

High Yield Hints – INFLORESCENCE

Inflorescence is the arrangement of flowers on the floral axis. The stalk bearing the inflorescence is called peduncle. It arises from the axil or tip of the stem. It may be single or branched.

Inflorescence is of two types. **Recemose** and **Cymose**

Recimose : It has indefinite growth. The main axis does not ends in a flower .It continuously produce flowers. The flowers may be stalked as in Radish, Mustard , Gulmohar etc. Sessile flowers are found in Adathoda , Amaranthes etc. The sessile flowers are arranged on a main axis called spike. In grasses the spike is small bearing one or more flowers. This is called spikelets.

Catkin : In mulberry and oak the spike bears unisexual flowers. This is catkin.

Recimose Flowers

Spadix :A spike with fleshy axis and large bright bracts. Eg. Banana , Palms.

Corymb :Main axis is short with long stalk of flowers. All the flowers are arranged more or less in the same level. Eg. Candytuft.

Umbel :The primary axis is short and bears a cluster of flowers. Eg Coriander.

Capitulum :The complete inflorescence looks like a single flower. Egs. Sunflower , Zinnia , Marigold.

Compound :The main axis is branched and flowers are born on branches. Egs. Gulmohar , Neem (compound receme) Wheat (compound spike) Palm (compound spadix) Candituft (compound corymb) Coriander (compound umbel)

CYMOSE

Cymose inflorescence shows definite with a terminal flower.

Uniparous or monochasial cyme :Main axis ends in a flower and has only one lateral branch that also ends in a flower. Egs. Begonia , Sundew , Solarum.

Biparous or Dichasial cyme :The main axis ends in a flower and has two lateral branches ending in flowers. Egs. Bougainvillia , Jasmine ,Teak.

Multiparous Cyme :The main axis ends in a flower with many lateral flowers around it. Egs. Madar , Asclepias

Cyathium : Special type of inflorescence. Cup shaped with a single female flower surrounded by many male flowers. The nectar secreting gland is present at the rim of the cup. Eg. Euphorbia.

Verticillaster : *It is a condensed cymose with a cluster of sessile flowers in the axil of the leaf forming a false whorl.* Eg. *Salvis , Ocimum , Coleus.*

Hypanthodium : A hollow cavity is present in a pear shaped receptacle with a narrow opening surrounded by scales. The flowers are produced on the inner wall of the cavity .Eg.Ficus.

FLOWER

Flower is the modified shoot. It consists of four parts namely Calyx ,Corolla , Androecium , and Gynoecium . All the parts are arranged in cyclic manner on the thalamus. Thalamus is the swollen part of the stalk or pedicel. A flower contain only one reproductive organ is called unisexual flower and if both the reproductive organs are

present it is called bisexual flower. A plant with unisexual flowers – both male and female flowers in the same plant - is called monoecius and the plant having bisexual flowers – male and female flowers in separate plants - is called dioecius plant.

TYPES OF FLOWERS

1.Regular flower : It is also called actinomorphic. The flower can be cut in to two halves through any vertical plane. Egs. Mustard , Datura.

2.Zygomorphic : The flower can be cut in to two equal halves only through one plane. Egs. Pea, Bean, Gulmohar, Casia.

3.Assymetrical : The flower cannot be divided in to equal halves through any plane. Egs. Canna.

4.Isomerous :The flower has whorls with equal number of parts.

5.Heteromerous :The flower has whorls without equal number of parts.

6.Hypogynous :Thalamus conical and gynoecium occupies the highest position. The ovary is superior. Egs. Mustard, China rose , Brinjal.

7.Perigynous :Thalamus is disc like. Carpels are born in the center and floral whorls are present on the rim of thalamus. Ovary is inferior. Egs. Sun flower , Guava , Cucumber and Apple.

8.Bractate :Flowers with bracts are called bractate. Bracts are the special leaves present at the base of flower.

9.Ebractate :Flower without bract.