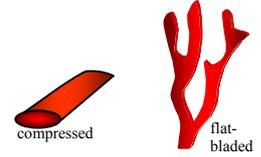


Techniques needed and shape



MACRO PLANT



Classification

Phylum: Rhodophyta; Family: Sarcodiaceae
flat red forks

*Descriptive name

Features



1. plants are red, 570-170mm high, with upright, **forked** blades, **flat** and slightly thicker at the edges
2. small, ball-shaped mature female structures (cystocarps) line the edges of blades
Port Elliott, S Australia to Victoria

Occurrences

Usual Habitat

Similar Species

on rocks in deep water or in shaded pools on rough-water coasts

Stenogramme interrupta but that species does not have cystocarps on the blade margins; *Curdiea angustata* has marginal cystocarps but is irregularly branched

Description in the Benthic Flora

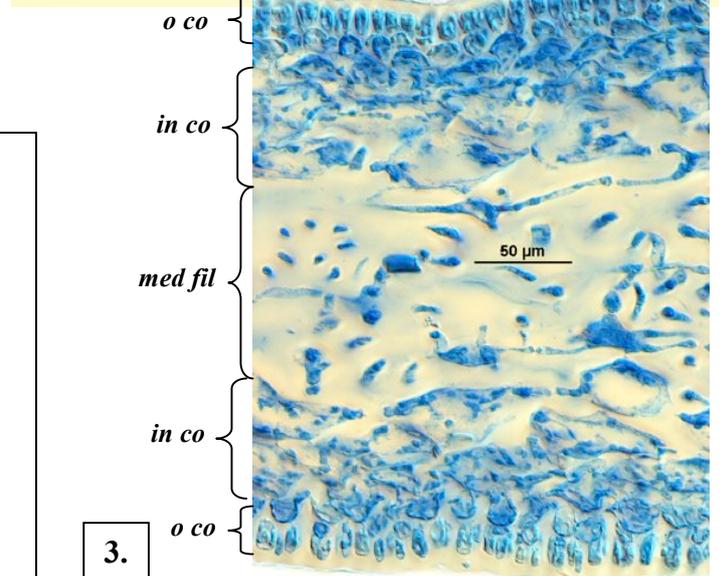
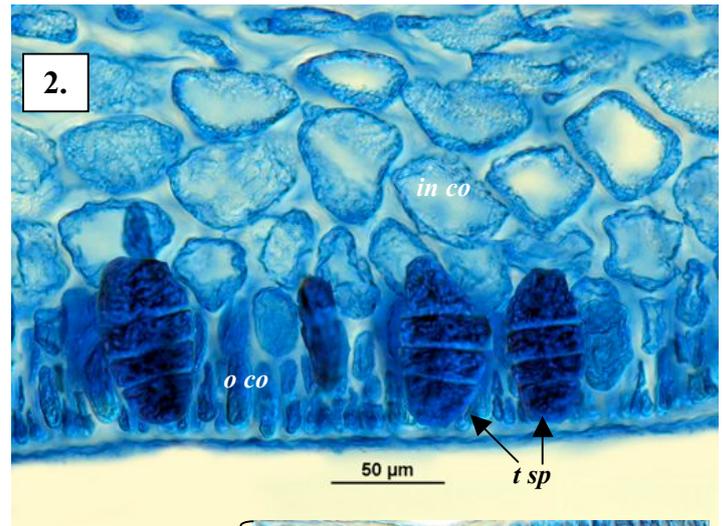
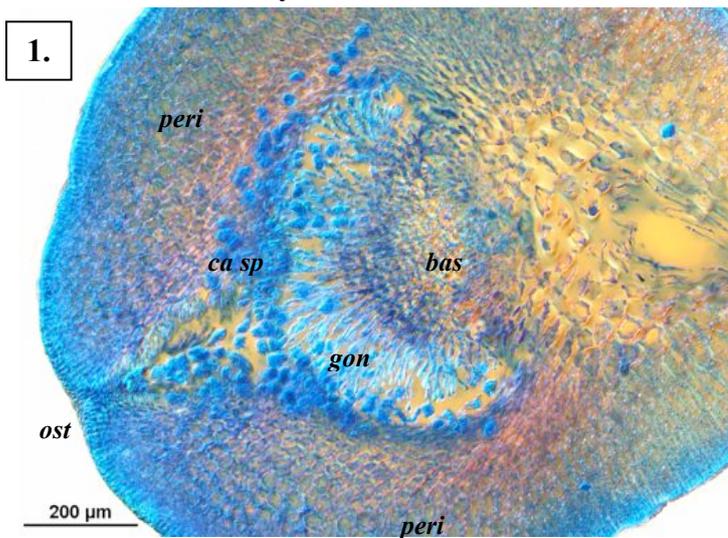
Part IIIA, pages 315-317

