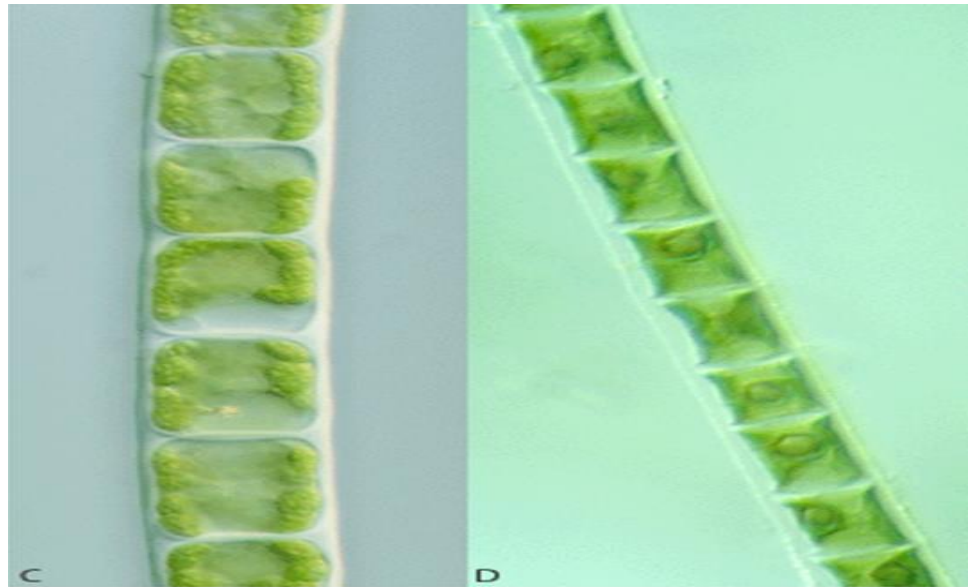
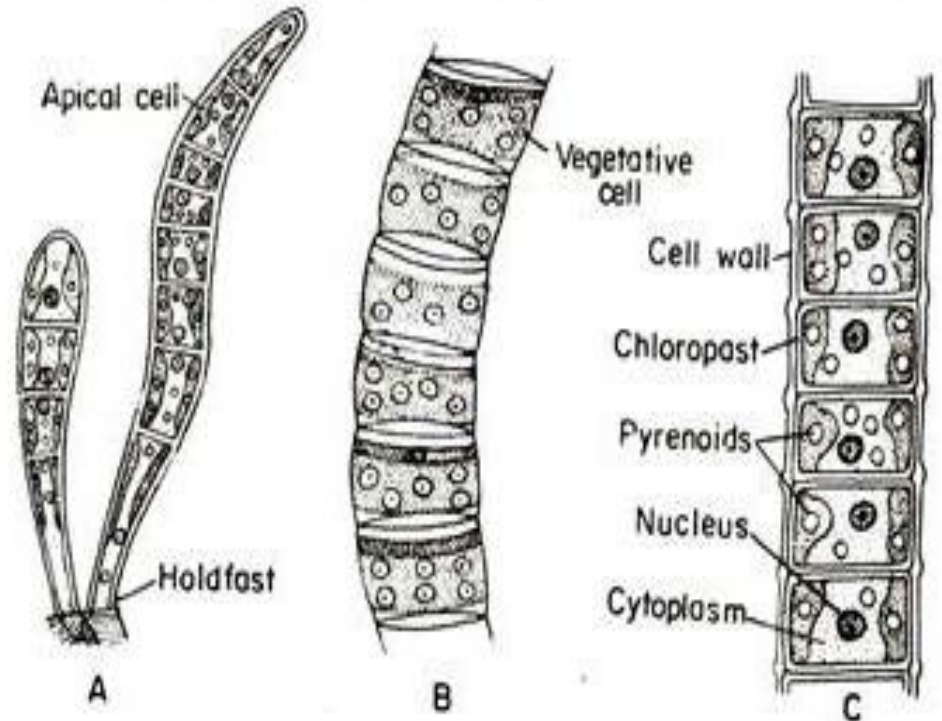


D: Chlorophyta.
Cl: Chlorophyceae.
Or: Ulotrichales.
F: Ulotrichaceae
Ex: *Ulothrix sp.*

