

# 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.

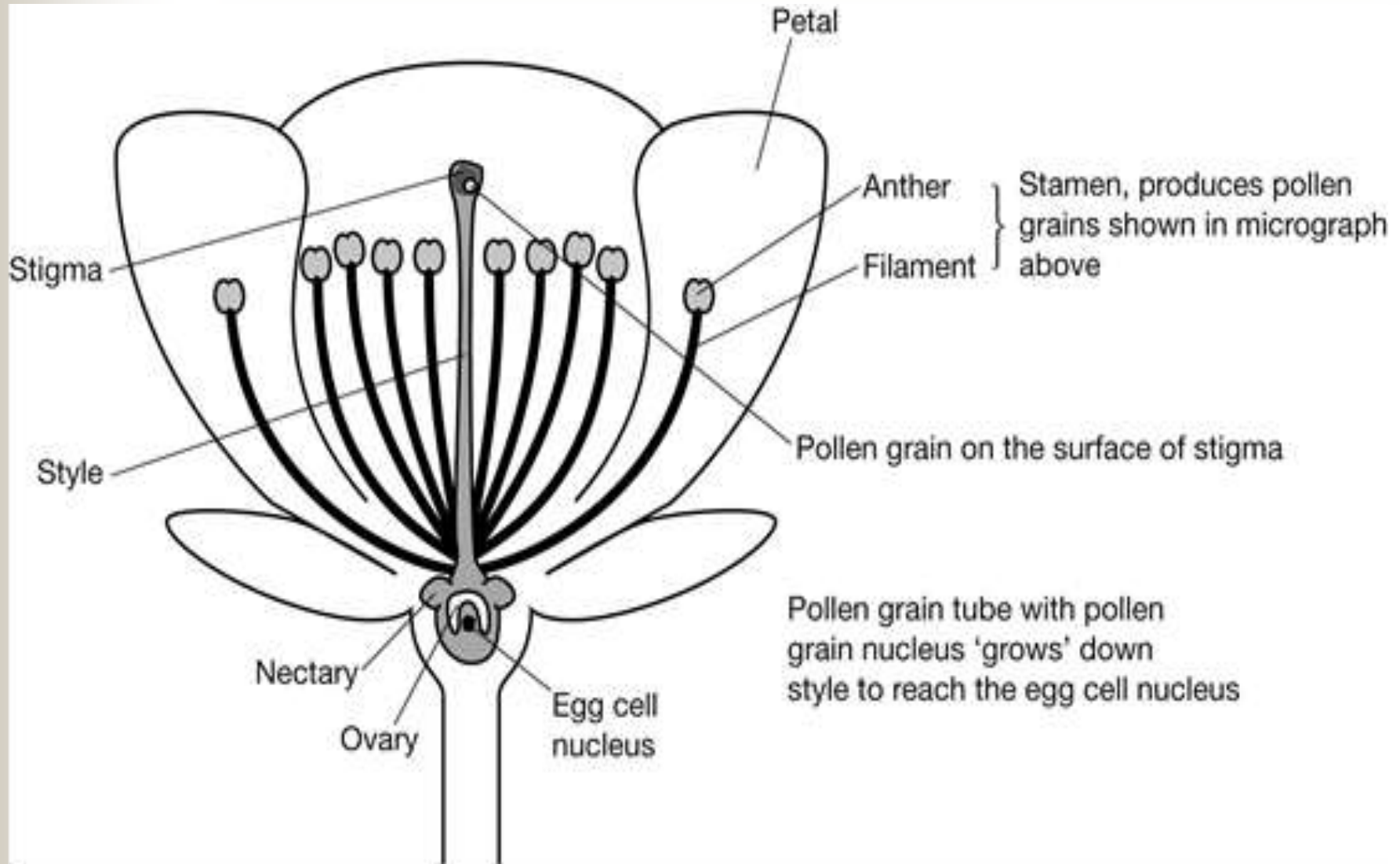


# Asexual Reproduction

## ■ Asexual Reproduction:

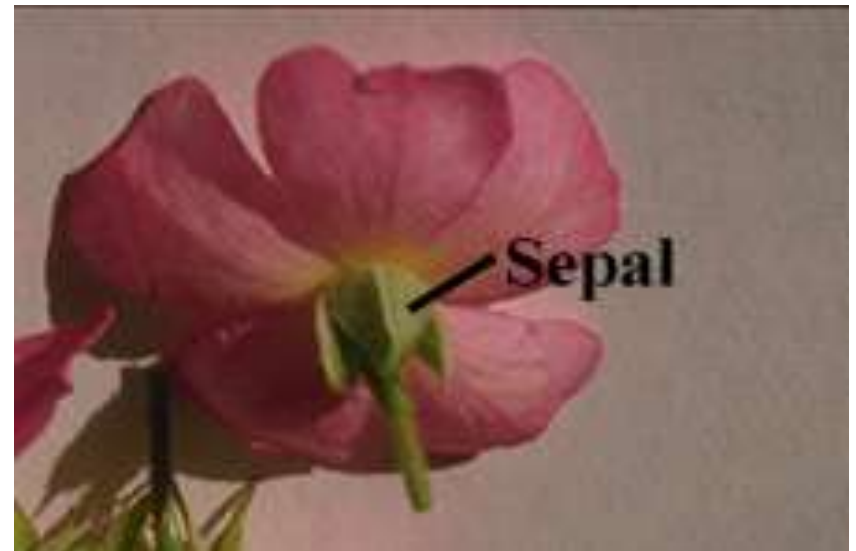
- The reproduction of a plant without the uniting of a pollen and ovule.
- Vegetative propagation
