

Topic: Polygonaceae

B.Sc. Botany Hons. II

Paper: III Group: B

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Class Magnoliopsida

Subclass Caryophyllidae

Order Polygonales

Family Polygonaceae

Characters of Polygonaceae:

- Mostly herb, climbing, leaves stipulate ochrea intrapetiolar, sheathing, swollen nodes; racemose, flowers small, crowded, ditrimerous, hypogynous, hermaphrodite, polyphyllous in two whorls; stamens 6 (3 + 3) or more; carpels (3), 1-loculed, single basal ovule; fruit a nut, enclosed by persistent membranous perianth.



A. Vegetable characters:

Habit:


Mostly herbs e.g. *Polygonum plebejum*, annual or perennial rarely shrubs (*Polygonum hydropiper*) or small trees (*Coccoloba uvifera*); tendrils – climber (*Antigonum* spp.). Acidic properties due to presence of various oxalates.

Root:

Tap, branched.

Stem:

Generally herbaceous with swollen nodes surrounded by a stipular




sheath; sometimes bent like a knee i.e., geniculate; phylloclades in Muehlenbeckia.

Leaves:

Simple, alternate, sometimes sparse, entire, lobed leaves occur in *Rumex acetosella*; leaves usually sour in taste due to the presence of calcium oxalate crystals in the cells.

In *Muehlenbeckia platyclados* leaves very few or absent, the stem is modified into flat and green phylloclades; leaves radical in *Rumex hastatus*; stipulate, stipules form an intrapetiolar sheath, the ochrea (= ocrea) which surrounds the nodes, stipules



sometimes fimbriate or hairy or rarely absent as in *Koenigia islandica*. The leaves may have a felt of hair as an adaptation cold.