

Techniques needed

Classification

Phylum: Chlorophyta; Order: Cladophorales; Family: Cladophoraceae

***Descriptive name**

green tidal-flat mats

Features



plants consist of mats or loose, fine entangled threads 50-100mm long, in calm water in the intertidal on sand or mud

Special requirements



1. threads light green, **unbranched, irregularly** curved or twisted
2. short rhizoids protrude **irregularly** from threads
3. **chloroplasts, net-like** with several to many pyrenoids
4. cells **box-shaped, 16-22µm** wide: L/B dimensions = **1.0-1.5**

Occurrences

cosmopolitan. In southern Australia, Proper Bay, Pt Lincoln, S Australia to Tasmania

Usual Habitat

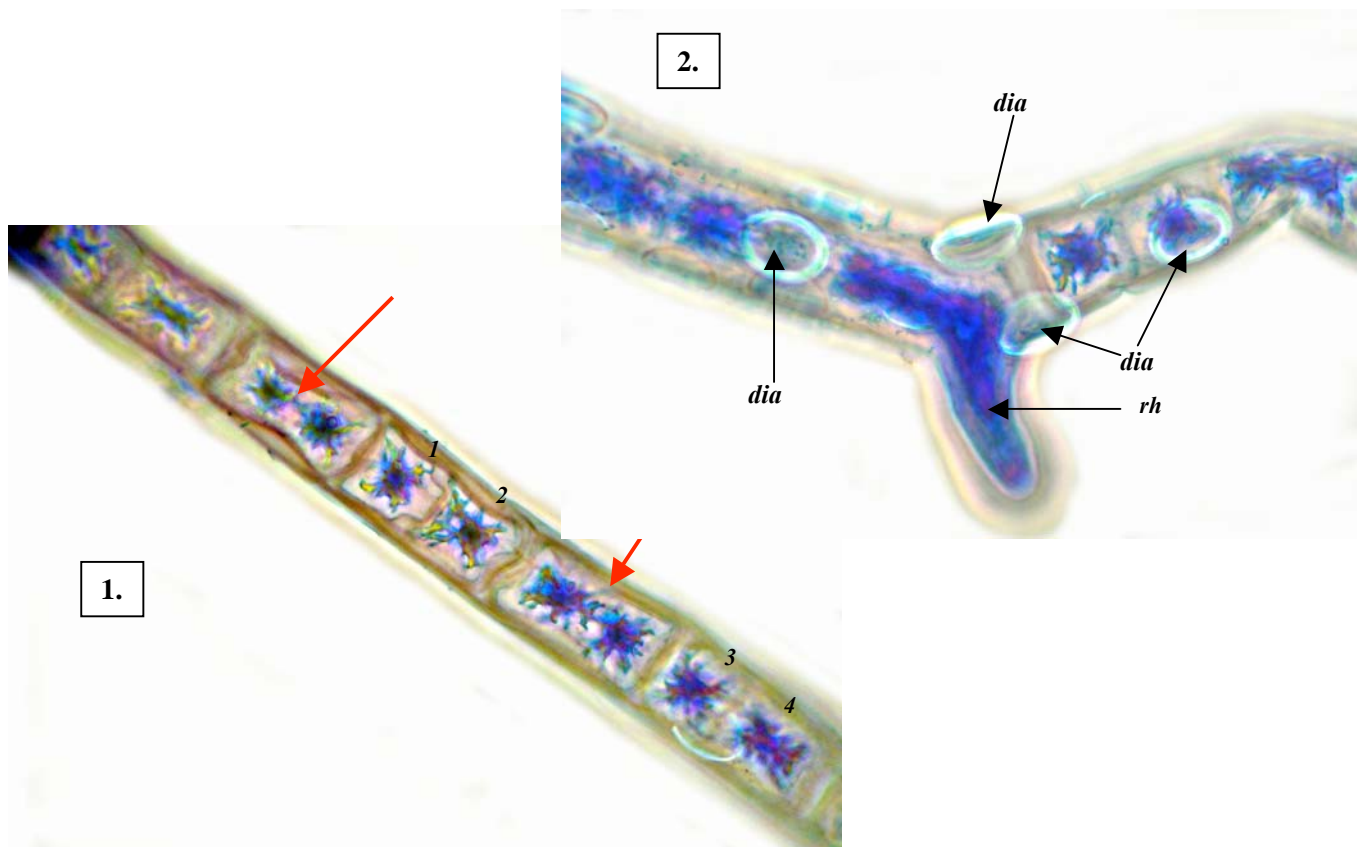
in the intertidal of sheltered waters

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 curvatum* also has curved threads and rhizoids, but in that species they are in **regular** positions, and cells are **wider**

