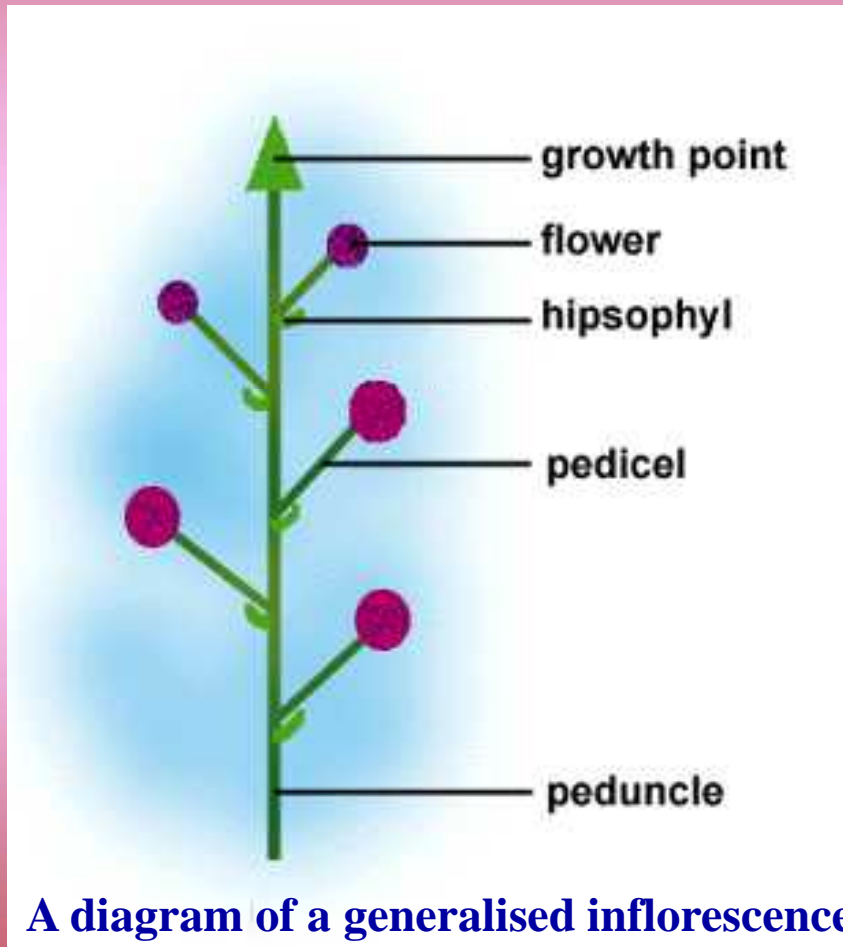


*FLOWER ARRANGEMENT ON FLORAL
AXIS: INFLORESCENCE*



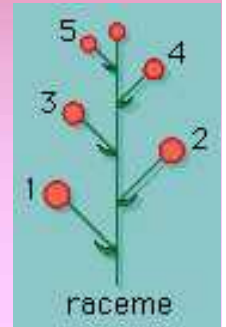
INFLORESCENCE



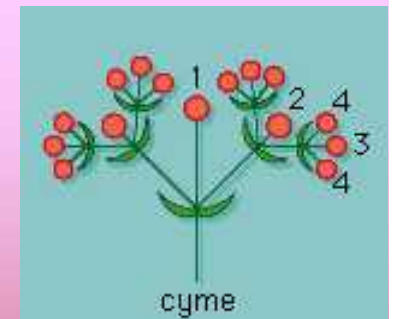
- Many trees do not bear their flowers separately but in groups closely together. These groups of flowers and their associated stems are called **inflorescences**.
- The stem that bears a single flower or an inflorescence is called the **peduncle**. The peduncle of an inflorescence may have smaller stems called **pedicels**
- The pedicels may bear the flowers as in the example on the left, or they may have further small branches which bear the flowers, in which case the inflorescence is said to be compound.

