

Techniques needed and plant shape



Classification

Phylum: Chlorophyta; Order: Acrosiphonales; Family: Acrosiphonaceae

***Descriptive name**

false Cladophora

Features

dark green, tufted plant, to 30mm tall with slightly slimy threads or filaments

Special requirements

1. view the narrow, **unbranched** threads (filaments)
2. view microscopically the rhizoids that **descend** from the cells near the bases of filaments
3. chloroplasts are wrapped around the cell (**parietal**), **open** on one side, and have several bright spots (**pyrenoids**)

Occurrences

a widespread species of cold temperate waters and in the Arctic and Antarctic. In Australia, from Eaglehawk Neck, Tasmanian only

Usual Habitat

found in felty patches on rock in the lower intertidal

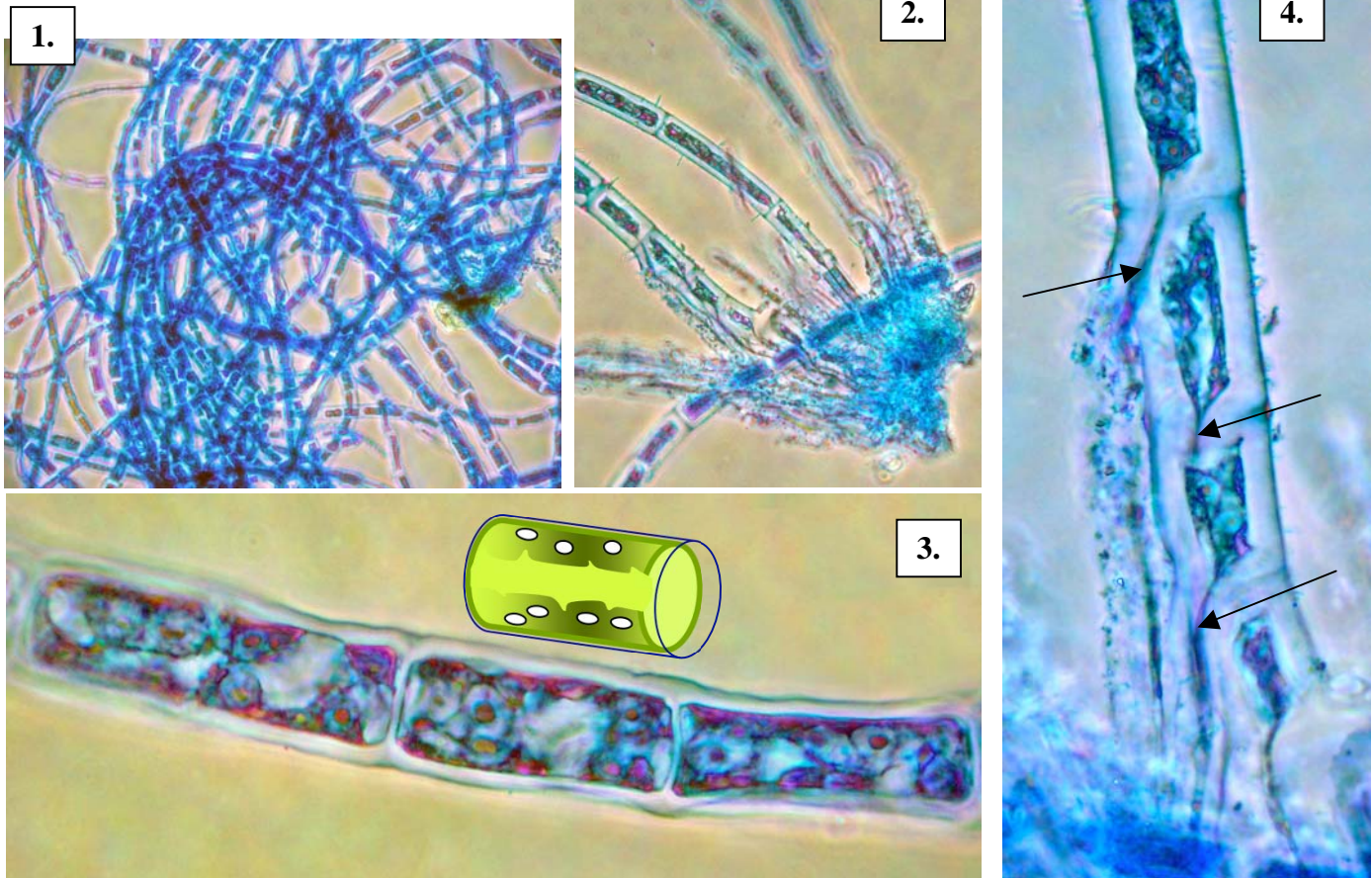
Similar Species

similar to *Cladophora* species, but cell walls without **cellulose**. *Cladophora* can be separated on visible differences (branched filaments, and numerous disc-shaped to angular chloroplasts strung out into net or reticulum)

Description in the Benthic Flora

Part I, pages 221-223, plate 12

Details of Anatomy



Urospora penicilliformis (slide 7883) stained blue and viewed microscopically at different magnifications

1. mass of un-branched threads (filaments) that make up the plant body.
2. bases of threads, showing rhizoids descending from several basal cells.
3. high power phase microscopy of chloroplasts. **Insert:** a representation of cell and chloroplast structure.
4. highly magnified view of basal descending rhizoids (arrowed)

Urospora penicilliformis (Roth) Areschoug, (A54021)
Eaglehawk Neck, Tasmania, 1982



* Descriptive names are inventions to aid identification, and are not commonly used
"Algae Revealed" R N Baldock, S Australian State Herbarium, February 2005