



Techniques needed, and shape

Classification

*Descriptive name

Features

Special requirements

Phylum: Chlorophyta; Order: Ulotrichales; Family: Ulotrichaceae
green threads

plants consist of minute, single, **unbranched** green threads

view the threads microscopically to find:



1. threads are the **same width** throughout their length
2. cells are **box-shaped**, about **10µm** wide, (L/B) = 0.7–1.0
3. a **single girdle-shaped** chloroplast in each cell; with **one** pyrenoid
4. threads are attached by an elongated **rhizoidal cell**

Occurrences

N Europe. In southern Australia, from American River, Kangaroo I., S. Australia, to Apollo Bay, Victoria.



Possibly more widespread but overlooked

Usual Habitat

an alga fouling boat hulls and on rocks in the intertidal of calm brackish waters and the sea

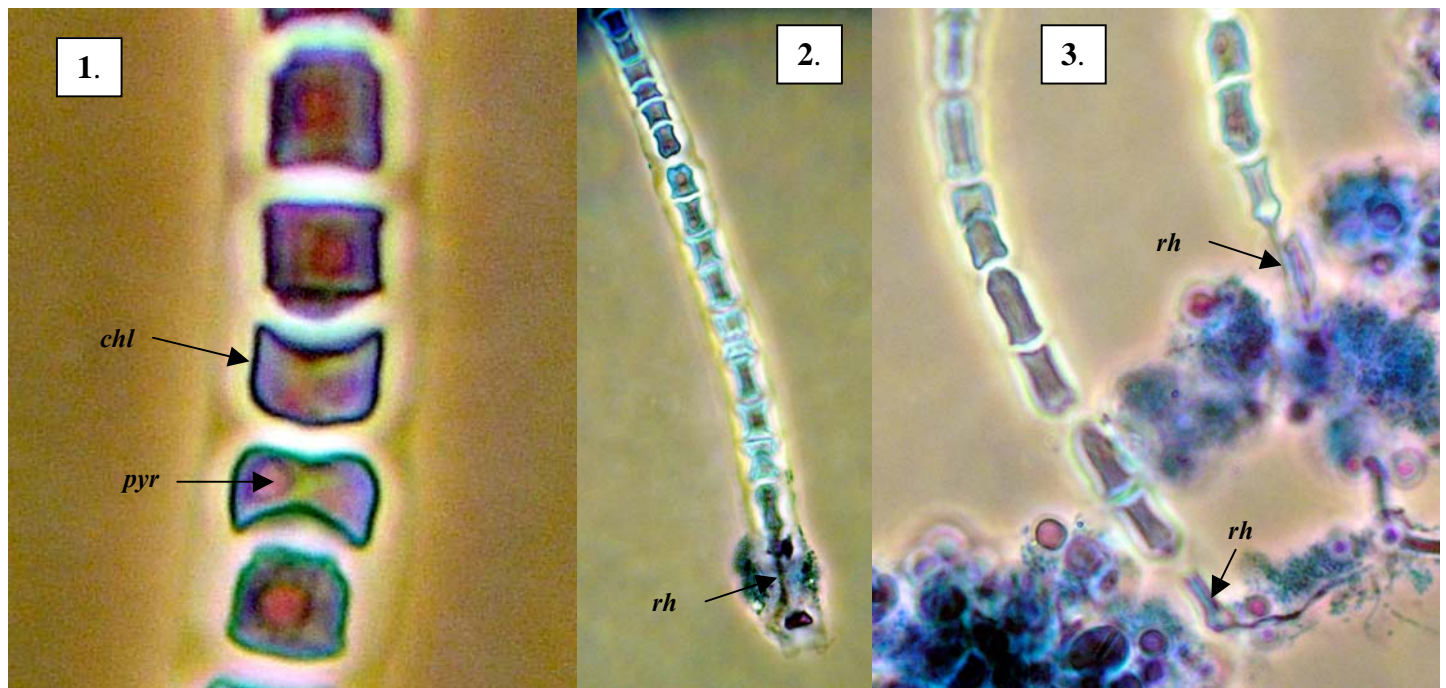
Similar Species

Uronema, also unbranched with a single chloroplast filling the cell, but in that genus the threads expand in width towards the tips