Types of Inflorescence

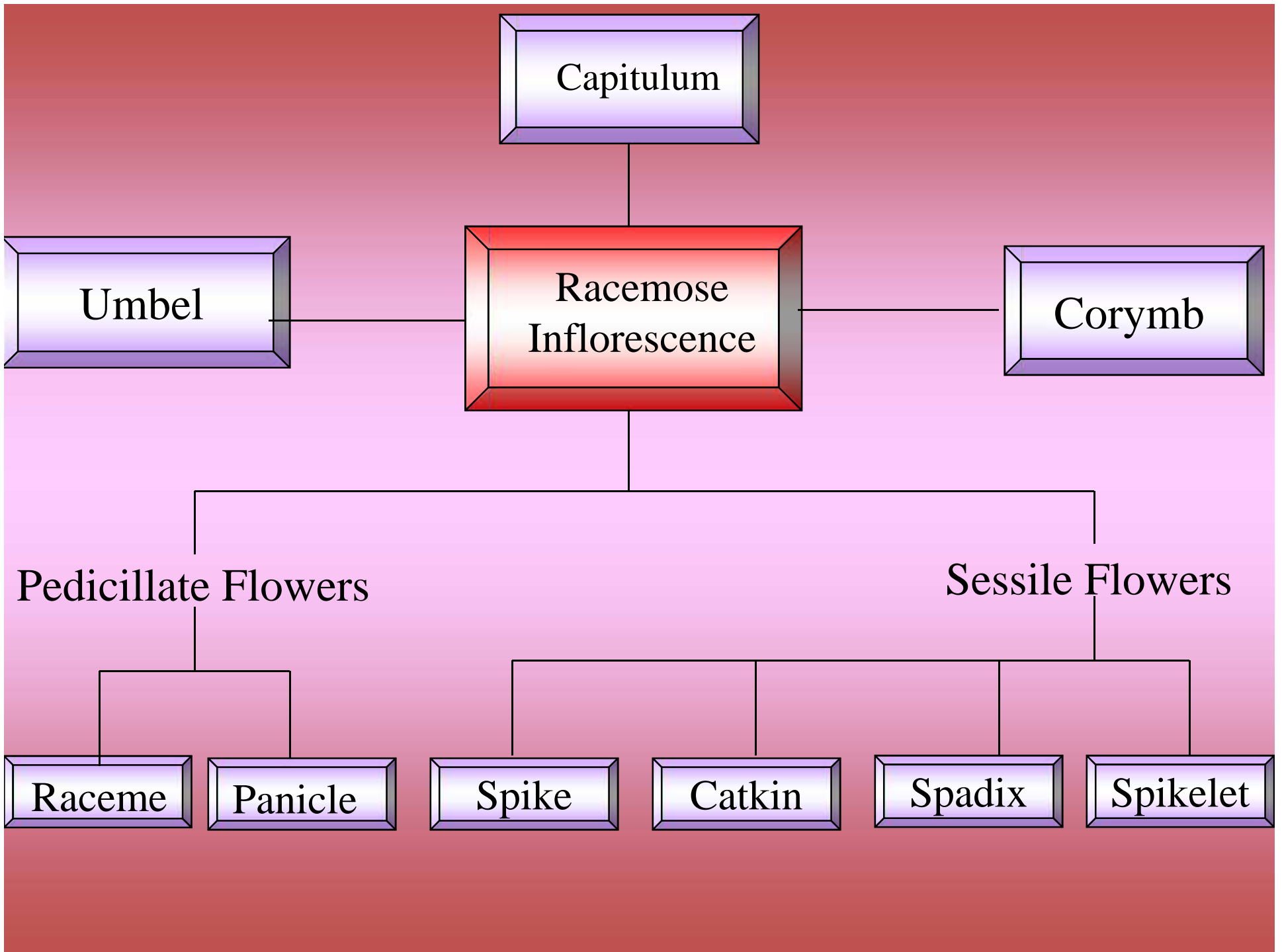
❖ *Racemose Type*: The main axis grows indefinitely giving rise to younger flowers in an acropetal order.

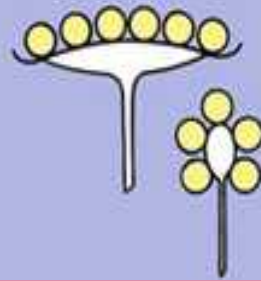


❖ *Cymose Type*: The apical bud is a flower. The younger flowers are borne below it, in a basipetal manner.

