

# Characters , formula , Euphorbiaceae floral diagram & Importance

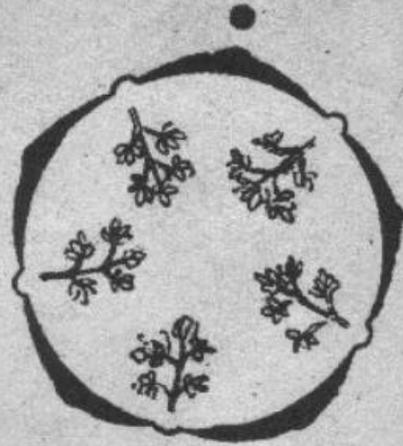
## Diagnostic characters

1. **Habit:** Annual perennial Herbs, shrubs, or tree; most of plants are xerophytic; presence of milky juice.
2. **Roots:** Tap root
3. **Stem:** Herbaceous and fleshy; sPiny;
4. **Leaver** Sessile or petiolate; alternate; simple; there is general tendency of reduction in leaves. Sometimes, leaves are reduced to scales or spines.
5. **Inflorescence:** Racemose or cymose; Often a **cyathium**, cyathium has single naked female flower in the centre. Five involucre bracts surround it. In the axil of each flower, there are naked male flowers.
6. **Flower:** **Pedici** I late; bracteate; actinomorphic: Regular; incomplete; unisexual; hypogynous;
7. **Perianth:** 5 perianth leaves; free: sometimes perianth is totally absent.
8. **Stamens:** 5 stamens; free;
9. **Carpel:** Tricarpillary; syncarpous ovary superior; Axi le placentation.
10. **Fruits:** Shizocarpic fruit **regma**, rarely a capsule **IL Seed:** Endospermic. **Flora**
11. seed:Endospermic.

