

Plant Reproduction



Propagation

- Propagation
 - The reproduction of plants either sexually or asexually.





Sexual Reproduction

- Sexual Reproduction:
 - The union of the female and male sex cells to produce a seed (embryo).
 - Creation of a genetically new individual.

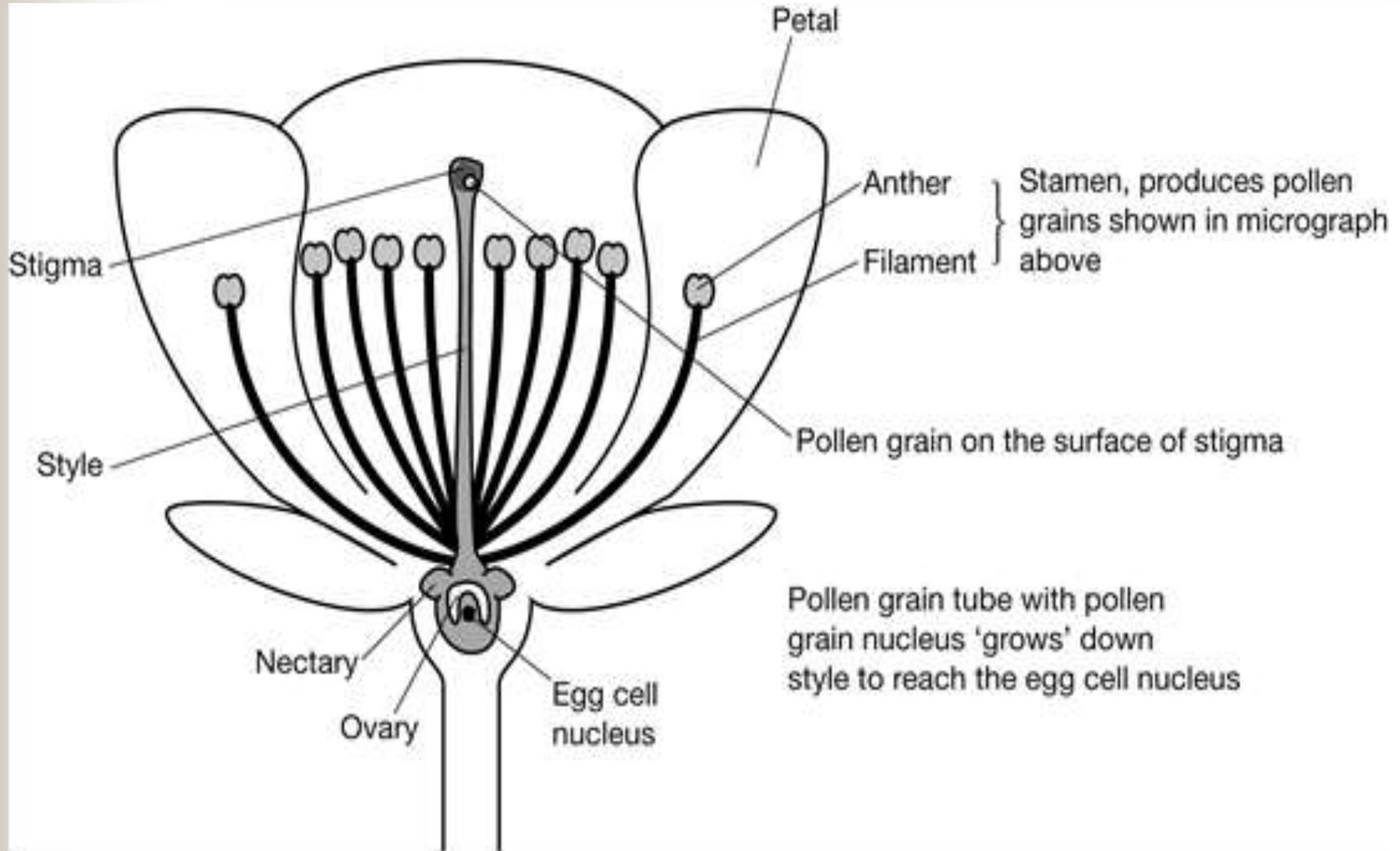


Asexual Reproduction

■ Asexual Reproduction:

- The reproduction of a plant without the uniting of a pollen and ovule.
- Vegetative propagation
- It is known as a clone.
- Leaves, stems or roots may be used to grow a new plant.
- *Produces a genetically identical plant.

Complete Flower



Sepals

- The outer part of the flower.
 - In open flowers, the sepals are found at the base of the plant.