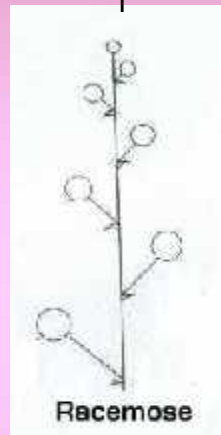


❖ *Special Inflorescence*

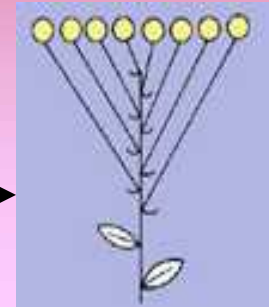




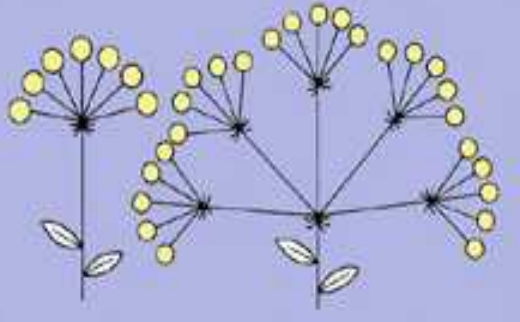
Capitulum



Racemose



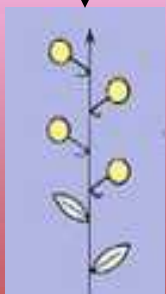
Corymb



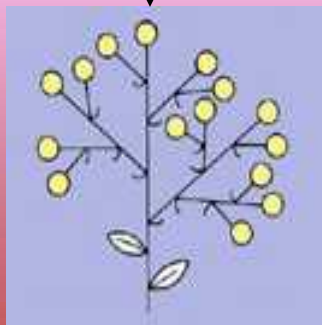
Umbel

Pedicillate Flowers

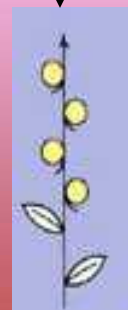
Sessile Flowers



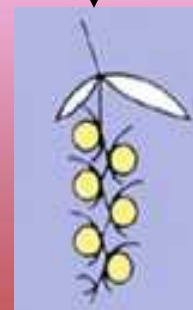
Raceme



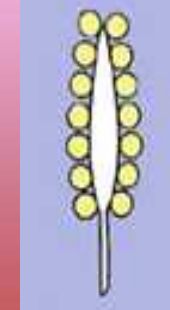
Panicle



Spike



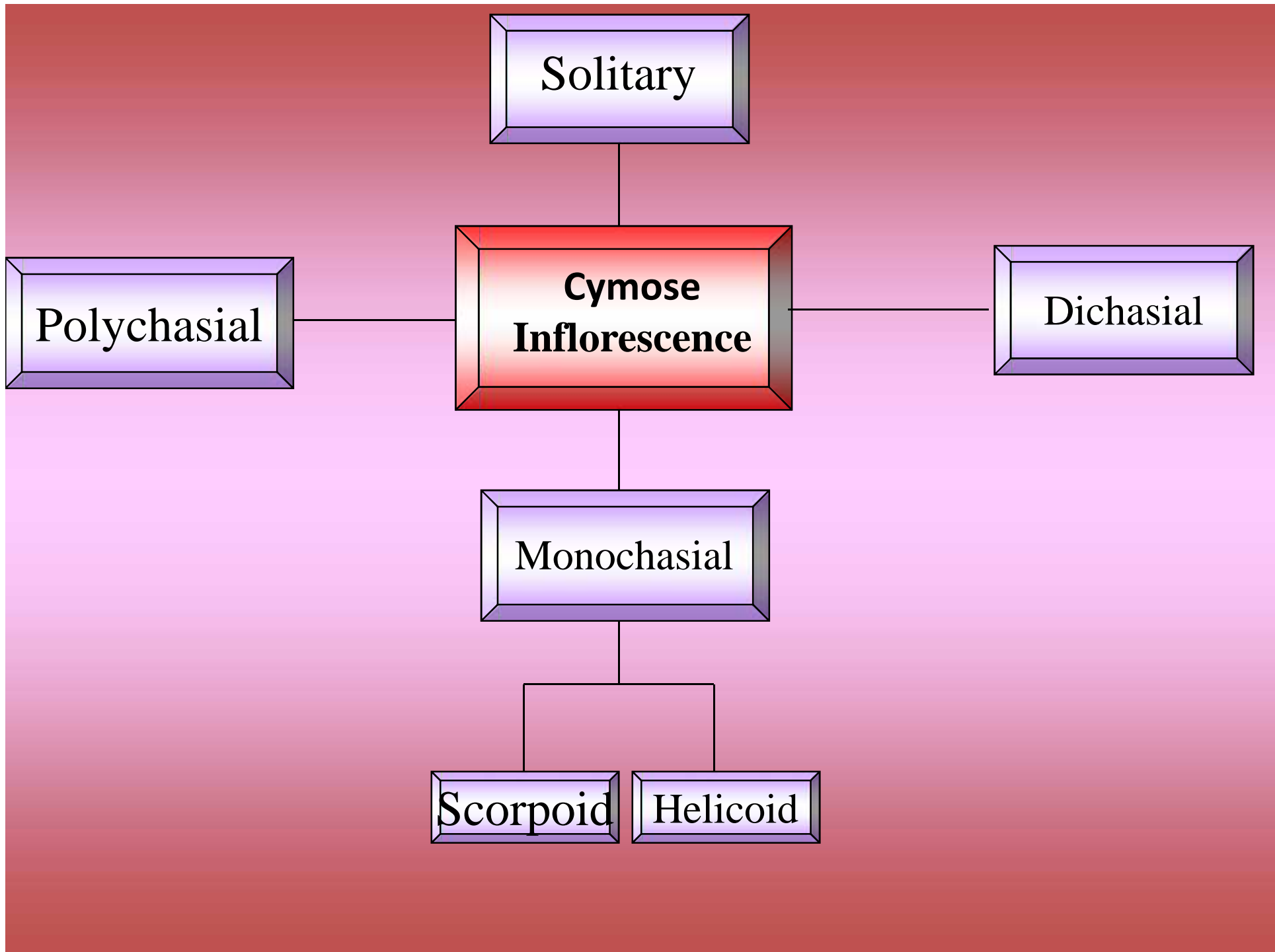
Catkin

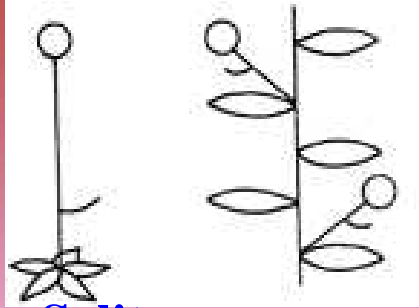


Spadix