- It is known as a clone.
- Leaves, stems or roots may be used to grow a new plant.
- \*Produces a genetically identical plant.

# Complete Flower



# Sepals

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



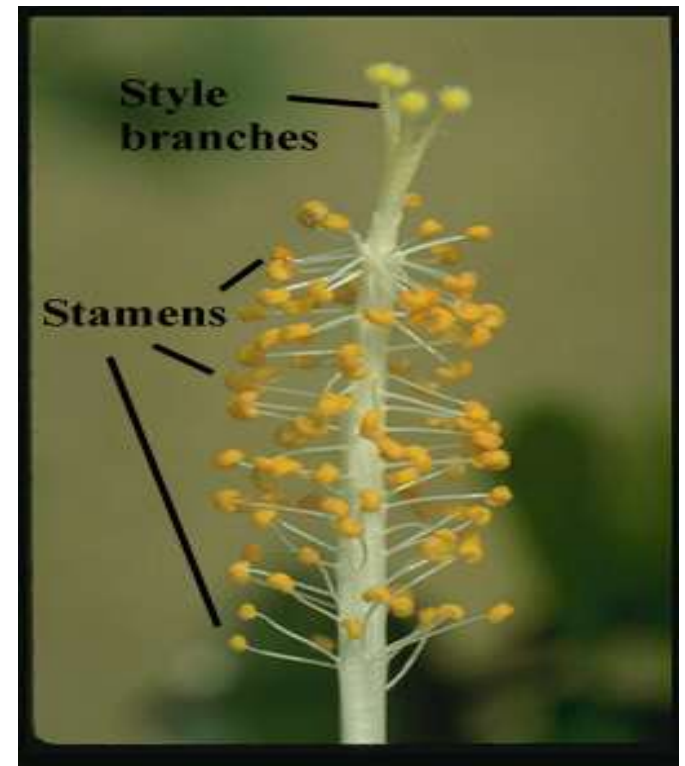
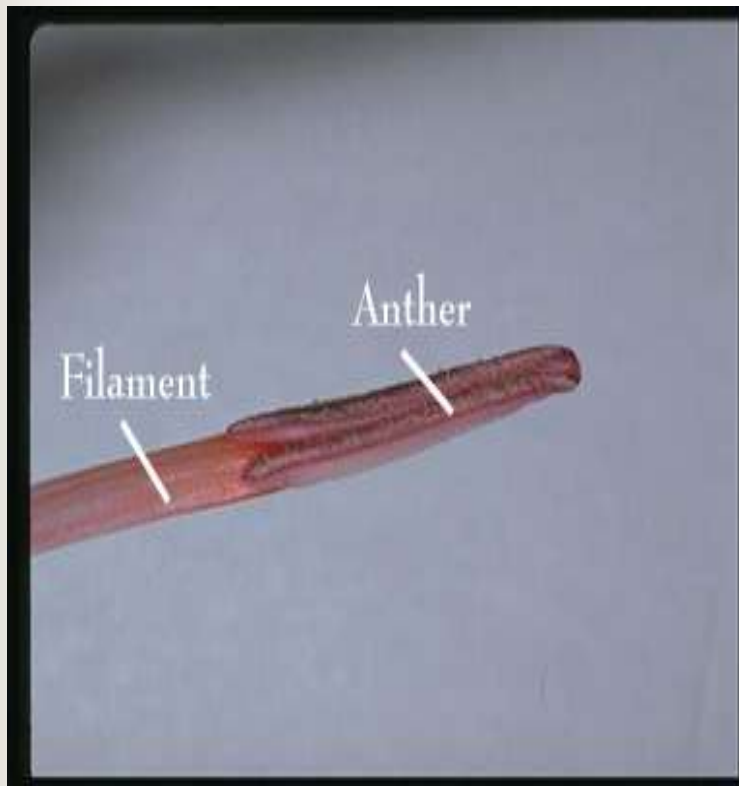
# Petals