## formula and floral diagram

Male flower:  $\oplus \sigma^{\circ} P_5 A_5 G_0$

Female flower:  $\oplus \text{♀} P_5 A_0 G(3)$



*Fig: Female flower*

*Male flower*

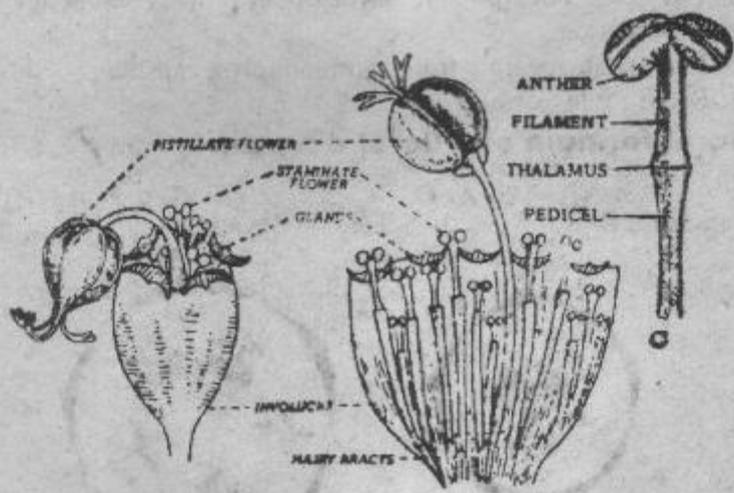
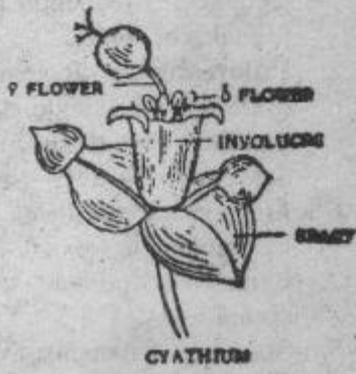
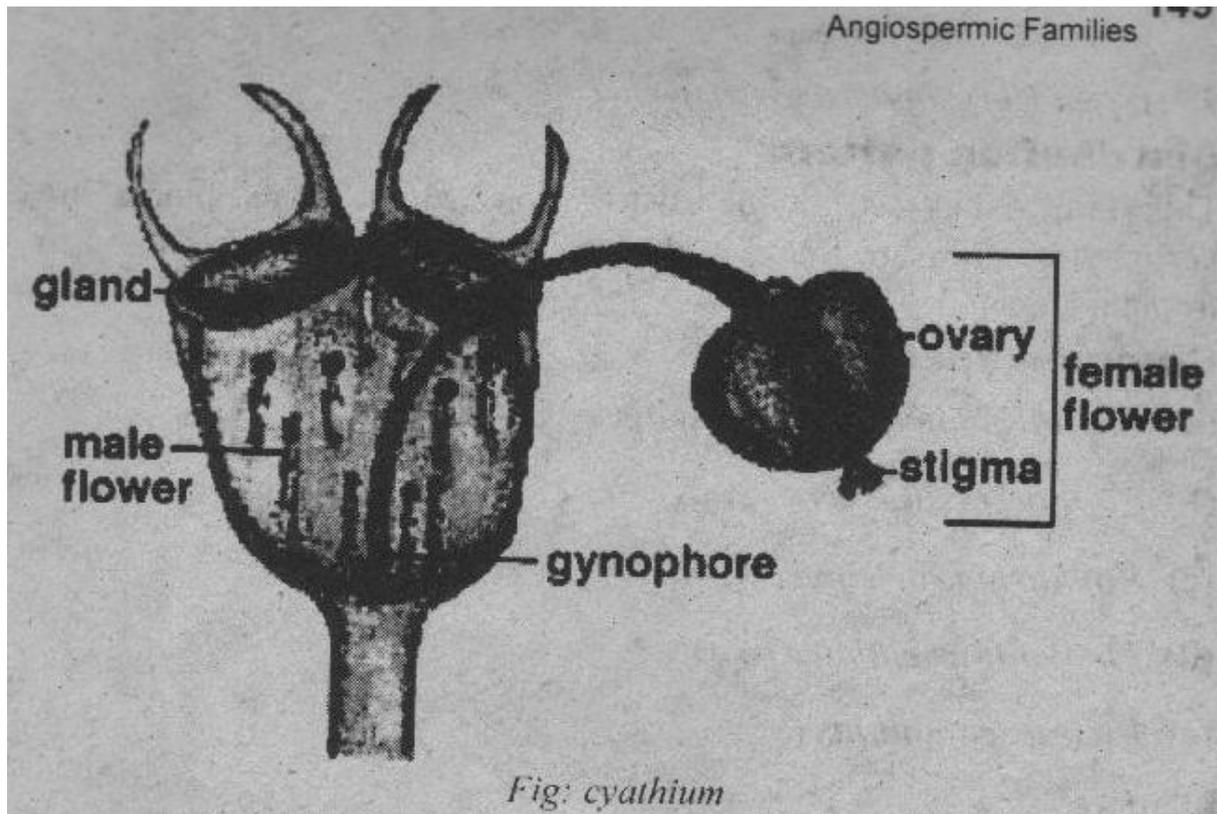


Fig. *Euphorbia splendens*



### Economic Importance

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1. **Source of food:** The plant *Montt:at* gives starchy food from its tuberous roots.
2. **Oils:** Some plants give wood oil, artist oil and other drying oils. These oils are used in paints. These oils are extracted from the seeds of several species.
3. **Lubricant** and purgative: Castor oil (IA and Conon oil (jL in are used as purgatives.
4. **Poisons:** The milky juice of many plants like *Manillal. Mercuriolis* has deadly poisons. Some are very dangerous for stomach. Some can cause blindness of eyes, Therefore, these poisons are used for murder and suicides. These are also used to kill some insects.

5. **Medicinal uses:** The fruit of *Phyllanthus emblica* has many medicinal uses.
6. **Rubber:** Several species of *Hevea*, *Man/hot* gives common rubber in their latex.
7. **Box wood:** Box wood ;s obtained from *Buxus* specie It is best wood for wood engraving.
8. **Ornamental plants:** The plants of this family have attractive colours. So they am commonly used as ornamental plants.  
Examples: *Euphorbiu splenclens*. *Euphorbia pulcherrima*, castor bean.
9. Dyes: *Chrozophora* gives dye.

#### 9. **Distribution pattern**

This family has worldwide distribution. Most of its plants are xerophytes. They are found in deserts. Some species are common in tropical areas.

#### **Common species**

1. *Euphorbia helioscopia* (Spurge)
2. *Euphorbia pilulifera*
  
3. *Euphorbia royleana*
  
4. *Phyllanthus emblica*
5. *Richuts communis*