

Topic: Cell Organelles

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Chloroplast

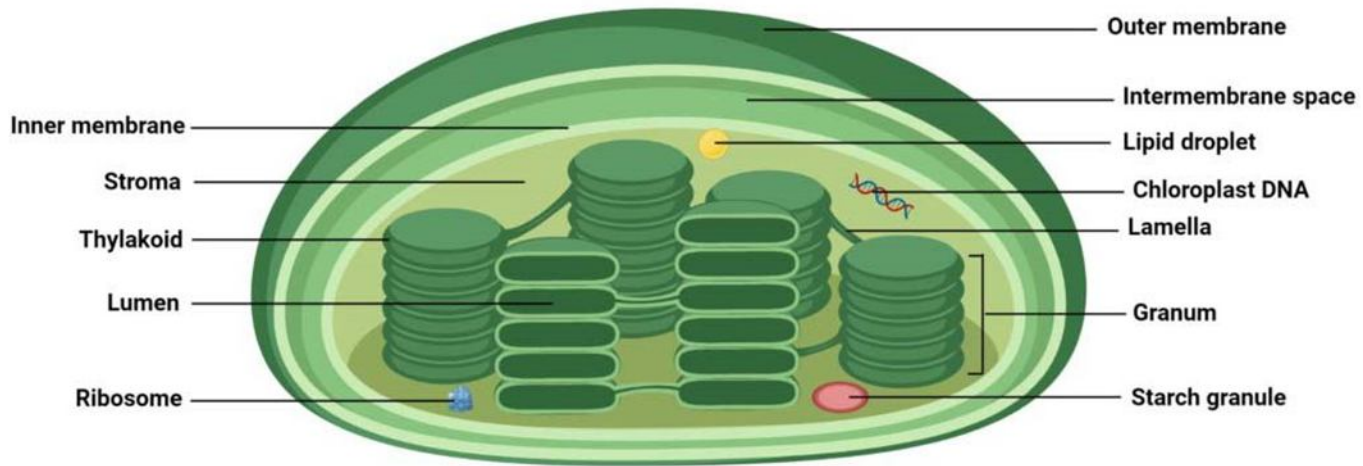
A chloroplast is a type of plastic that is involved in photosynthesis in plants and algae.

Chloroplast contains an essential pigment called chlorophyll necessary to trap sunlight for the production of glucose.

Structure

- It is a double-membraned structure with its own DNA which is inherited from the previous chloroplast.
- These are usually lens-shaped with shape and number varying according to cells.
- They have an outer membrane, an inner membrane, and a thylakoid

Chloroplast



- membrane that enclosed the gel-like matrix called the stroma.
- The outer and inner membrane is porous and allows transport of materials while the stroma contains DNA, chloroplast ribosomes, proteins, and starch granules.

Functions

- i. The chloroplast is the primary center for light-dependent and light-independent reactions during photosynthesis.
- ii. Different proteins present in chlorophyll are involved in the regulation of photorespiration.