

Lycopodium

Classification -

Sub-division - Lycopsidea

Order - Lycopodiales

Family - Lycopodiaceae

Life history =

> Lycopodium is represented by about 400 species which mostly grow in tropical and subtropical region.

Some species also found in arctic and alpine regions of the world.

> In India, the genus about 33 species confined to the Eastern Himalayas and south Indian hills.
(*L. clavatum*, *L. cernuum* and *L. serratum* etc).

Habit.

> Lycopodium are small herbaceous sporophytes commonly named club moss which vary in their habit.

> These are found on tree trunks and branches as pendulous epiphytes. The terrestrial species are either prostrate with a creeping stem or erect with aerial stems (*L. complanatum*). *Lycopodium volubile* is a climber.

External Morphology =

> The plant body is differentiated into root, stem and leaves.

Root -

> Root is ephemeral, hence older plants have only adventitious roots. In some species branching is dichotomous.

> Adventitious roots develop mainly from the cells of the stem pericycle, but sometimes they also originate from endodermis.

> The roots which seem in the region of the cortex. Such roots are known as Corticle roots.

Stem -

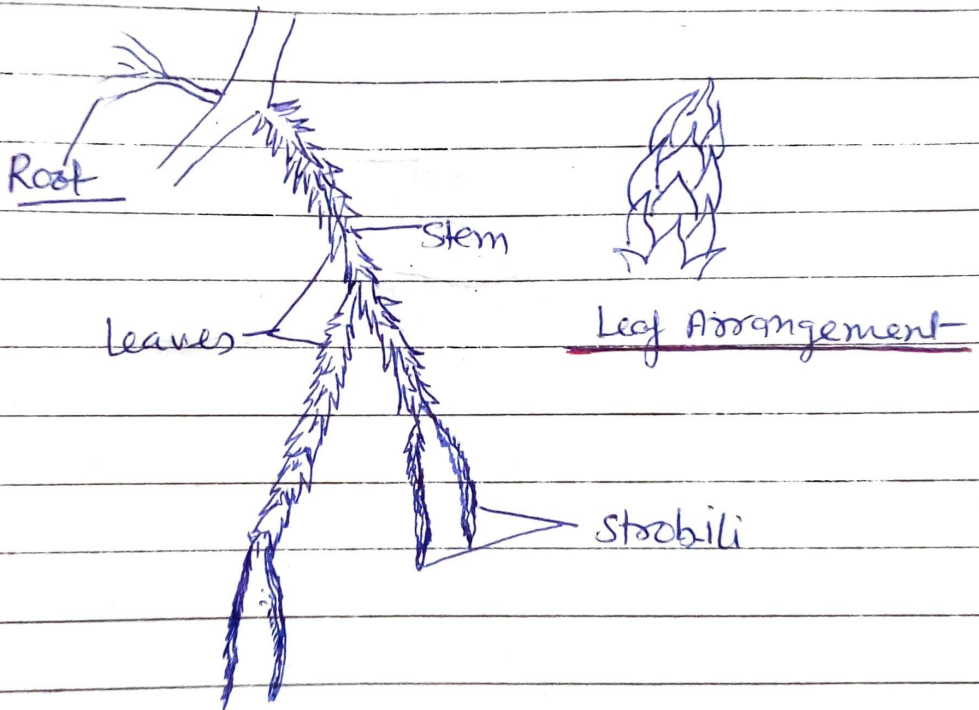
> The stem is weak, slender and rhizomatous. It is sparsely or profusely branched. Unequal branching occurs mostly during the formation of reproductive branches such as bulbils and gemmae. The stem and branches are covered with leaves.

Leaves =

> The leaves are small, simple, eligliate and sessile with a narrow apex and slightly broad base. They are mostly entire but sometimes the margins are serrate.

> The size of leaves are 2-10 mm but in *L. mandt-
ceum* these are 25-30 mm long.

> The arrangement is spiral, whorled or
opposite decussate.



External Morphology Lycopodium.

Internal structure - Root -

> A transverse section of root shows three distinct regions - epidermis, cortex and stele.

> The epidermis is single layered made up of thin walled cells in the apical region of the root.