

Pollination and Fertilisation

Chapter 5: Pollination and Fertilisation · Topic 1

Key Concept

Pollination can be self-pollination (within the same flower) or cross-pollination (between different flowers), aided by wind, insects, or animals.

After pollination, the pollen grain forms a pollen tube that grows down the style, delivering male gametes to the ovule.

Fertilisation occurs when the male gamete combines with the female gamete (egg cell) inside the ovule, forming a zygote.

After fertilisation, the ovule develops into a seed, and the ovary develops into a fruit, completing the plant reproductive cycle.

Quick Revision Notes

- Self-pollination occurs within the same flower.
- Cross-pollination occurs between different flowers.
- Wind, insects or animals aid pollination.
- The pollen tube grows down the style after pollination.
- It delivers male gametes to the ovule.
- Fertilisation combines male and female gametes.
- This forms a zygote.
- The ovule becomes a seed; ovary becomes a fruit.

Practice Questions

- 1 Discuss the difference between self and cross-pollination.
- 2 Explain what a pollen tube does.
- 3 Describe the process of fertilisation.
- 4 Discuss what happens to the ovule after fertilisation.
- 5 Research an example of wind pollination.
- 6 Research an example of insect pollination.