

## Key to some common green algae and Euglenoids

1.	Plants unicellular or colonial.....	2
1'	Plants filamentous.....	14
2(1).	Motile by flagella.....	3
2'.	Nonmotile.....	8
3(2).	Unicellular.....	4
3'.	Colonial.....	5
4(3).	Cells long and tapering when swimming, round when resting; one flagellum and a red eyespot.....	<i>Euglena</i>
4'.	Cells oval; 2 flagella; chloroplast cup shaped.....	<i>Chlamydomonas</i>
5(3').	Colony a flat plate, 4-8-16 cells.....	<i>Gonium</i>
5'.	Colony spherical.....	6
6(5').	Cells close together, usually 16.....	<i>Pandorina</i>
6'.	Cells remote from each other.....	7
7(6').	32 (usually) to 128 cells.....	<i>Eudorina</i>
7'.	Hundreds of cells.....	<i>Volvox</i>
8(2').	Unicellular.....	9
8'.	Colonial.....	10
9(8).	Cells in two symmetrical halves connected by a narrow isthmus.....	<i>Desmids</i>
9'.	Cells spherical to oval, sometimes in irregular masses; on wood or moist soil.....	<i>Protococcus</i>
10(8').	Colonies with four cells (sometimes eight) in a row; spines often on end cells.....	<i>Scenedesmus</i>
10'.	Colonies with more than four cells.....	11
11(10').	Colonies mucilaginous; cells in groups of four within mucilage.....	<i>Tetraspora</i>
11'.	Colonies not mucilaginous.....	12
12(11').	Cells forming a net often visible to the unaided eye.....	<i>Hydrodictyon</i>
12'.	Cells forming a flat plate.....	13
13(12').	Plate irregular; some cells with long, sheathed bristles.....	<i>Coleochaete</i>
13'.	Plate regular; marginal cells with lobes, horns, or short spines.....	<i>Pediastrum</i>
14(1').	Filaments unbranched.....	15
14'.	Filaments branched.....	21
15(14).	All cells short.....	16
15'.	Some cells long.....	17
16(15).	Cells with thick walls; chloroplast diffuse.....	<i>Micospora</i>
16'.	Cells with thin walls; chloroplast in a ring around interior of cell.....	<i>Ulothrix</i>
17(15').	Chloroplasts star-shaped, usually two per cell.....	<i>Zygnema</i>
17'.	Chloroplasts not star shaped.....	18
18(17').	Chloroplasts spiral.....	<i>Spirogyra</i>
18'.	Chloroplasts not spiral.....	19
19(18').	Cell wall thin; chloroplast a flat plate which is broad in surface view and appears as a thin line in sideview.....	<i>Mougeotia</i>
19'.	Cell wall thick.....	20
20(19').	Chloroplast more or less uniform; some cells with apical caps; swollen oogonia.....	<i>Oedogonium</i>
20'.	Chloroplast dense and granular; cells large, with a very few short rhizoidal branches.....	<i>Rhizoclonium</i>
21(14').	Branches short, with a bulb-like base tapering into a long spine.....	<i>Bulbochaete</i>
21'.	Branches relatively long.....	22
22(21').	Cells with thick walls.....	<i>Cladophora</i>
22'.	Cells with thin walls.....	23
23(22').	Plant body showing marked differentiation between a single row of large cells forming the main axis and numerous tufts of short lateral branches with small cells.....	<i>Draparnaldia</i>
23'.	Plant body not so differentiated.....	<i>Stigeoclonium</i>

### Some terms used in key

Apical caps – Distinctive rings in the tip (apical region) of certain cells. These caps often are broader than the rest of the cell.

Colonial – Cells present in groups (rather than as single cells which are considered unicellular).

Diffuse (chloroplast) – Thin, spread out, not dense. Usually appears light in colour.

Filamentous – Cells are threadlike.

Motile – Able to move, often by flagella.

Mucilaginous – Covered in a slimy (mucus-like) layer.

Rhizoidal (branches) – Branched structures that look like roots.