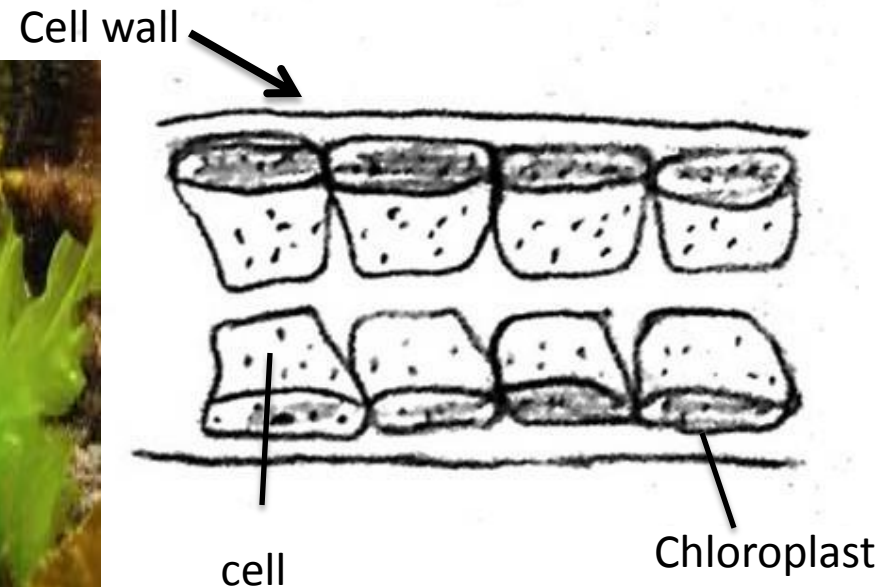
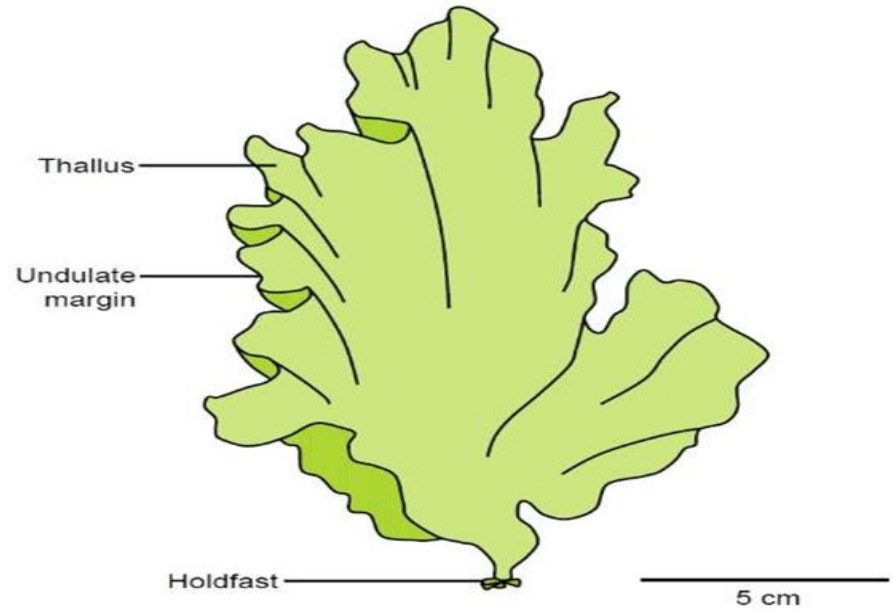


Ulothrix is a genus of simple, unbranched filamentous green algae, characterized by cylindrical cells in a single row (uniseriate) attached by a basal holdfast cell, each containing a large, parietal, girdle-like chloroplast with one or more pyrenoids, a central nucleus, and a central vacuole.



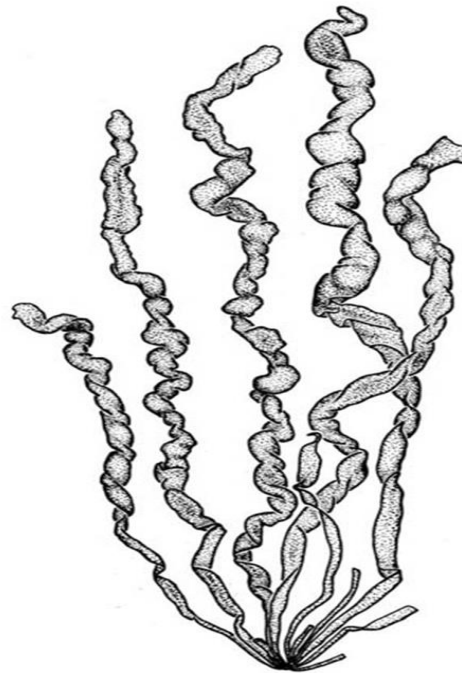
D: Chlorophyta.
Cl: Chlorophyceae.
Or: Ulotrichales.
F: Ulvaceae.
EX: Ulva sp.

