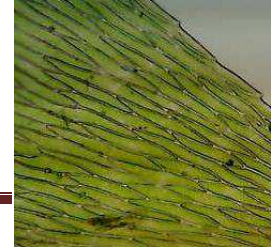




PLASMOLYSIS



Necessary materials and tools:

Some moss, microscope, slide, coverslip, filter paper, KCl or KNO_3 concentrated solution.

Description of experiment:

a) Examine the leaf of the moss under microscope.

Cells are filled with the pigmented cell plasma.

b) Drop a solute KCl onto another leaf.

The cell plasma shrinks, plasmolysis occurs.

Result:

The cell plasma shrinks, plasmolysis occurs.

Explanation:

The cellular membrane is a semi-permeable membrane which lets through micro-size water molecules but it does not let through the bigger-sized solute molecules and ions. As a result of this plasma shrinks and osmosis occurs.

During plasmolysis water flows from the cells into the more solute KCl solution because inside the cells the concentration of water is higher than outside the cells.

As a result of this the plasma shrinks.

Plasmolysis is a form of osmosis.

Only living cells are capable of plasmolysis.