SEXUAL REPRODUCTION IN FLOWERING PLANTS

PRE-FERTILISATION : STRUCTURES AND EVENTS

ANDROECIUM

- An androecium is the male part of the flower which is composed of a long filament and an anther attached to its tip.
- The number of stamens may vary according to the flower.
- The anther is a bi-lobed structure. Each lobe contain two pollen sacs.
- The pollen sacs contain pollen grains. The pollen grains are nourished in the pollen sacs and when they mature they are liberated out of the sac.
- The pollen grains are very minute structures, which appear as a powdery mass and can be found in different size and shapes.

GYNOECIUM

They are female reproductive structures composed of carpels. A carpel is composed of 3 parts namely ovary, style and stigma.

Here, let's discuss more about the structure of gynoecium and the concept of placentation.

Gynoecium – Structure

Gynoecium is the female reproductive portion as well as the innermost whorl in a flower. As mentioned earlier, carpel is the main component of gynoecium that consists of ovary, style and stigma. These carpels can be either apocarpous or syncarpous. If there is more than one carpel, and all are fused together, then it is called syncarpous. Examples – tomato and mustard. If the carpels are free, then it is apocarpous. Examples – rose and lotus.