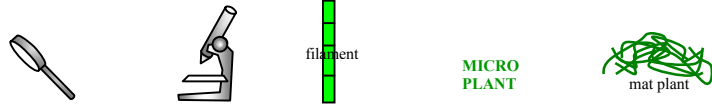


Techniques needed and plant shape



Classification

Phylum: Chlorophyta; Order: Cladophorales; Family: Cladophoraceae

***Descriptive name**

green tidal-flat mats

Features



plants consist of thin mats or loose, fine entangled threads found in calm water in the intertidal on sand or mud

Special requirements



1. threads light green, **unbranched**
2. chloroplasts **net-like** with several to many pyrenoids
3. cells **16-22µm** wide, **elongate**: L/B dimensions = **2-6**

Occurrences

Usual Habitat

cosmopolitan. In southern Australia, from Venus Bay, S Australia to Victoria intertidal of sheltered waters

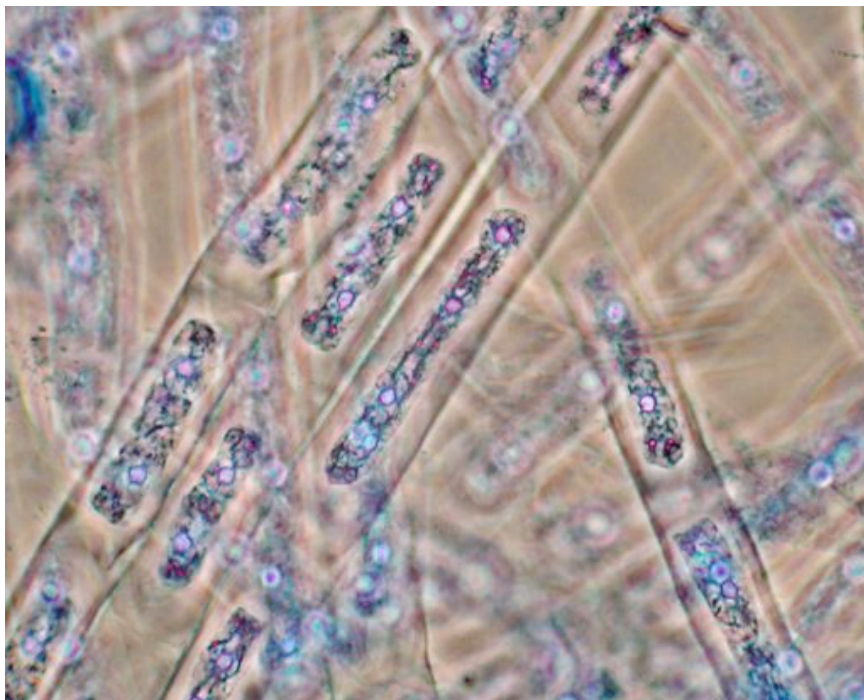
Similar Species

other thread-like (filamentous) algae such as *Ulothrix* (but that has a parietal chloroplast — one that partly encircles the inside of the cell wall); and *Cladophora* (but that has branched filaments)
Rhizoclonium tortuosum has similar straight threads, but these are **wider** in that species

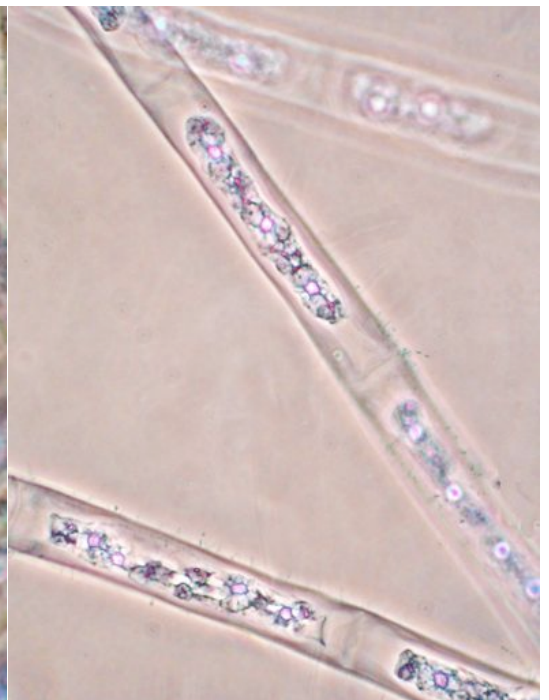
Description in the Benthic Flora Part I, pages 167-9

Details of Anatomy

1.



2.



Rhizoclonium implexum stained blue and viewed microscopically at different magnifications to show

1. tangled, fine, unbranched threads (slide 7446)
2. elongate shape of cells in which L/B = 2-6. Although shrunken due to the staining process, the plastids show the complex net-like shape with many bright plastids, characteristic of this group (slide 6792)



3. *Rhizoclonium implexum*
(Dillwyn) Kützing, (A13021d)
from the upper intertidal
amongst samphires, Port
Wakefield, S Australia
4. a specimen (slide 7446) stained
blue and viewed
microscopically to show
tangled, fine, unbranched
threads

