Techniques needed and shape

Classification
*Descriptive name
Features



Occurrences

Usual Habitat Special requirements















Phylum: Rhodophyta; Order: Gigartinales; Family: Phyllophoraceae
§delicate red alga

- 1. plants are pink to red-brown, fading to grey when dry, 50-150mm high tall
- 2. branches are *flat*, thin, *flat-branched*, *forked* and sometimes narrower basally
- 4. female structures form a broken centre line of darker fertile structures on fronds widespread in temperate regions. In Australia from West Coast, S Australia to Tasmania and S NSW

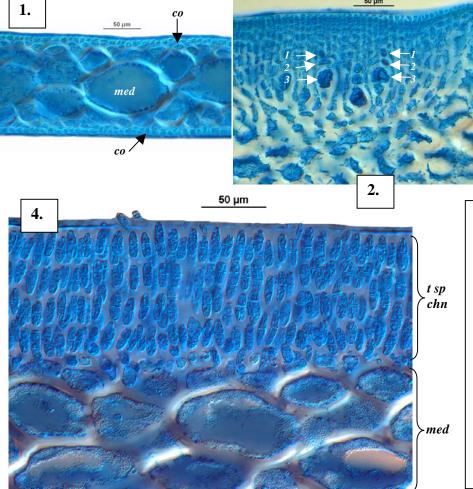
from shallow to deep water (30m) on rock

- 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 broken mid-line of female plants to find *embedded* mature structures (cystocarps)

Stenogramme leptophylla, but that species has linear fronds at least half 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 260-261

Details of Anatomy



Stenogramme interrupta stained blue and viewed microscopically (A42217 slide 12170)

- cross section showing large cells of the core (medulla, med) and outer layers (cortex, co) of small cells
- part of the cortex of a female plant with three 3-celled pre-fertilisation structures (carpogonial branch cells, 1, 2, 3) and a proliferation of cells forming the mid-line streak on fronds
- 3. a cross section of post-fertilisation female structure (cystocarp, *cyst*) embedded in the frond mid-line
- a cross section through part of a sporangial "blister" (nemathecium) showing chains of tetrasporangia (t sp chn) in rows, some divided in a cross pattern





Specimens of *Stenogramme interrupta* (C Agardh) Montagne from shallow water, reef edge, Long Gully, S Australia (A63241)

- 5. a female plant with forked blades bearing interrupted centre-line concentrations of reproductive structures
- 6. broader, lobed, sterile fronds
- 7. detail of the reproductive midlines



* Descriptive names are inventions to aid identification, and are not commonly used $$^{\$}$$ name used by Edgar, G (2008) in Australian Marine Life (2nd ed.). Prepared September 2009