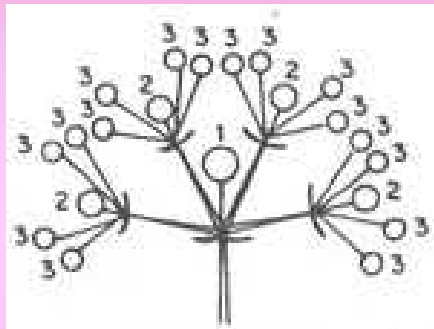


Spikelet



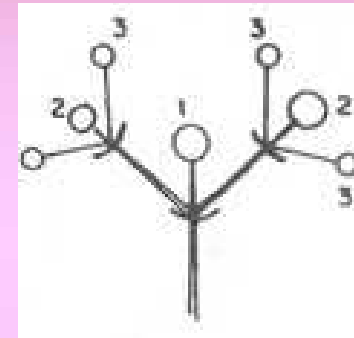


Solitary cyme



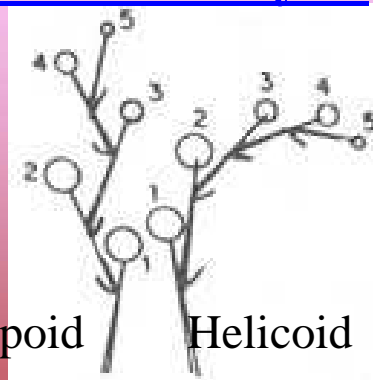
Polychasial cyme

**Cymose
Inflorescence**



Dichasial cyme

Monochasial cyme



Scorpoid

Helicoid



Special Inflorescence

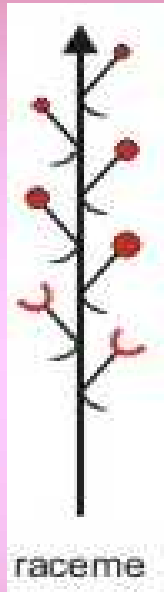
Cyathium

Verticillaster

Hypanthodium



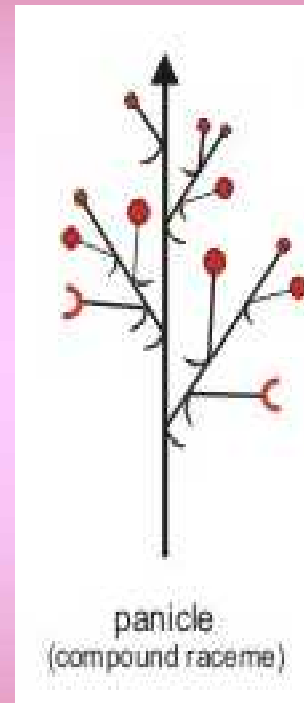
Raceme



**Stalked flowers are borne acropetally on an elongated rachis.
e.g. Mustard, Radish.**



PANICLE



Alfalfa

Flowers borne not directly on the axis but on its branches.