- 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.







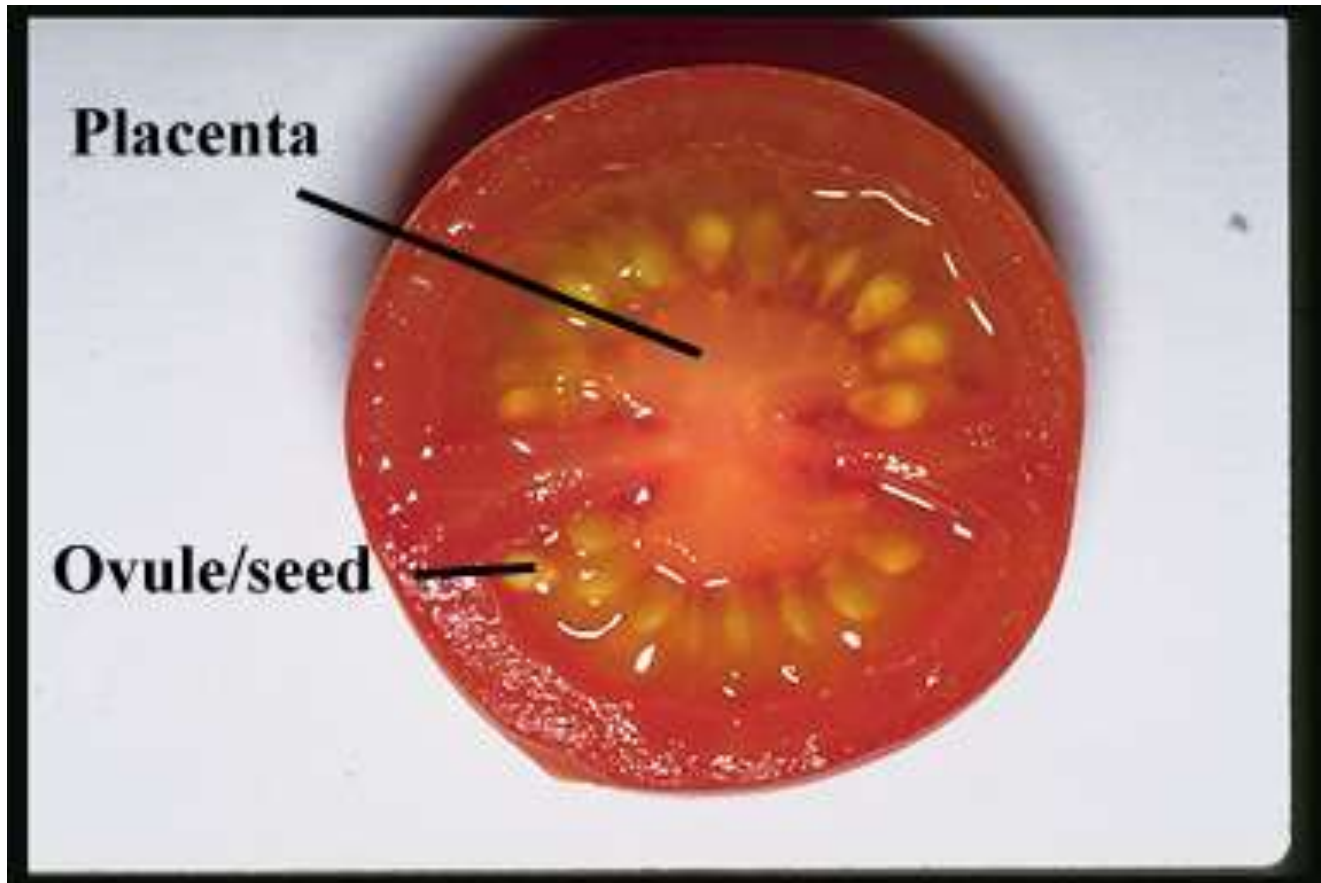
# Pistil

- 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