(Sea Lettuce) has a simple structure, typically a flat, green blade (thallus) that's only two cells thick, attached by a holdfast, its cells contain a single large chloroplast and are arranged in irregular layers, with the cell walls rich in the complex polysaccharide ulvan, giving it flexibility and distinctive properties.



D: Chlorophyta.
Cl: Chlorophyceae.
Or: Ulotrichales.
F: Ulvaceae
EX: *Enteromorpha sp.*

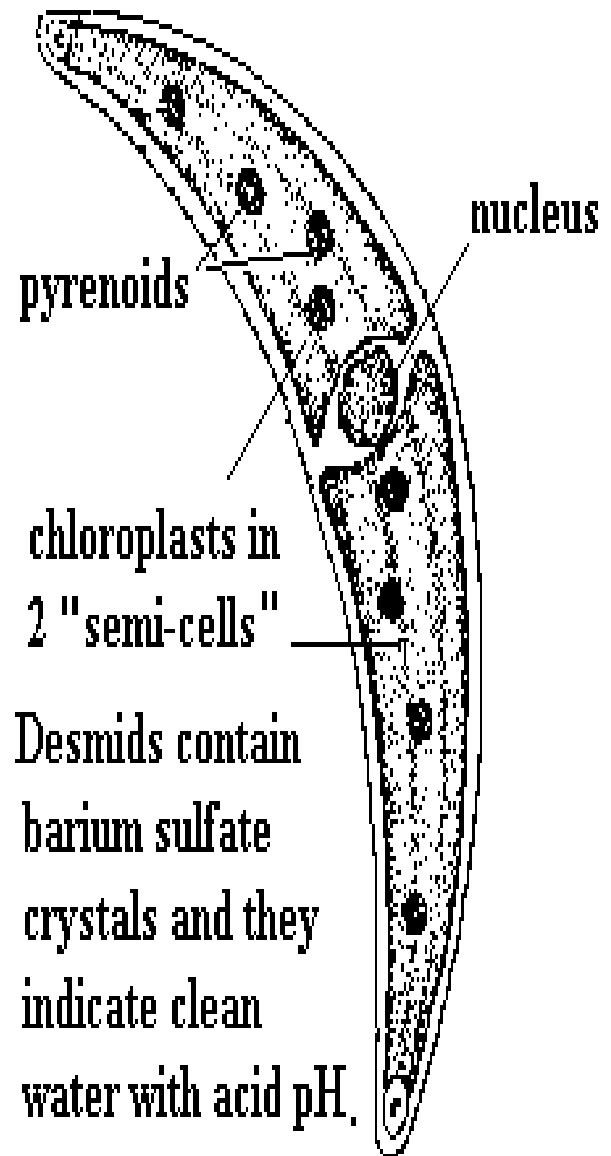
its hollow, tubular, one-cell-thick filaments, which can be unbranched or branched, , crisp structures attached by a holdfast with cells containing a single chloroplast and variable in size, often forming bushy mats.



20 μ m

D/ Chlorophyta
Cl/ Chlorophyceae
Or/ Zygnematales
F/ Desmidiaceae
EX: *Closterium sp*

its crescent or spindle shape, divided into two symmetrical semicells by a central constriction (isthmus), where the nucleus resides, with each semicell containing a large, ridged chloroplast and several pyrenoids, plus a unique terminal vacuole at each tip holding vibrating barium sulfate crystals that exhibit Brownian motion. The cell wall can be smooth or have patterns like striate.



D/ Chlorophyta.
Cl/ Chlorophyceae.
Or/ Zygnematales .
F/ Desmidiaceae.
EX: *Cosmarium* sp.

features single, microscopic, bilobed cells (semicells) joined by a narrow isthmus, with varied shapes (oval, angular) and cell wall ornamentation (smooth, pitted, spiny). Each semicell typically contains a large, central chloroplast with pyrenoids and a central nucleus, appearing green and often highly decorative under a microscope.

