Biology

Transpiration and translocation

Transpiration

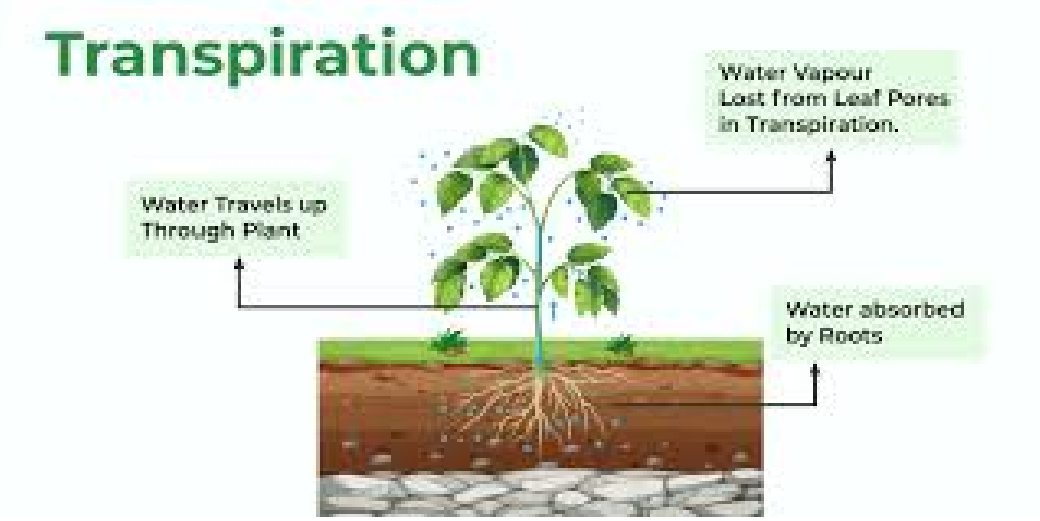
The process of water movement through a plant and its evaporation from the leaves ,stems and flower is called transpiration
There is a transport tissue and it is also known as xylem tubes

Xylem structure

- **Made of Dead cell joined end to end**
- **no end walls form a continuous tube**
- **they are strengthened and made by Lignin**

Function of xylem

- **Xylem carries water And mineral ions from Roots to stems and from stems to leave**
- **This movement is called transpiration stream**



Translocation

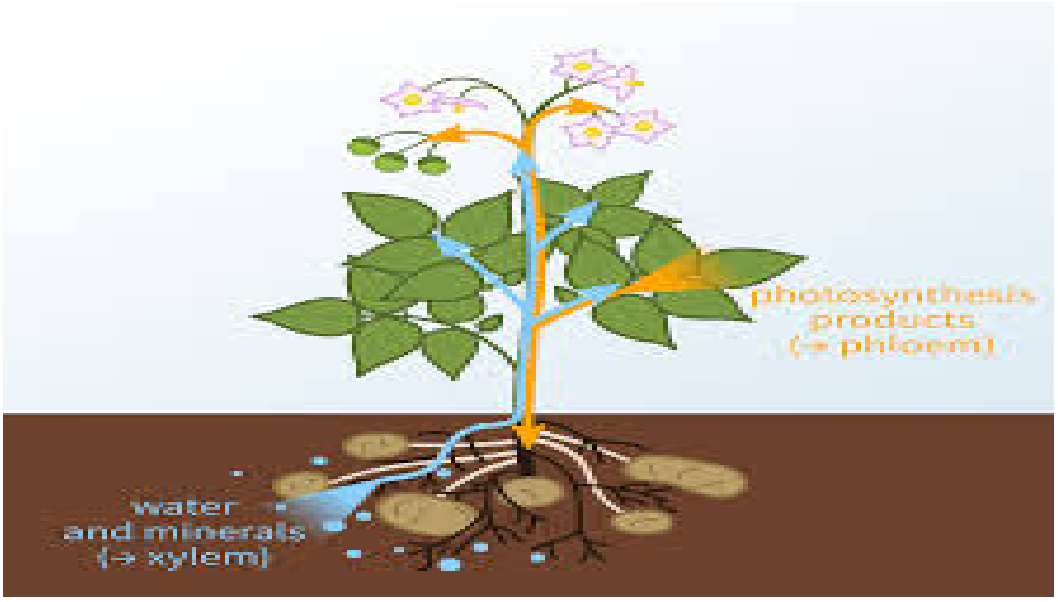
Phloem tubes

Phloem structure

- **Phloem is made up of living elongated long cells joined in columns**
- **They have small pores to allow dissolved food to pass through**

phloem tube function

- **It transports sugar made in leaves**
- **Food is either used immediately or stored**
- **Transport is two way**
- **up and down the plant**



Difference between xylem and phloem

- Xylem carries water and minerals from Roots to leaves. only upward
- Phloem carries food from leaves to all parts of plant up and down
- Xylem is one way
- phloem is 2 way up and down the plants
- In xylem water going from Roots to the leaves
- in phloem sugar moving from leaves to fruits or roots