e.g. Alfalfa



SPIKE



Simple Spike-
Achyranthes aspera



Compound Spike-
Amaranthus spinosus

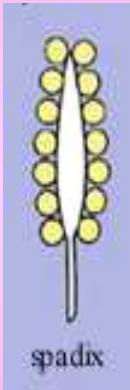
Like a raceme but flowers are without stalk.e.g. *Achyranthes*



SPADIX



Musa indica



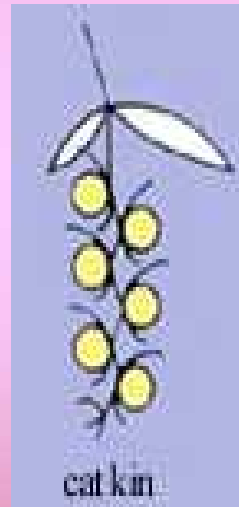
Rachis is thick and fleshy and the flowers are covered by one or more spathy bracts e.g. *Musa indica* (banana)



CATKIN



Morus alba

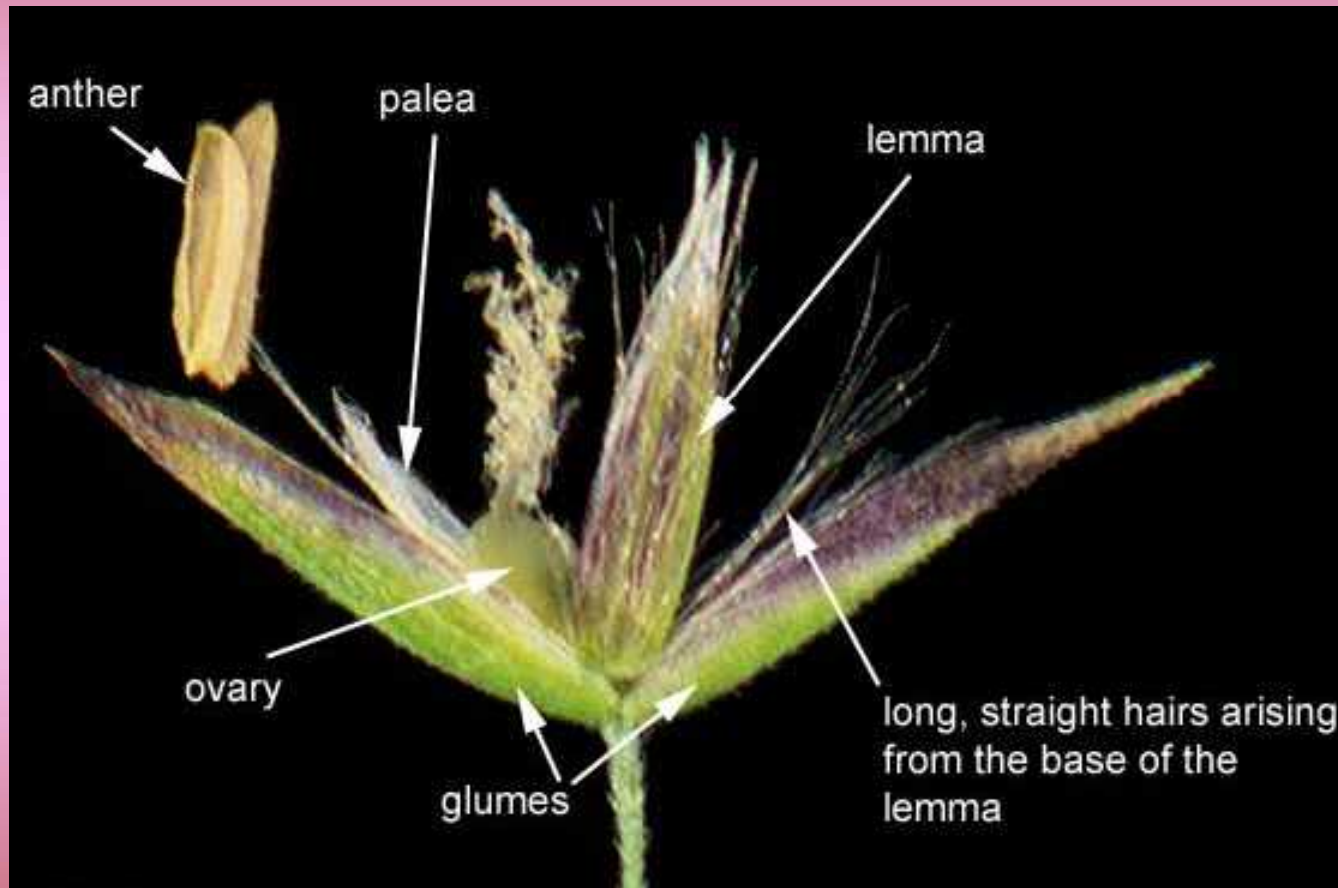


Carya texana

Spike in which the axis is thin and weak. These are unisexual inflorescences and usually deciduous e.g. *Morus alba* (Mulberry)



