

Transportation in Plants

Chapter 18: Transportation in Plants · Topic 1

Key Concept

Water and minerals are absorbed by roots and transported upward through xylem tissue to leaves, driven partly by transpiration (water evaporation from leaves).

Phloem transports food (glucose) made during photosynthesis from leaves to other parts of the plant, like roots and fruits, for growth and storage.

Transpiration, the evaporation of water from leaf surfaces, helps pull water upward through the xylem, similar to drinking through a straw.

Understanding plant transportation systems helps explain how plants grow, survive, and distribute nutrients throughout their structure.

Quick Revision Notes

- Roots absorb water and minerals.
- Xylem transports water upward to leaves.
- Transpiration is water evaporation from leaves.
- It helps pull water upward through xylem.
- Phloem transports food from leaves to other parts.
- Food is transported to roots and fruits.
- This supports growth and storage.
- Transportation systems explain plant survival.

Practice Questions

- 1 Draw and label xylem and phloem in a plant.
- 2 Discuss the role of transpiration.
- 3 Explain how water moves from roots to leaves.
- 4 Research how food moves from leaves to fruits.
- 5 Discuss why transportation systems matter for plant growth.
- 6 Compare the functions of xylem and phloem.