Techniques needed and plant shape

Classification
Phylum: Chlorophyta; Order: Cladophorales; Family: Cladophoraceae

*Descriptive name
arced mangrove threads, (referring to the regular curved segments)

Features
plants consists of green, felty mats or loose, entangled threads

Special requirements
view the threads microscopically to find
1. relatively regular curved segments separated by short rhizoids, characteristic of this species
2. threads unbranched, cells box-shaped; L/B dimensions < 2
3. chloroplasts net-like with several to many pyrenoids

Occurrences
New Zealand. In southern Australia, from Outer Harbour and the Port River estuary

Usual Habitat
on mangroves in the mid intertidal

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); Cladophora (but that has branched filaments) or Chaetomorpha (but the threads are wider in that genus)

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

Details of Anatomy

1.

Rhizoclonium curvatum
stained blue and viewed microscopically at different magnifications
1. curved segments with rhizoids at the junctions (slide 6797)
3. detail of the box-shaped cells characteristic of this species and a rhizoid (slide 6797)

2.

* Descriptive names are inventions to aid identification, and are not commonly used

“Algae Revealed” R N Baldock, S Australian State Herbarium, October 2003
3. *Rhizoclonium curvatum* Chapman, (A52647), on mangrove stems in the mid-intertidal, Garden Island, S Australia
4. dissected threads stained blue and viewed microscopically, showing the curved segments with rhizoids at the junctions (slide 6789)

Descriptive names are inventions to aid identification, and are not commonly used

"Algae Revealed" R N Baldock, S Australian State Herbarium, October 2003