Description in the Benthic Flora

Part I, pages 128, 129, 130

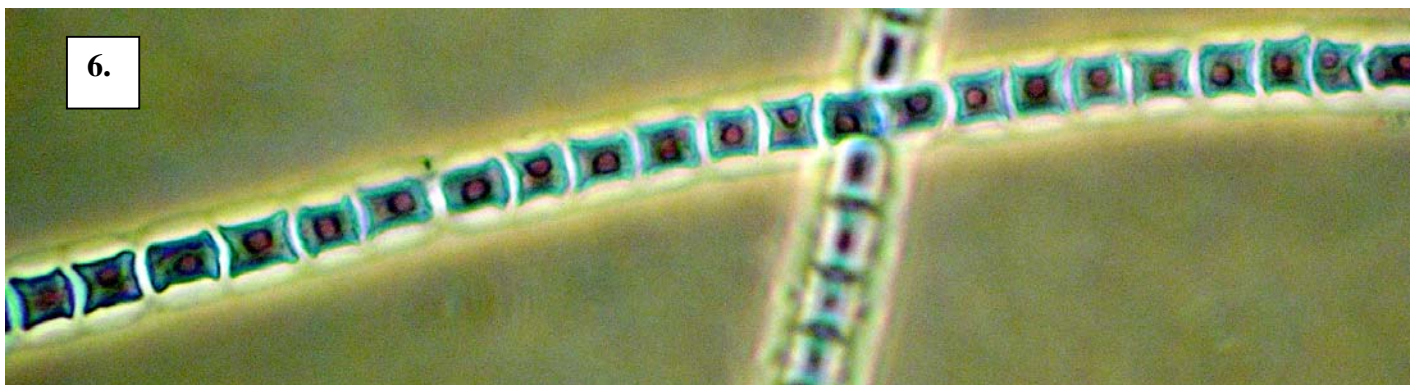
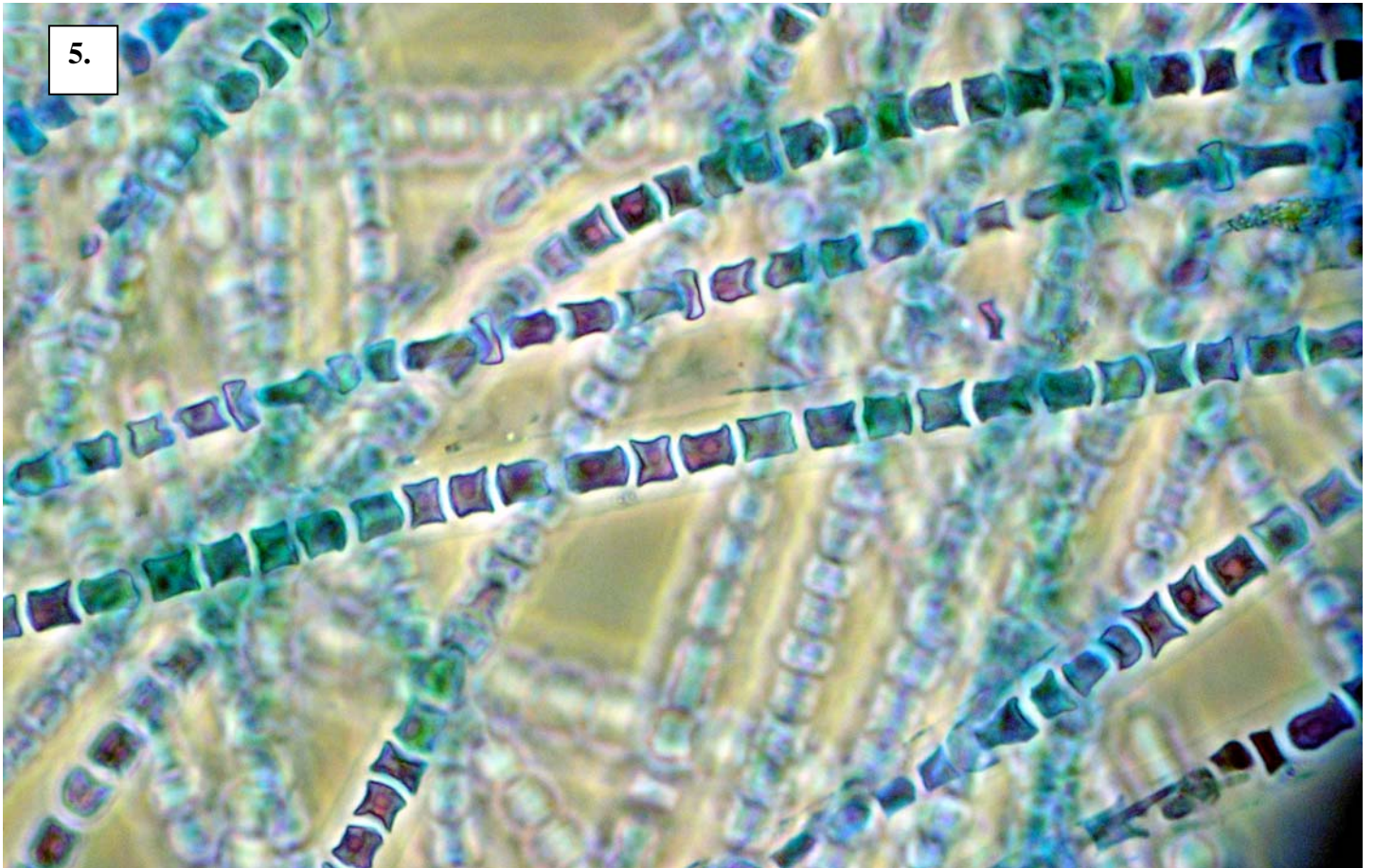
Details of Anatomy



1-4. *Ulothrix subflaccida* (A53176 slide 7500) viewed with phase contrast microscopy

1. a highly magnified thread, showing the girdle-shaped chloroplast (*chl*) with a single pyrenoid (*pyr*)
- 2., 3. two magnifications of bases of threads showing the elongate attachment cell (rhizoid, *rh*)
4. reproductive cells with flagellated zooids (*zo*) forming

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



Ulothrix subflaccida Wille, (A53176 slide 7500) viewed with phase contrast microscopy
5. a mass of unbranched threads, showing their uniform width
6. individual threads, with detail of the girdle-shaped chloroplast and single pyrenoids