

Techniques needed and shape



MACRO PLANT



Classification

Phylum: Rhodophyta; Order: Gigartinales; Family: Phylloporaceae

*Descriptive name

Features

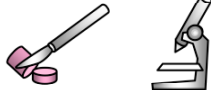


1. red-brown, fading to grey when dry, 50-200mm high tall
2. branches are **flat**, thin, **narrow, flat-branched, forked**
3. female structures form a centre line of darker fertile structures on fronds from N Spencer Gulf, S Australia to Victoria generally in deep water on rock

Occurrences

Usual Habitat

Special requirements



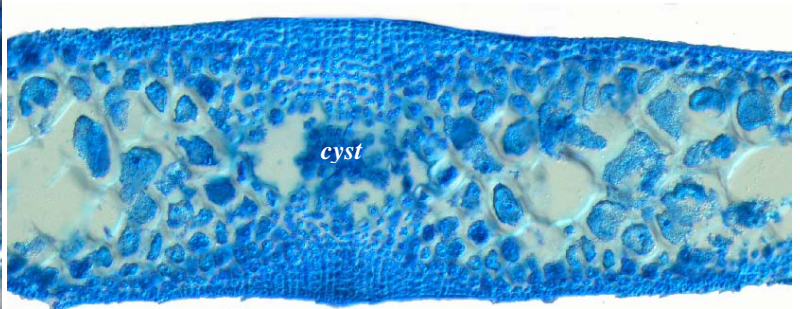
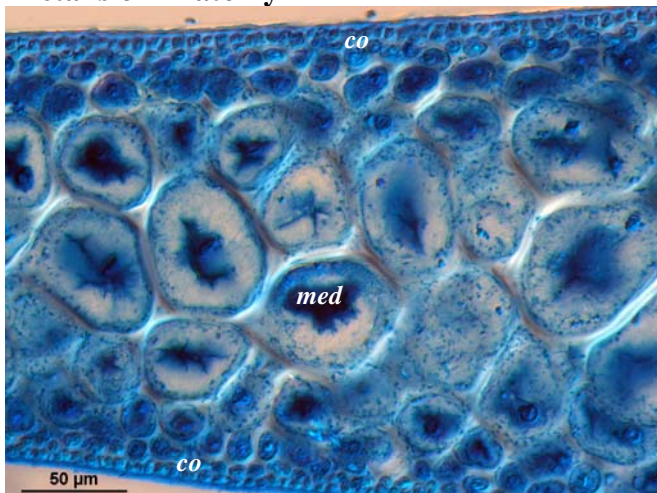
1. cut a cross section to find **large, closely** packed, equal-sided (parenchymatous) cells in the core (medulla) and outer (cortex) layers of several rows of **small** cells facing outwards
2. if possible, find sporangial plants with scattered, raised "**blisters**". Cut a cross section to find **chains** of tetrasporangia, divided in a cross (**cruciate**) pattern when mature, lying in several rows.
3. cut a cross section through the mid-line of female plants to find **embedded** mature structures (cystocarps)

Similar Species

Stenogramme interrupta, but that species has broader fronds at least twice the width. Superficially like some *Rhodymenia* species, but the core cells are smaller and/or more loosely arranged in that genus

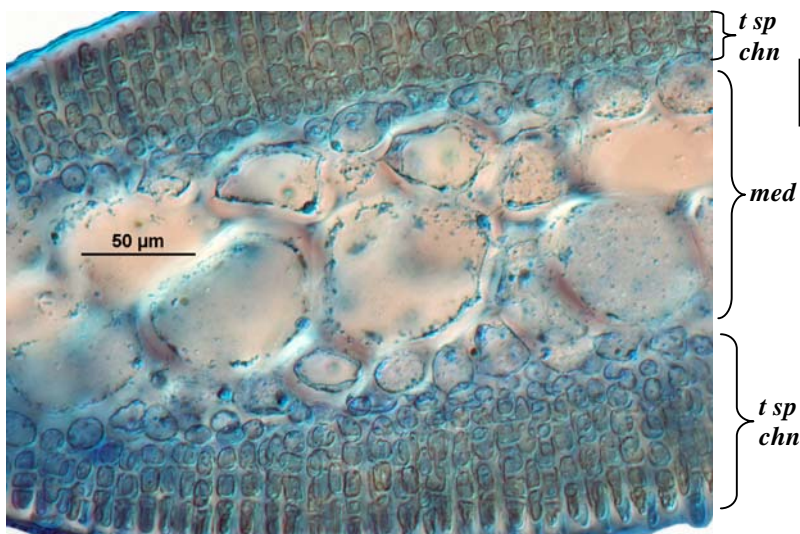
Description in the Benthic Flora Part IIIA, pages 262, 264

Details of Anatomy



1.

3.



2.

Cross section of *Stenogramme leptophylla* stained blue and viewed microscopically

1. cross section showing large cells of the core (medulla, *med*) and outer layers (cortex, *co*) of small cells (A63242 slide 13988)
2. a cross section through sporangial "blisters" (nemathecia) on both sides of a frond showing chains of young tetrasporangia (*t sp chn*) in rows, not yet divided in a cross pattern (A51051 slide 6174)
3. a cross section of post-fertilisation female structure (cystocarp, *cyst*) embedded in the frond mid-line (A63242 slide 13988)

5.



6.



Specimens of *Stenogramme leptophylla* J Agardh

4. from Port Phillip, Victoria, 15m deep (A22800) with linear, regular forked blades
5. dredged from 36m deep, 12 nautical miles SE of Granite I., S Australia (A59696) showing detail of linear fronds
6. a more closely-branched specimen from shallow water, Long Gully, SE of S Australia (A63242)

7.

