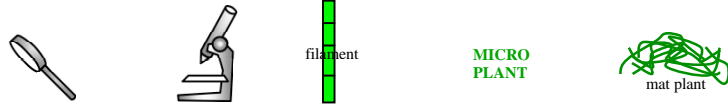


**Techniques needed and plant shape**



**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**



View threads microscopically to find

1. threads green, **unbranched**
2. chloroplasts, **net-like** with several to many pyrenoids
3. cells **oblong**, **25-40µm** wide, L/B dimensions = **2-3**

**Occurrences**

Europe, N America and New Zealand. In southern Australia, from Kangaroo I. and St Kilda, S Australia

**Usual Habitat**

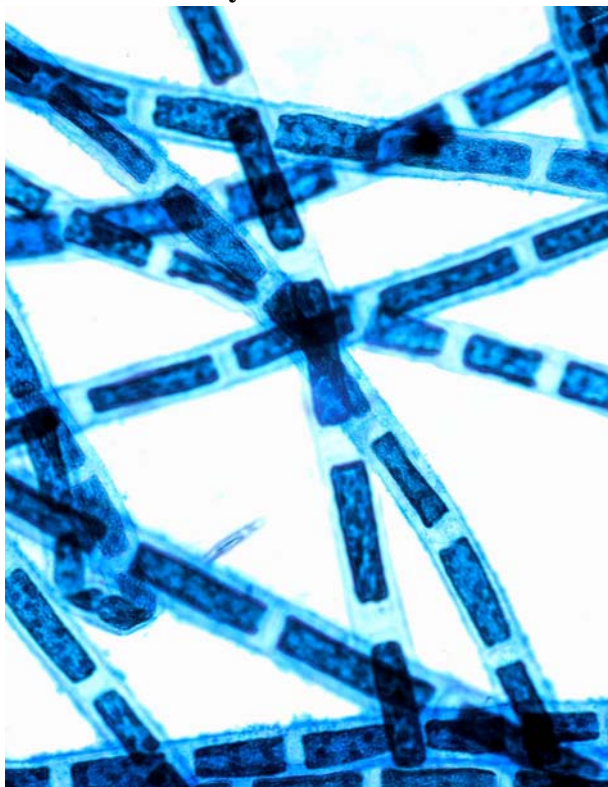
in the intertidal of sheltered waters or tangled in the stems of samphires

**Similar Species**

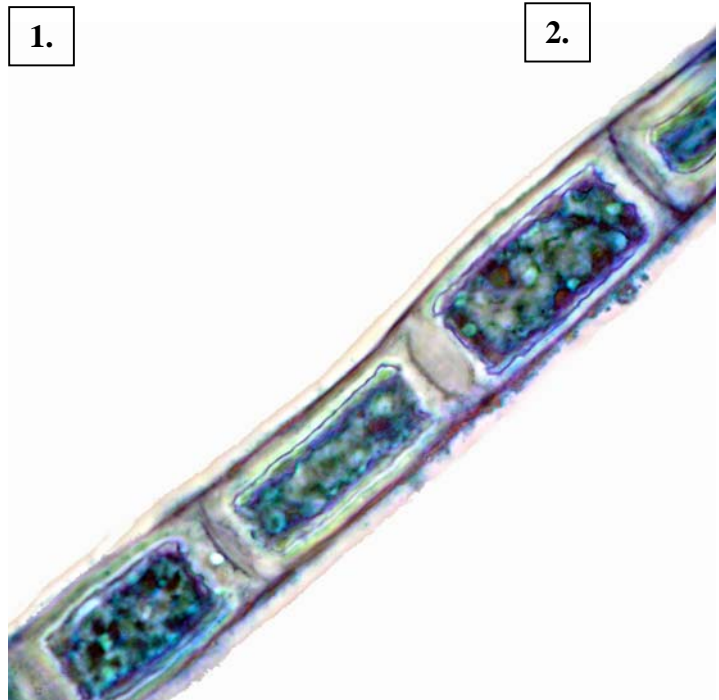
other thread-like (filamentous) algae such as *Ulothrix* (but that genus has parietal chloroplasts — ones that partly encircle the inside of cell walls); and *Cladophora* (but that has branched filaments). Similar to *Rhizoclonium implexum*, but *Rh. tortuosum* has wider filaments

**Description in the Benthic Flora** Part I, pages 168-169

**Details of Anatomy**



1.



2.

Different magnifications of *Rhizoclonium tortuosum* (A52994 slide 7445) stained blue and viewed microscopically to show

1. tangled, unbranched threads (rarely with short rhizoids)
2. cell detail showing the net-like chloroplast and cell dimensions of L/B = 2-3





Two magnifications of *Rhizoclonium tortuosum* (Dillwyn) Kützing, (A54729), from Thomson Creek, St Kilda, S Australia amongst seagrass detritus

\* Descriptive names are inventions to aid identification, and are not commonly used  
“Algae Revealed” R N Baldock, S Australian State Herbarium, October 2003