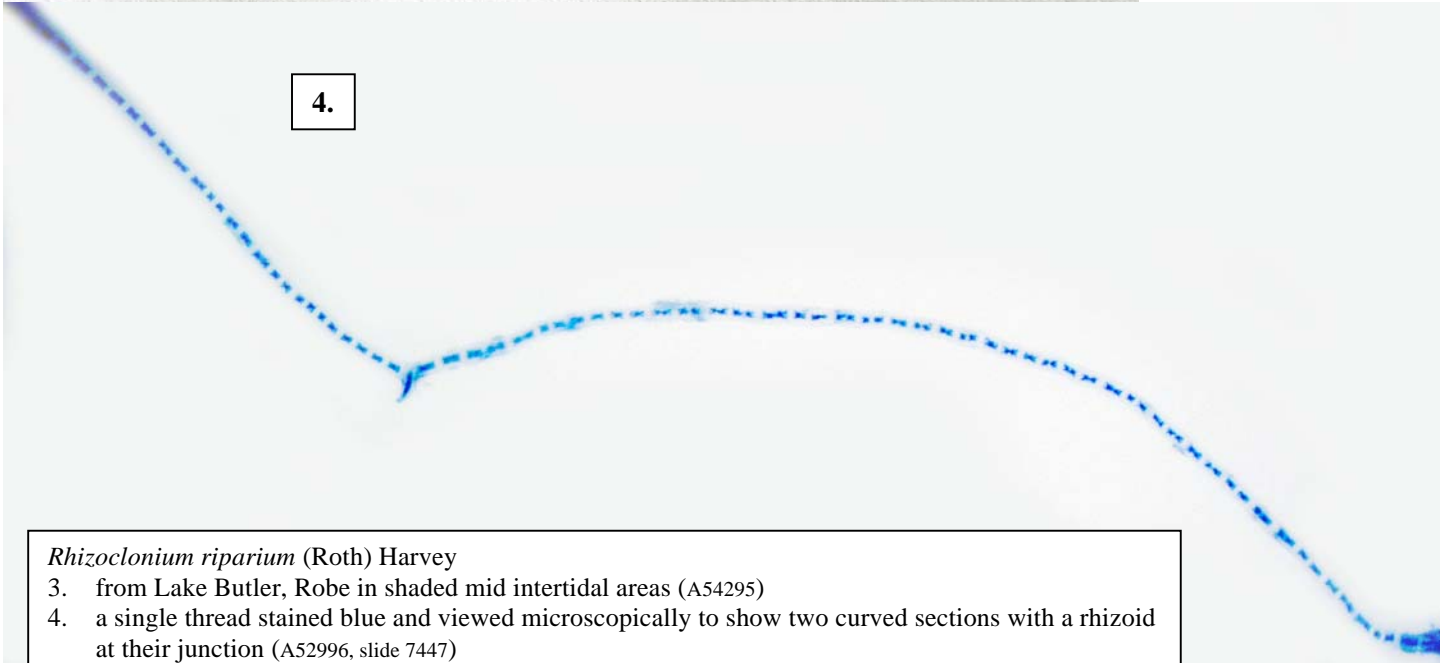
Description in the Benthic Flora Part I, pages 169, 170

Details of Anatomy



Rhizoclonium riparium (A52996 slide 7447) stained blue and viewed microscopically showing
1. some cells dividing (arrowed) and others (1,2,3,4) with the more usual box-shape where L/B = 1-1.5
2. junction of two curved portions with a rhizoid (rh). (The bright discs are epiphytic diatoms (dia) on the surface of the thread)

* Descriptive names are inventions to aid identification, and are not commonly used
“Algae Revealed” R N Baldock, S Australian State Herbarium, June 2007



Rhizoclonium riparium (Roth) Harvey

3. from Lake Butler, Robe in shaded mid intertidal areas (A54295)

4. a single thread stained blue and viewed microscopically to show two curved sections with a rhizoid at their junction (A52996, slide 7447)

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