

PLANT GROUPS

(7)

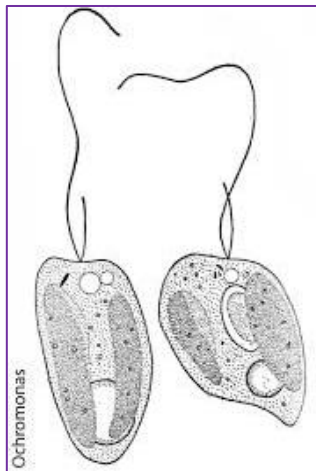
Chrysophyta
Golden-brown Algae**General characteristic of the Chrysophyta**

Habitat	Aquatic mainly fresh water
Pigments	Chlorophyll (a & c), β -carotene & Fucoxanthin
Food reserve	Fat (Leucosin)
Cell wall	Cellulose, Hemicellulose often with siliceous scales
Growth form	Flagellate, Coccoid, Colonial rarely filamentous
Flagella	Two unequal in length & one of them has tripartite hairs
Reproduction	Asexual, Sexual

Chrysophyta, or golden-brown algae, are common microscopic in fresh water. Some species are colorless, but the vast majority is photosynthetic. As such, they are particularly important in lakes, where they may be the primary source of food for zooplankton. They are not considered truly autotrophic by some biologists because nearly all chrysophyta become facultatively heterotrophic in the absence of adequate light, or in the presence of plentiful dissolved food. When this occurs, the chrysoplast atrophies and the alga may turn predator, feeding on bacteria or diatoms.

Division	Chrysophyta
Class	Chrysophyceae
Order	Ochromonadales
Family	Ochromonadaceae
Genus	<i>Ochromonas</i>

Ochromonas single-celled naked with two unequal flagella cells spherical cylindrical to pyriform. Cells with 1-2 (rarely more) chloroplasts, with or without an eyespot and/or Pyrenoid chloroplasts sometimes much reduced and pale or completely lost after abnormal division.



Division	Chrysophyta
Class	Chrysophyceae
Family	Synuraceae
Genus	<i>Mallomonas</i>

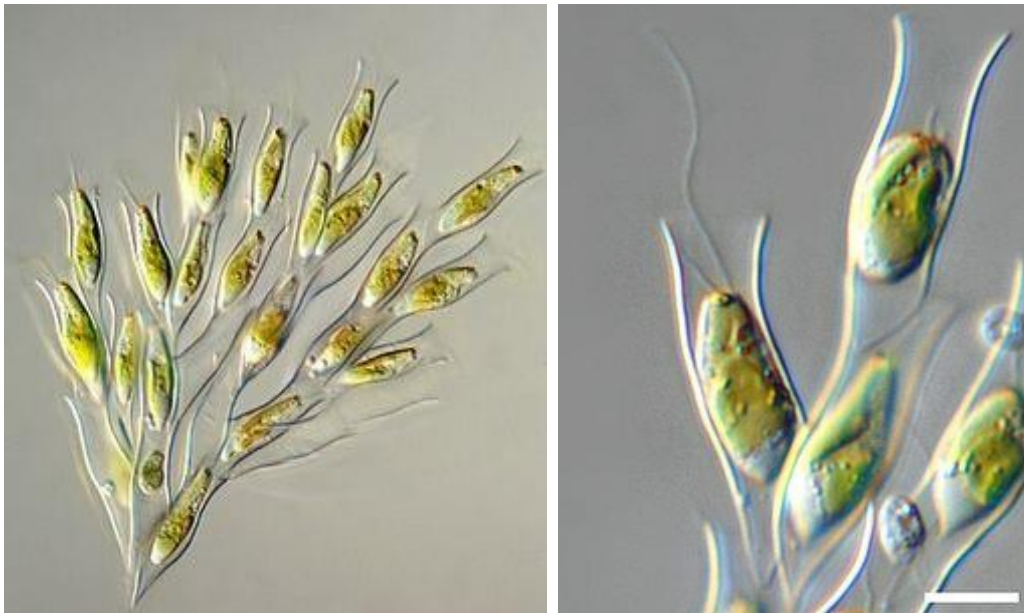
Mallomonas Single-cell, flagellates, size 6 μm to $> 60\mu\text{m}$ long shape globose to elongate cells covered by silica scale armour silica scales variable and taxon specific. Bristles attached to silica scales in many species, and spines on scales of a few species; typically with one visible flagellum when observed by light microscopy although some species with two visible flagella; second flagellum, if present, visible by electron microscopy;



Mallomonas

Division	Chrysophyta
Order	Dinophysiales
Family	Dinophyceae
Genus	<i>Dinobryon</i>

Dinobryon Loricata forming arbusculate colonies (rarely solitary) planktonic and free-swimming. Lorica cylindrical, vase- or funnel-shaped and often with a slightly broadened mouth; lorica consisting primarily of cellulose and protein, formed by successive loops of fibrils extruded during rotation of the cell. Cells attached to base of lorica by a thin protoplasmic strand.



Dinobryon