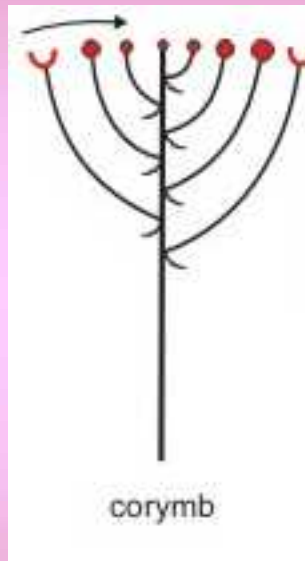
SPIKELET



1-5 flowers are present in a spikelet, which are subtended by lemma (br.), palea (brls.) and glumes e.g. *Triticum vulgare* (wheat)



CORYMB



Iberis amara

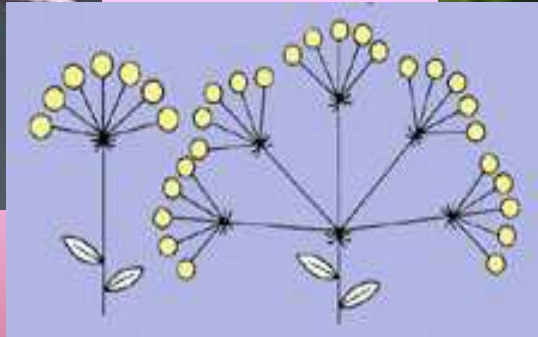
Axis not elongated. All the flowers are placed almost at the same level, the lower flowers having longer pedicels. e.g. *Iberis amara* (candy tuft)



UMBEL



Geranium



Foeniculum vulgare

Axis is suppressed and the flowers usually have pedicels equal in length, forming a cluster e.g. *Foeniculum vulgare* (saunf)



CAPITATE



Albizia julibrissin (Mimosa)

The axis is suppressed and a large number of sessile flowers arise from it forming a globose structure e.g. *Acacia*, *Mimosa*

CAPITULUM

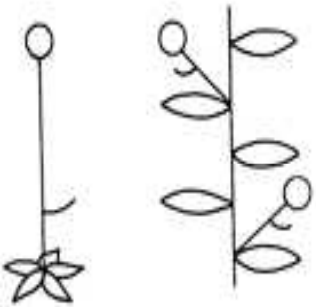


Helianthus annuus

Rachis forms a flattened or convex receptacle on which the florets are arranged e.g. *Helianthus annuus* (sunflower)



SOLITARY



Hibiscus rosa sinensis

Axillary bud forms a single flower e.g. *Hibiscus rosa sinensis* (shoe flower)



MONOCHASIAL CYME

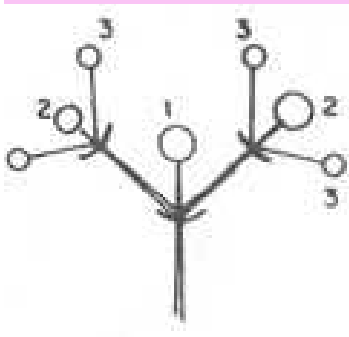


Heliotropium

Main axis terminates in a flower and one lateral branch develops from its base also ending in a flower e.g. *Heliotropium*



DICHASIAL CYME

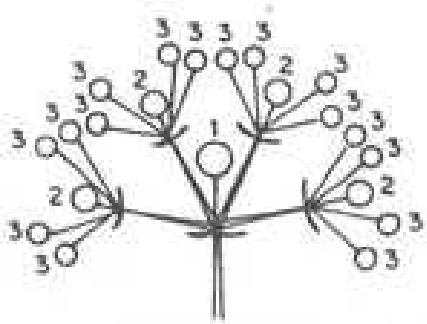


Dianthus

Two lateral branches develop on two sides of the terminal flower.
Lateral branches may again branch e.g. *Dianthus*



