

Family - Euphorbiaceae

(Spurge family)



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Ricinus

The most common example of the family Euphorbiaceae is *Ricinus communis* Linn. It is commonly called as Arandi. The diagnostic features of the family Euphorbiaceae are -

1. Habit - Annual or perennial shrub or small tree.

Root - Tap, branched.

Stem - Erect, cylindrical, branched, fistular, glabrous.

Leaf :- Alternately, simple, petiolate, broad, palmately lobed, lobes usually 7-9 serrate multicostate reticulate venation.

Inflorescence - Terminal paniced cyme

Flowers - Pedicellate, bracteate, unisexual, — monoecious, male flower towards lower portion, female flowers towards apical portion of inflorescence, actinomorphic, incomplete, hypogynous.

Male flower

Calyx - 5 or 4, membranous, polysepalous, green, inferior, valvate aestivation.

Corolla - Absent

Androecium - Stamens - 5, Each Stamens profusely branched, anther cells borne on ultimate branches, anther basifixed.

Female Flower

Calyx - 3 to few or more, membranous, caudex, Spethaceous, valvate aestivation.

Corolla - Absent

Gynoecium :-

Carpels-3, tricarpelegy, syncarpous, ovary superior, trilobular, covered with toying outgrowth, axile placentation, single large ovule in each locule. three styles, three bifid stigmas.

Fruit - Schizocarpic, capsule or Regma.

Floral Formula

Male : Br ⊕ ♂ K₅ C₀ A₅ (branched)

Female : - Br ⊕ ♀ K₃ C₀ G₍₃₎

Identification and systematic position -

Reticulate venation — Dicotyledon
Flower pentamerous //

Flower simple petals,
pet usually sepallate

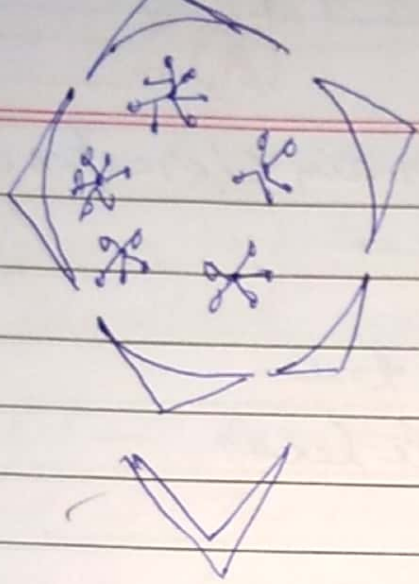
Sometimes absent — Monochlamydeae

Flower unisexual, hypogynous, actinomorphic.

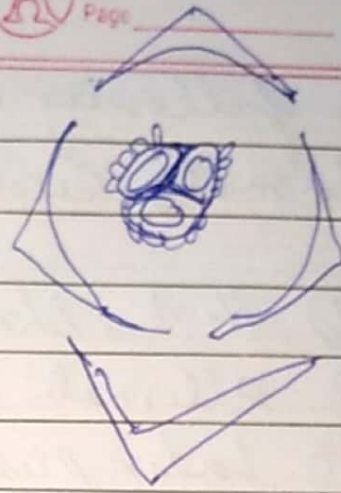
Axile placentation, calyx present, rarely absent — unisexuals.

Leaves simple alternate with latex, stems indefinite to one, free or monadelphous or branched. ovary superior, tricarpelegy, syncarpous, axile placentation, seeds endospermic.

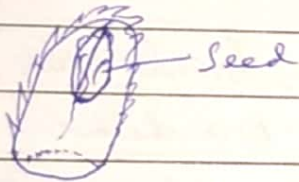
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Floral diagram (male)



Floral diagram (female)



Single Carpel



Seed.

Economic Value :-

- 1) Seeds are source of castor oil which is used as a lubricant and as a purgative.
- 2) It is used as an ingredient of transparent soap, textile soap, typewriter links, perfume aromatics, varnishes and paints.
- 3) Seed cake is used as fertilizer.