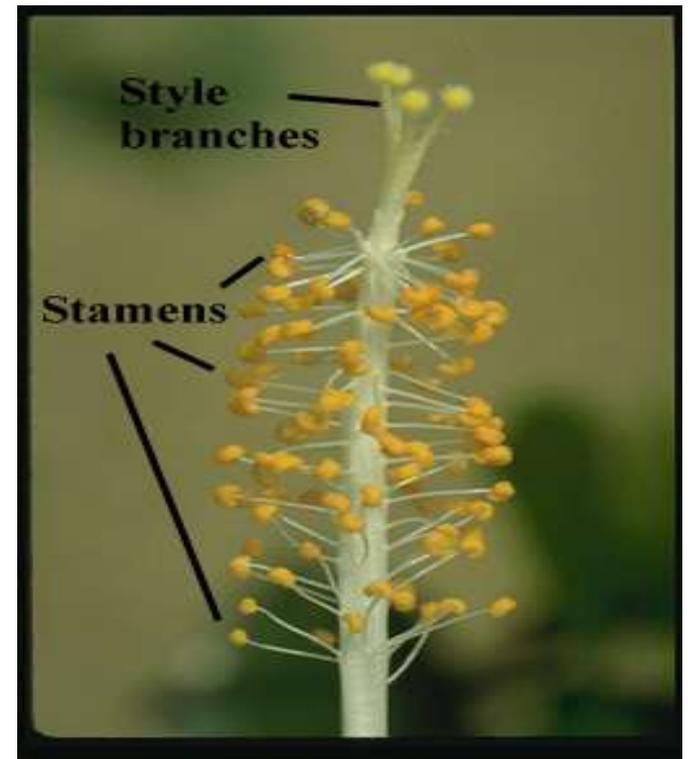
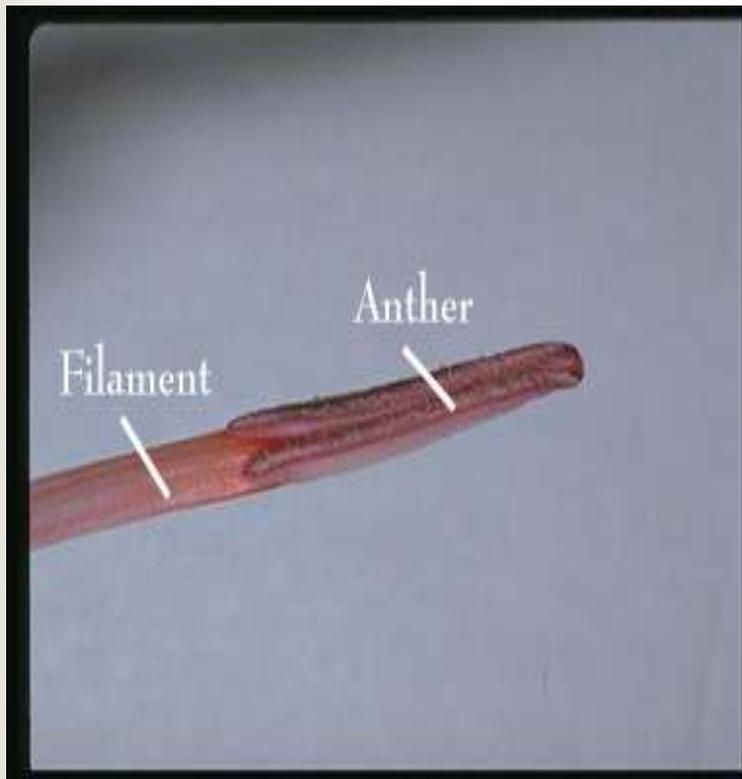
Petals

- The brightly colored, soft tissue that attracts pollinators.



Stamens

- The male part of the flower that has an anther at the end of it to produce pollen.