POLYCHASIAL CYME



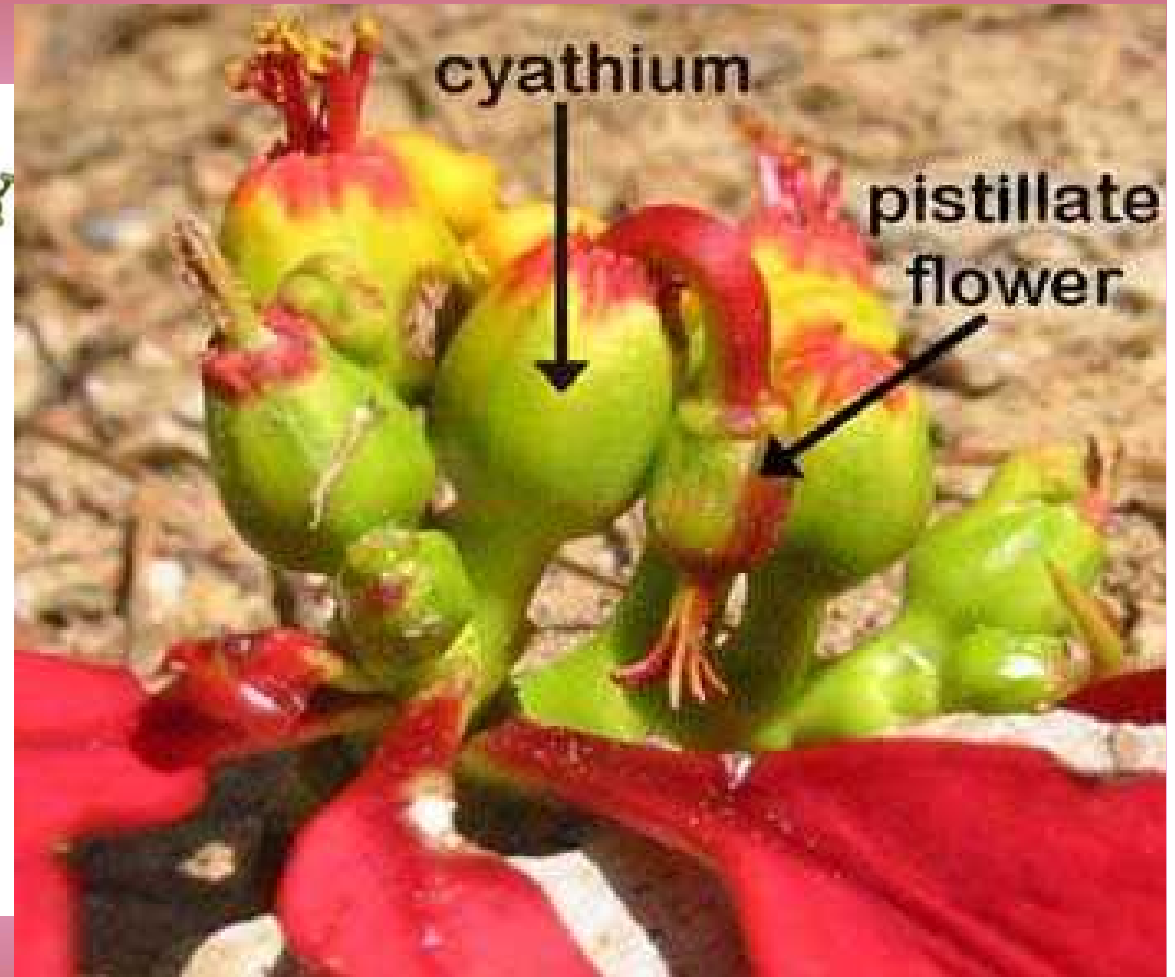
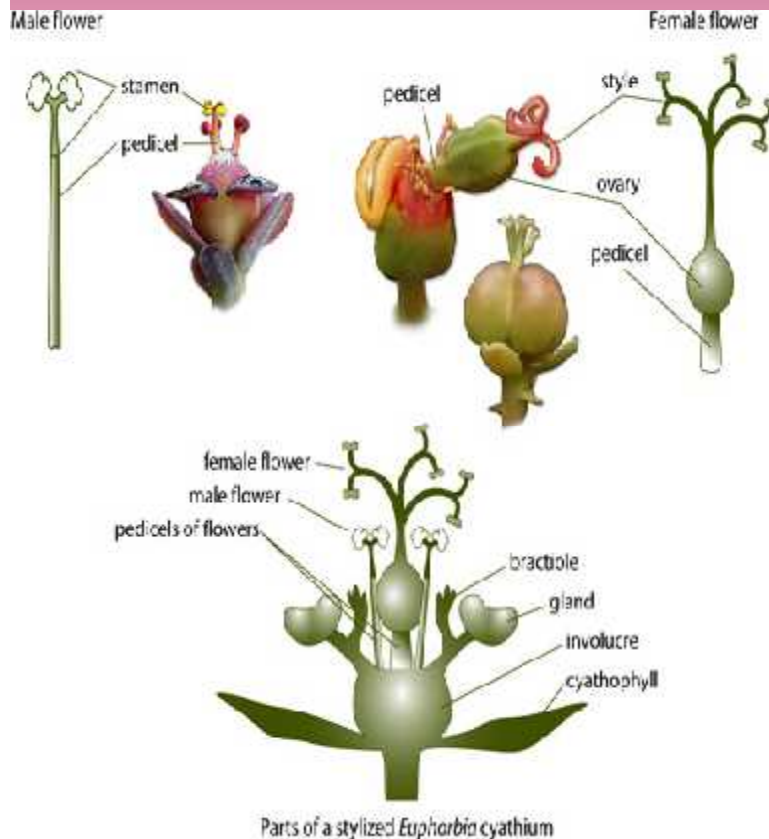
Calotropis procera

