

VACUOLES

Vacuole is a membrane bound space found in the cytoplasm .It contains water ,and excretory products. It is bounded by a single membrane called Tonoplast.

➤ FUNCTIONS OF VACUOLE

- Vacuole is the main storing organelles for solid and liquid contents such as amino acids ,sugars, Various organic acids and some proteins.
- Helps in osmoregulation in plant cells ,i.e. ,expels excess water from the cell.
- Provides turgidity and rigidity to the cell.

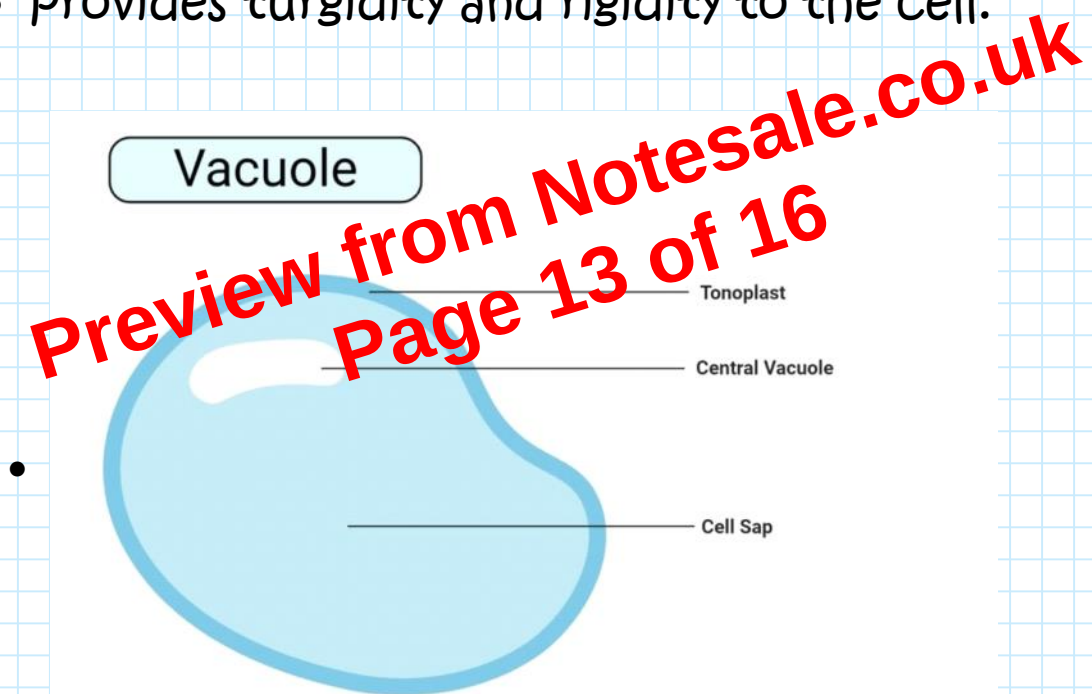


Figure: Vacuole, Image Copyright Sagar Aryal, www.microbenotes.com

PLASTIDS

Plastids are found in almost all plant cells .It is a double membrane bound structure .It is the largest cell organelle in the plant cell.

➤ TYPES OF PLASTIDS

- **Chloroplast**- They are green colored plastids which takes part in photosynthesis.
- **Chromoplast**- These are yellow and red colored ,fat soluble plastid .
- **Leucoplast**-These are colorless plastids of various shapes and sizes with stored nutrients.

➤ FUNCTIONS OF PLASTIDS

- Photosynthetic pigments of chloroplast traps light energy of the sun and converts it into the chemical energy in the form of glucose.
- Chromoplasts impart colour to fruits and flowers thus help in pollination.