Special Requirements



1. cut a cross section of a branch and view microscopically
 - a core of **tangled threads** formed from star-shaped cells of the outer layers
 - outer layers (cortex) of **large inner** cells decreasing to **small** closely-packed **outermost cells**
2. find mature, **ball-shaped** female structures (cystocarps) about 1-2mm across on at the **edge** of blades. Cut a cross section to view microscopically
 - a base of a network of threads
 - spreading threads bearing short chains of carposporangia
 - a **thick wall** of cells (pericarp) and a definite opening (**ostiole**)
3. tetrasporangia form slightly raised clusters (sori) on blade surfaces and are divided across (zonate)

Details of Anatomy



Cross sections of *Sarcodia marginata* stained blue and viewed microscopically showing

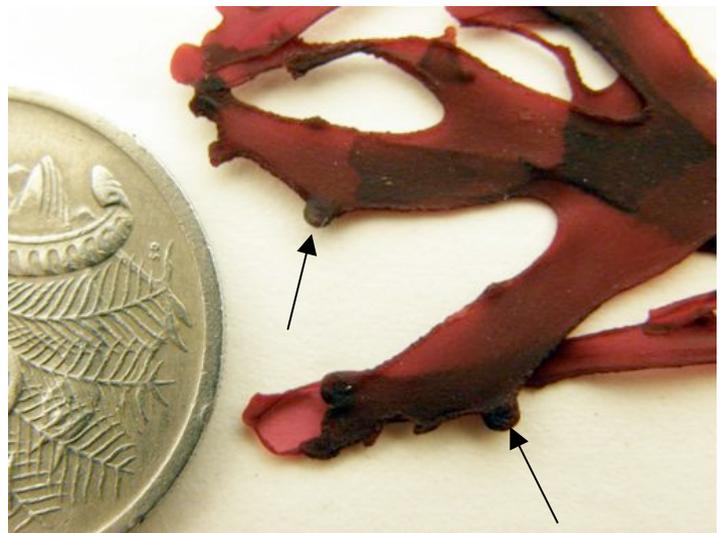
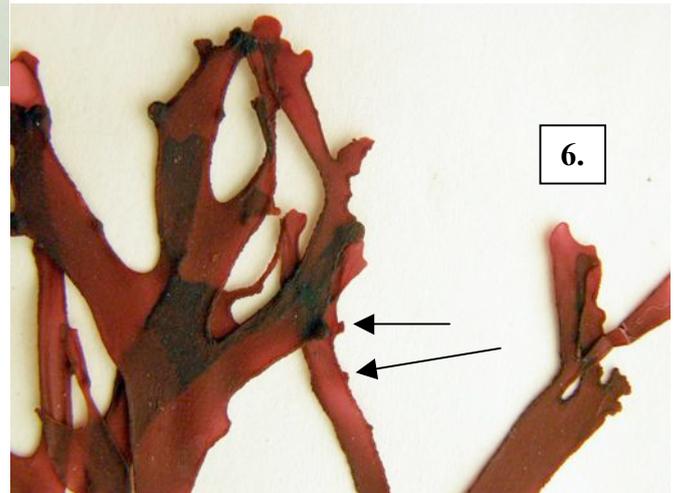
1. a mature female structure (cystocarp) from the edge of a blade showing a netlike base (*bas*) radiating threads (gonimoblast, *gon*), short chains of carposporangia (*ca sp*), thick wall (pericarp, *peri*) and opening (ostiole, *ost*) (A46370 slide 12232)
2. outer part of a blade with large-celled inner cortex (*in co*) small-celled outer cortex (*o co*) and tetrasporangia (*t sp*) divided across (zonate) (A46370 slide 12233)
3. a blade with core of intermingled threads (medullary filaments, *med fil*), inner cortex and outer cortex (A27846 slide 12234)



Different magnifications of *Sarcodia marginata* J Agardh

4 from the lower intertidal in Evans Cave, Cape Lannes, S Australia (A63264) with scattered patches of tetrasporangia on some of the blades (arrowed)

5-7. from 15m deep, 1300m off Cape Northumberland, S Australia (A46370) showing cystocarps on the blade edges (arrowed)



7.