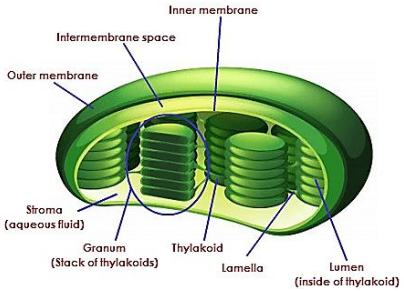
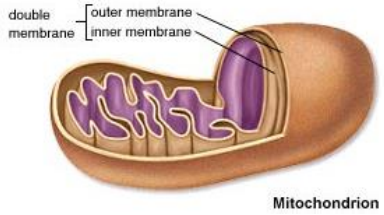
الصـــانـــعـــة

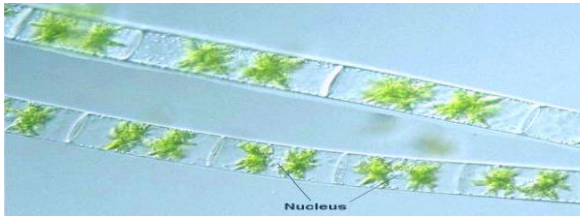
Plastid



- Chlorophylle A C55H72O5N4Mg
- Chlorophylle B C55H70O6N4Mg
- Carotene C40H56
- Xanthophyle C40H56O2



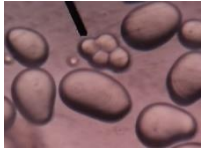
Chloroplast Zygnema

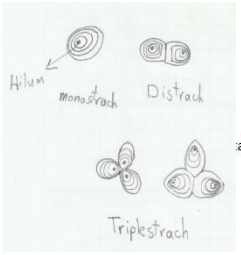


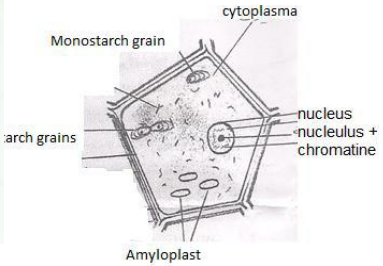
Spirogera

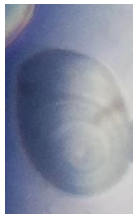
Amyloplast

- Family: Solanaceae
- Genus: Solanum
- Species: Solanum tuberosum
- Organ: potato tuber
- Medium: water

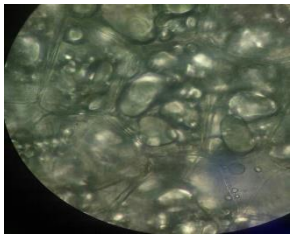


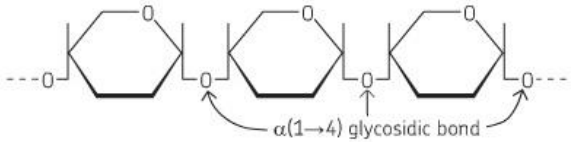


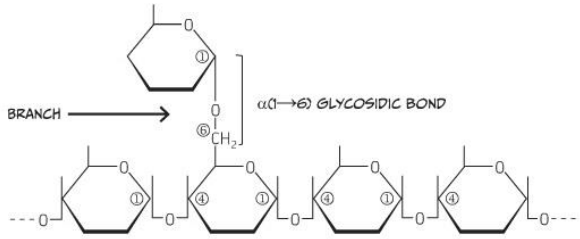




صورة مجهرية للخلايا المضلعة في نبات درنة البطاطا وبداخل سيتوبلاسماها حبيبات عديدة من النشاء




α(1→4) glycosidic bond

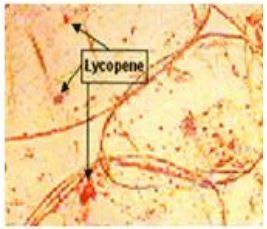

BRANCH
α(1→6) GLYCOSIDIC BOND

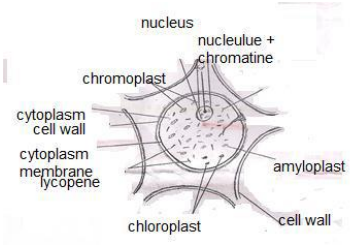
The difference between Amylose and amylopectin

Amylose	Amylopectin
alpha glucose sugar bonded by 1-4 gylcosidic bonds.	amylopectin is alpha glucose sugars bonded by1-4 glycosidic bonds with 1-6 branches
the shape of amylose is straight	the shape of amylopectin is branched
It constitutes about 20-30% of the strach	It constitutes about 70-80% of the strach
With iodine amylose stain blue	With iodine amylose stain reddish brown
More soluble in water	Less soluble in water

Chromoplast

- Family: Solanaceae
- Genus: Solanum
- Species: Solanum lycopersicum
- Organ: fruit
- Medium: water


Lycopene


nucleus
nucleulue +
chromatine
chromoplast
cytoplasm
cell wall
cytoplasm
membrane
lycopene
amyloplast
chloroplast
cell wall