- Scrophulariales

Family :- Acanthaceae

Herb :- Plants are mostly herbs, shrubs or a few climbers (Thunbergia) - Some xerophytes (Barleria, Blepharis, Acanthus), aquatic (Asteracantha longifolia).

Root :- Branched tap root system

Stem :- Aerial, erect, underground (Ruellia tuberosa), herbaceous or woody, branched cylindrical, nodes swollen, climbing or twining (Thunbergia), spinous (Barleria).

Leaves :- Opposite decussate, simple, crestipulate, Petiolate, usually entire, acute apex, hairy, crystalids are present in the epidermal cells of stem and leaves.

Floral characters :-

Inflorescence :- solitary axillary (Thunbergia), spike (Blepharis) racemes, dichasial or monochasial cymes.

Flowers :- Bracteate, bracteolate, bracts, and bracteolates conspicuous, pedicellate or sessile

and brightly coloured, hermaphrodite, complete, zygomorphic, pentamerous or tetramerous, hypogynous nectariferous disc present below the ovary wall.

Calyx: - sepals 4 or 5 gamosepalous, mostly bilabiate hairy, imbricate, inferior.

Corolla: - Petals 2 to 5, bilipped, gamopetalous, variously coloured, imbricate or twisted inferior.

Androecium: - Generally 4, rarely 5 (Penstemon), in some 2 fertile stamens and 2 staminodes, epipetalous, filaments free, ditheous, dorsifixed, alternate with the corolla lobes, one anther lobe may be smaller than the other and unequally placed, anthers sometime spurred.

Gynoecium: - Bicarpellary, syncarpous, superior, bilocular, axile placentation, carpels medium, on or more ovules per loculus, style simple, stigma bilobed, disc present below the ovary.

Fruit: - Capsule or rarely drupe.

Seed: - Non endospermic with hooks.

Pollination: - Entomophilous - Insects.

Floral Formula: -

Br, Bud % $\frac{\text{♂}}{\text{♀}}$ K(4-5) $\overset{\text{A}}{\underset{(5)}{\text{C}}}$ $\overset{2+2}{\text{A}}$ $\underline{\underline{\text{G}(2)}}$

Economic importance :-

Medicinal :- Adhatoda vasika > used in cough
Barleria cristata

Roots of Ecbolium used in jaundice

Andrographis paniculata used for = Liver disease

Fruit and leaves of phlogacanthus thyrsiflorus
are used for fever.

Ornamental :- Acanthus
Barleria
Justicia
Thunbergia
Jacquinia
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