.



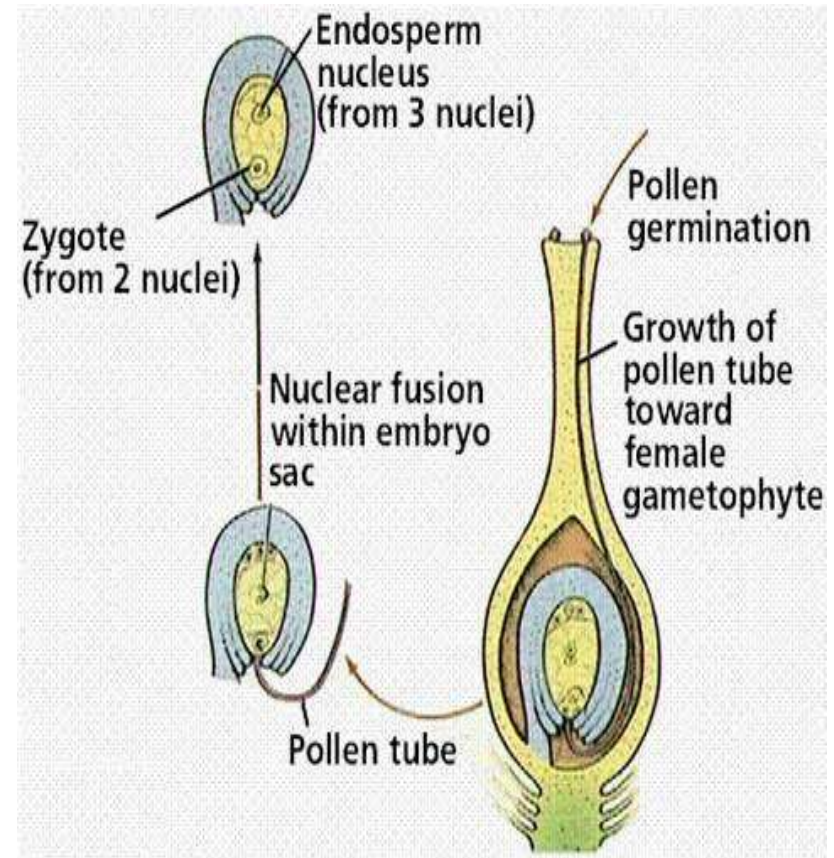
# Pollination

- 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