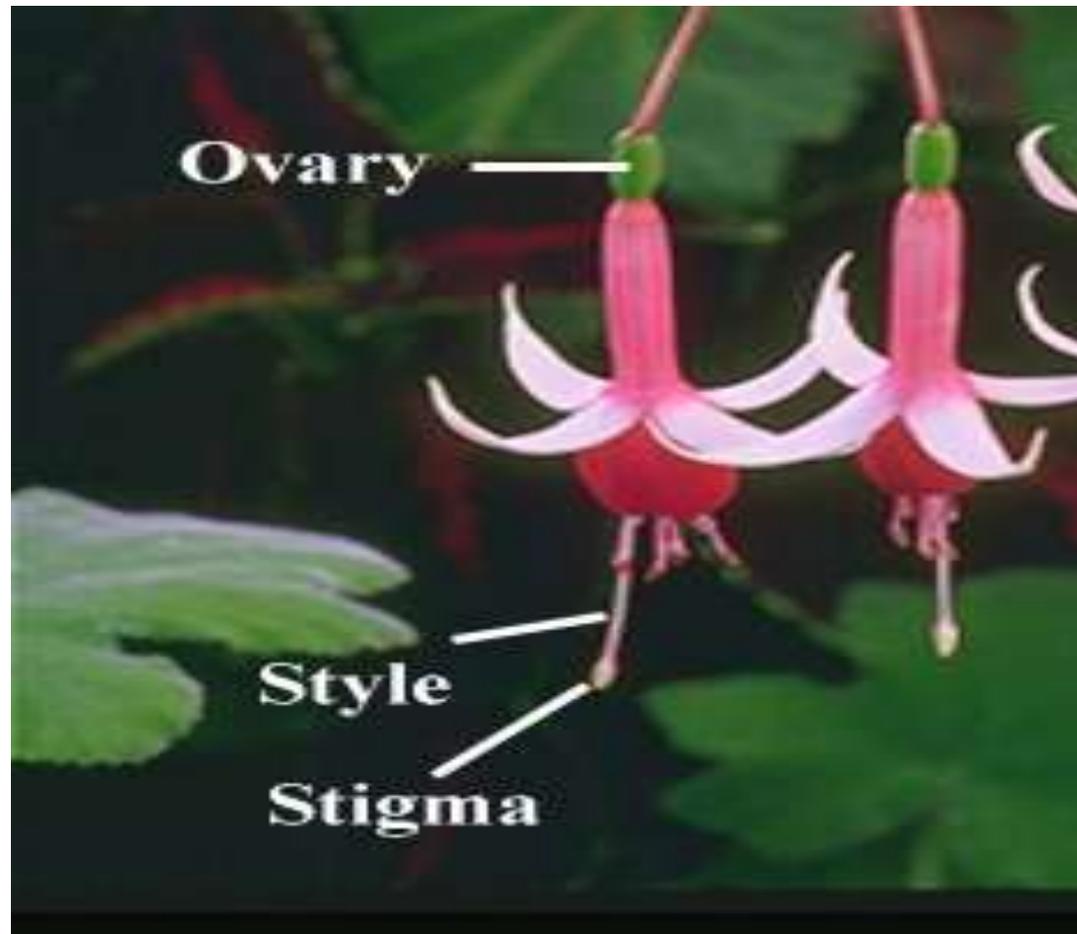




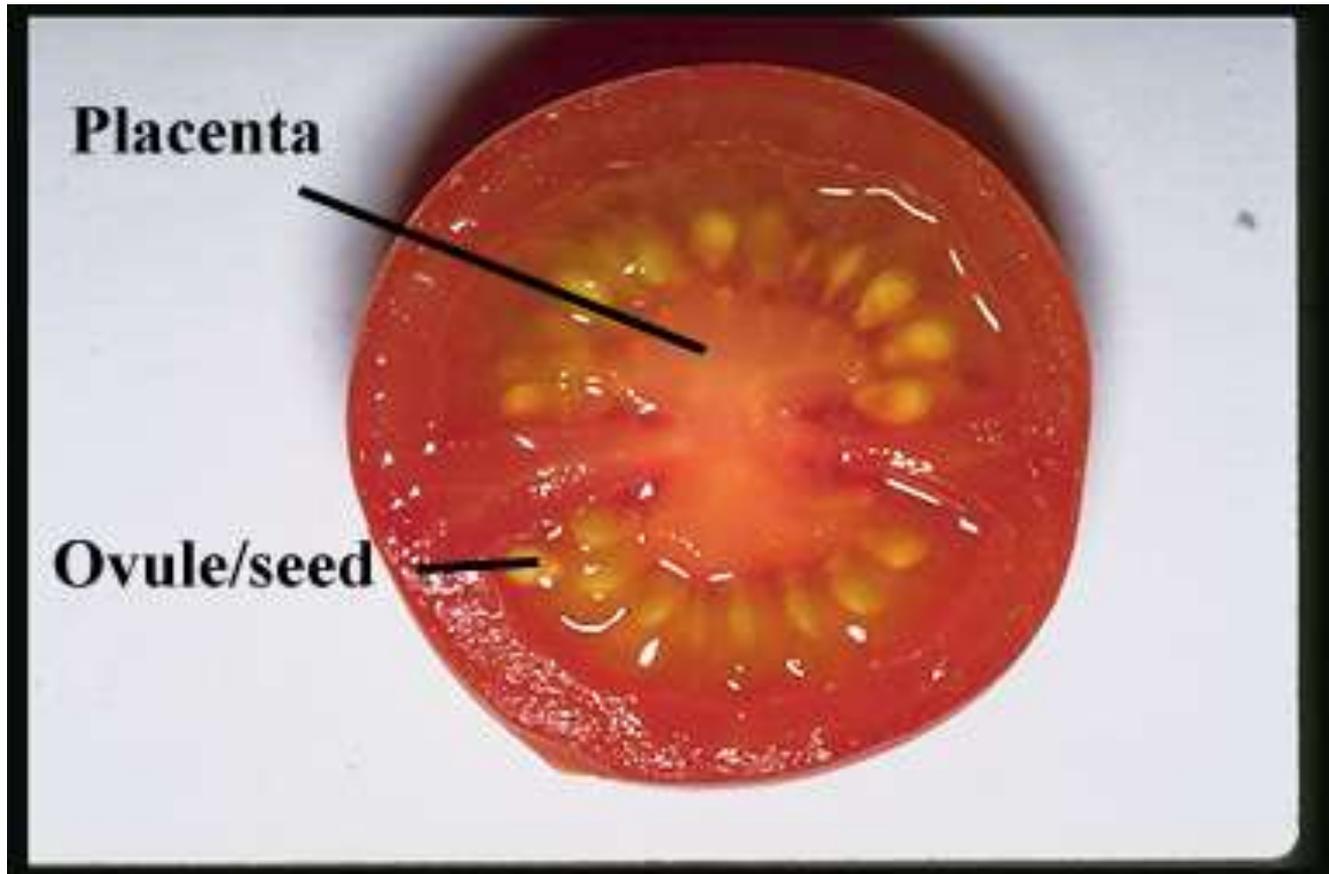
Pistil

- Stigma
 - The opening of the pistil.
- Style
 - The tube-like structure that connects the stigma and ovary.
- Ovary
 - The site of fertilization and growth of the seed.

Stigma, Style & Ovary



Ovary



Fertilization

- Fertilization
 - The union of the pollen and ovule cells.



Germination.

- Germination
 - The sprouting of a seed.



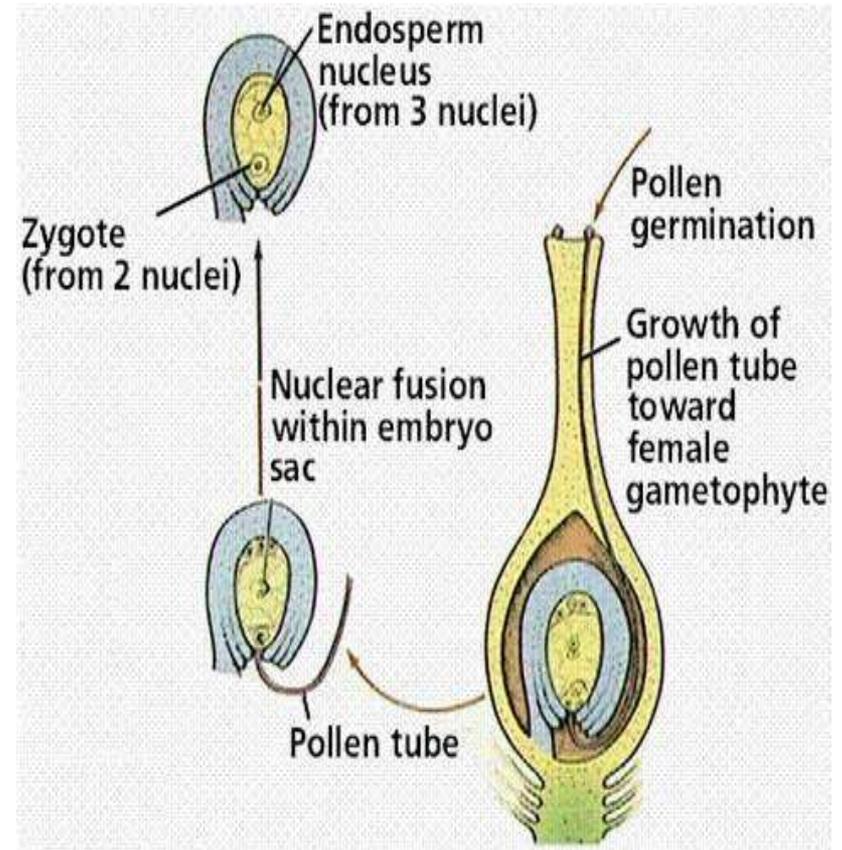
Pollination

- Pollination
 - The transfer of pollen from an anther to a stigma of a flower of the same species.



Pollination

- Pollen brought to flower
- Pollen grain sticks to stigma
- Grows down the stigma and style through the ovary to reach the egg
- Pollen grain nucleus and egg nucleus join



Methods of Pollination

- Wind
- Animals / insects



Wind pollination

- Some flowers, such as grasses, do not have brightly coloured petals and nectar to attract insects.
- They do have stamens and carpels.
- These flowers are pollinated by the wind.



Insect Pollination

- Pollen grains are carried on the hairs of insects







