



Department of biology

((Plant groups))

Stage 2

Fifth lecture

Euglenophyta

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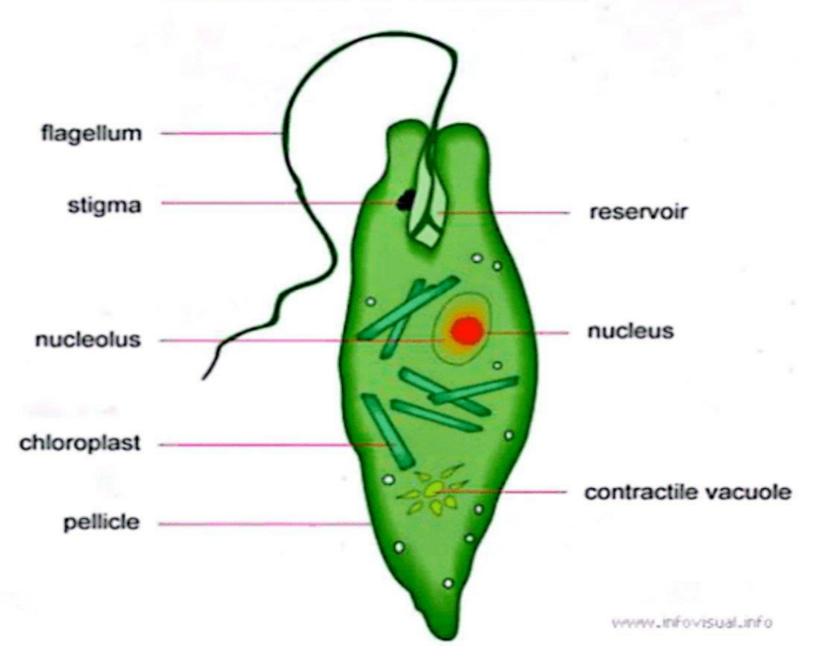
Euglenophyta

A unicellular alga with a circular or pointed end. At the front of the body, a flask-shaped swelling is noted, which is characterized by a widened basal part called the reservoir, and a flagellum protrudes from the base of the reservoir, extending outside the apical structure. The plastid is multicellular and appears in different shapes depending on the type of alga. The nucleus is single, large, in the middle of the cytoplasm or located in the posterior third of the cell. It reproduces vegetatively by longitudinal fission.

Environment and presence

- This division includes about 30 genera and 450 species, usually found in fresh and brackish waters.
- Few of them are found in salt water and are usually observed in small ponds rich in organic matter. They may be found on wet mud in river estuaries. Some of the spore-bearing genera grow on the remains of
- ➤ Plants, on the bodies of some crustaceans, or inside the intestines of some amphibians.

STRUCTURE OF A EUGLENA



General characteristics of Euglenophyta

- 1. Most of the genera are unicellular motile, some are non-motile or in the form of clusters, and a few are in the form of colonies.
- 2. Plastids are of different shapes, discoid, lamellar, ribbon, star, or lenticular.
- 3. Pigments include chlorophyll a and b, carotene 3, and multiple xanthophylls.

General characteristics of Euglenophyta

- 3. The cells lack the presence of a cellulose cell wall and are surrounded by the plasma membrane.
- 4. Stored food consists of polysaccharide compounds stored in granules called paramylum granules, which are in the form of straight chains of glucose.
- 5. Stored in the cytoplasm or in plastids. Cells contain one, two or three feathery flagella that usually protrude from the base of the reservoir at the front of the cell.

