

Topic: Euphorbiaceae

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Systematic classification

Class: Dicotyledonae

Sub class: Monochlamydae

Series: Incompletae

Order: Unisexuales

Family: Euphorbiaceae

Euphorbiaceae

Distribution: The members of this family are cosmopolitan in distribution but, they are more abundant in warmer parts or tropical regions of the world. They are almost absent in Arctic region. In India this family is represented by 61 genera and 336 species. All these species are distributed in tropical and sub-tropical Himalayas and mountain ranges of south India.

Vegetative characters

Habitat: Generally, plants belonging to this family are Mesophytic or xerophytic in habitat

Habit: This family shows a great range of characteristics in vegetative and floral structures. Members of this family are mostly shrubs (for example *Jatropha*, *Ricinus*, *Euphorbia* sps.) or trees (for example *Emblica officinalis*, *Hevea brasiliensis*) and rarely herbs (for example *Acalypha*, *Phyllanthus*).

The species of *Tragia* are climbers. Several species of *Euphorbia* (like *E. royleana*, *E. neriifolia* and *E. trigona*) are cactus like in habit with thick, fleshy stems and with leaves reduced to spines. These plants



contain milky latex in special laticiferous vessels.

Root system: These plants show tap root system. Exceptionally, *Manihot* has tuberous roots which are rich in starch. Few species of *Manihot* are edible.

Stem: Several species of Euphorbia are cactus-like in habit with thick and fleshy stems and leaves reduced to spines. These plants often contain milky latex with special laticiferous vessels.

Leaf: The leaves are usually alternate or rarely opposite (*Choriophyllum*) or whorled (*Mischodon*), simple, entire or deeply palmately lobed (*Ricinus* and *Jatropha*) or compound (*Bischofia*). The



leaves are variegated in Croton.

The stipules are usually present and in *Jatropha* they are represented by ciliate glands. The venation is pinnate or palmate as in *Ricinus*. In species of *Euphorbia*, leaves fall off early and photosynthesis is carried by green stems.