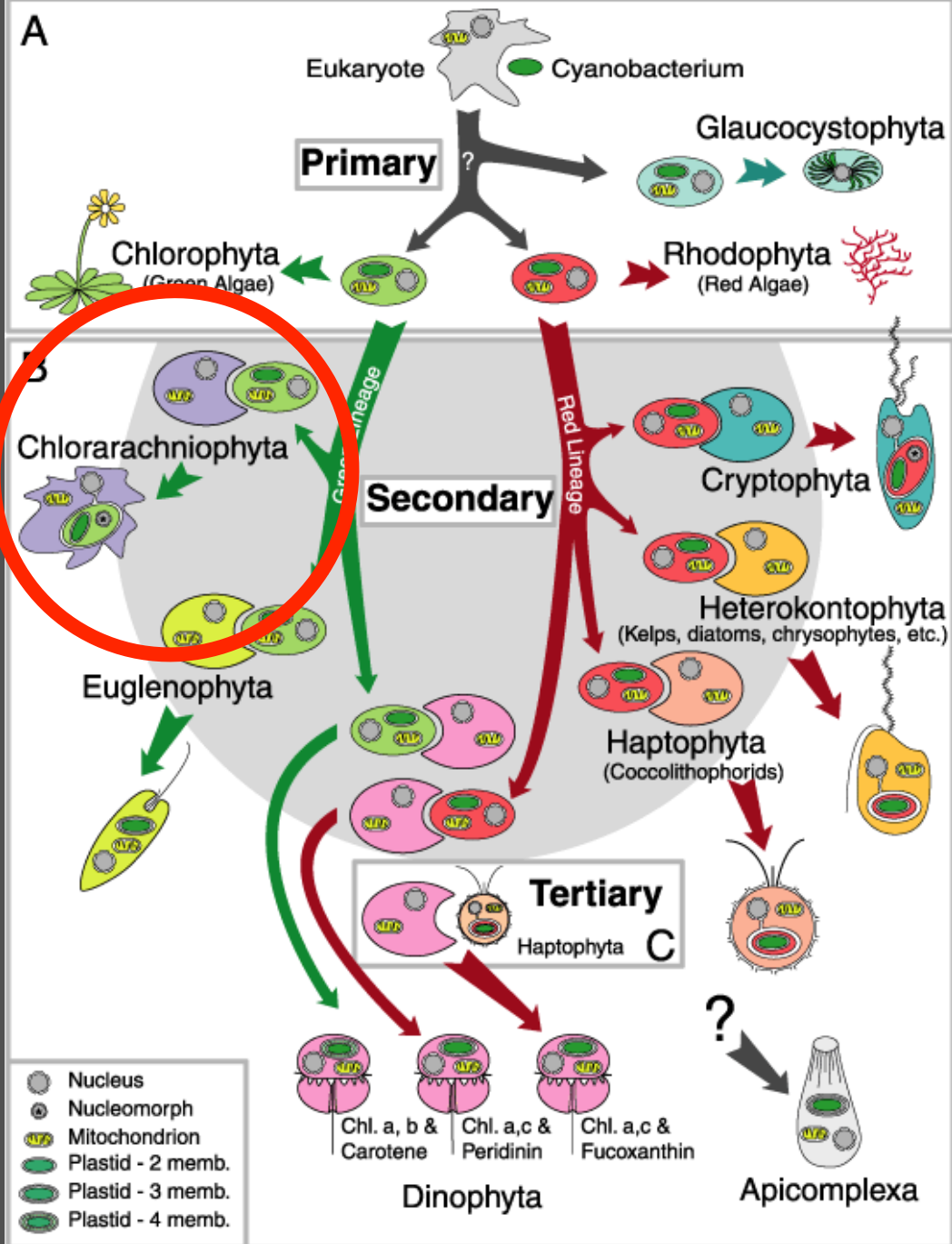


# CHLORARACHNIOPHYTA



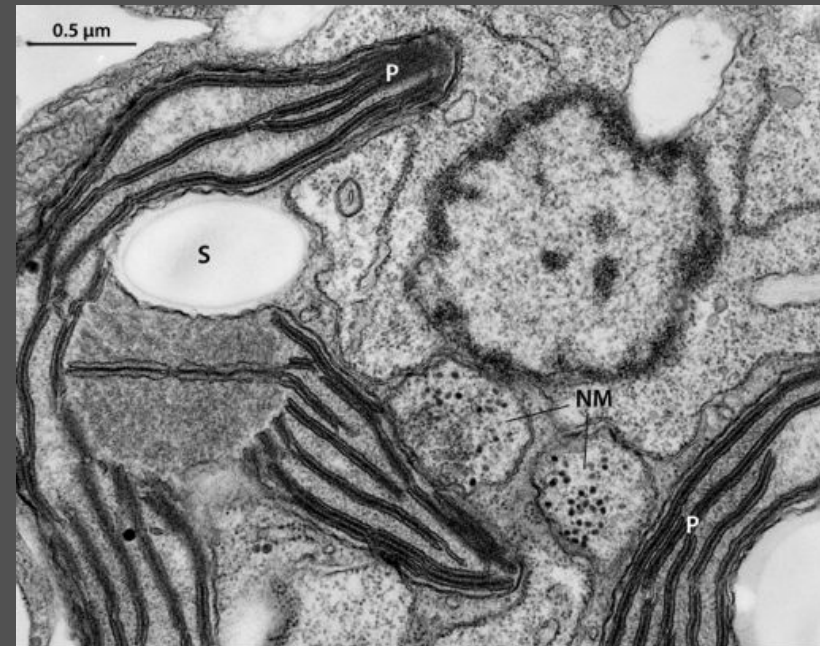
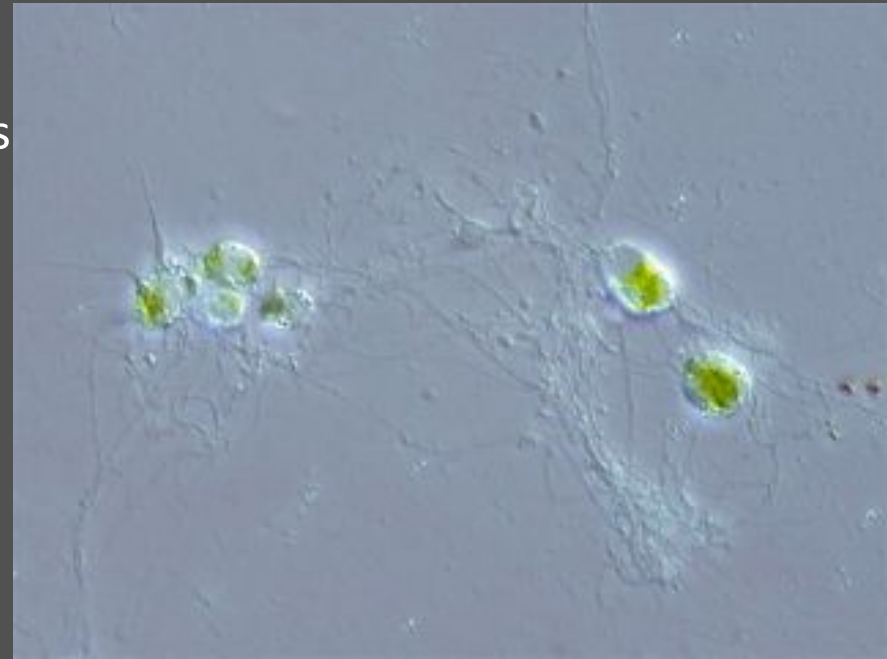
CHLORARACHNIOPHYTES are an example of a SECONDARY endosymbiosis

Their chloroplasts represent an ancestral EUKARYOTIC GREEN ALGA

Modified from Delwiche, C.F. 1999. Tracing the thread of plastid diversity through the tapestry of life. Am. Nat. 154:S164-S177.

# CHLORARACHNIOPHYTA

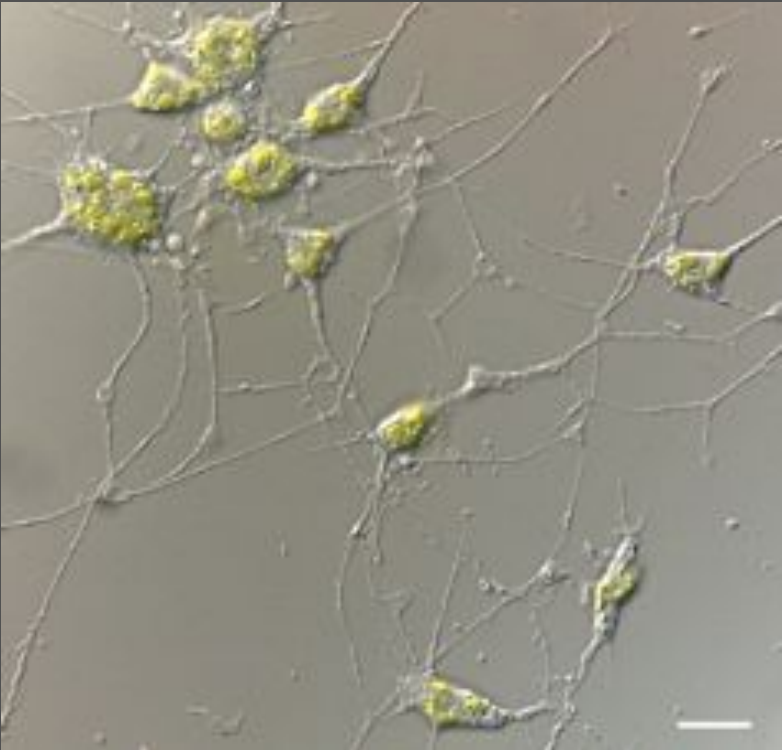
- Marine in tropical or temperate oceans
- On mud, sand, on seaweeds
- Mixotrophs (photosynthetic and ingesting food)
- Amoeboids forming a net
- Zoospore with 2 flagella
- One long and sub-apical flagellum
- Flagellum with one row of hairs
- Plastids with 4 membranes and large pyrenoid
- Chlorophylls a and b
- Outer plastid membrane continuous with the ER
- Nucleomorph with two membranes and found between the inner and outer two pairs of plastid membranes or Periplastidial Compartment



# Diversity of Chlorarachniophyta

## *Chlorarachnion*

Spider-shape cell forming nets  
many plastids



## *Bigelowiella*

Unicell with one flagellum  
Plankton