More than two branches develop on the two sides of the terminal flower e.g.

Calotropis procera (Ak)



CYATHIUM

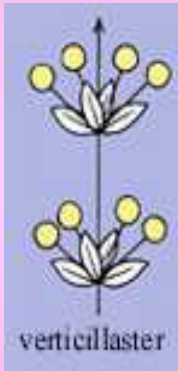


Euphorbia pulcherrima

Extremely reduced unisexual florets are placed on convex receptacle covered by a cup shaped green involucre. Central female flower is the biggest surrounded by a large number of male flowers e.g. *Euphorbia pulcherrima* (*Poinsettia*),



VERTICILLASTER



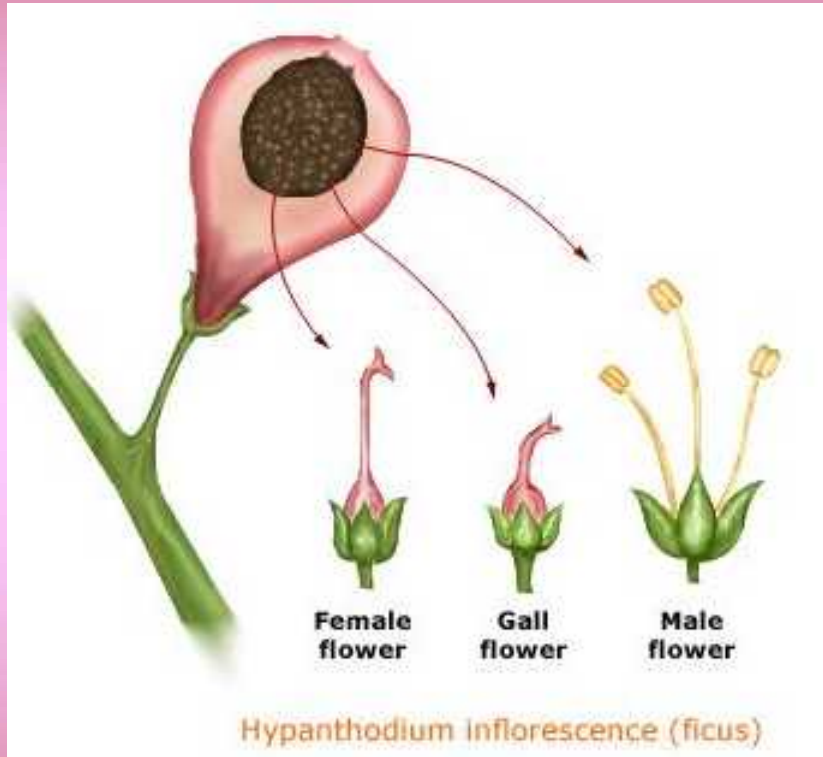
Ocimum sanctum



The opposite leaves at the nodes, bear dichasial cymes in their axils. The sessile flowers are clustered together appearing like a whorl around the stem e.g. *Ocimum sanctum* (tulsi)



HYPANTHODIUM



Cup-shaped receptacle formed by the condensation of the rachis of closely placed cymes. The receptacle forms a vessel with a terminal opening and flowers inside it in cymose groups e.g. *Ficus*





Thank you