

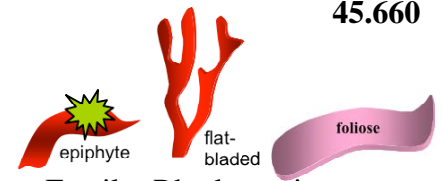
Hymenocladia chondricola
(Sonder) J Lewis

45.660

Techniques needed and plant shape



MACRO
PLANT



Classification

*Descriptive name

Features

Phylum: Rhodophyta; Order: Rhodymeniales; Family: Rhodymeniaceae
§ variable red strapweed

1. dark red to red-brown, fading to yellow-red, 100-500 mm tall, flat-branched
 2. main parts (axes) strap-like (foliose), 5-10 mm wide, texture of parchment, slightly thicker at edges,
 3. thin or streamer-like branches marginal, often characteristically from the tip
 4. mature female structures (cystocarps) pustulate, scattered
- near Perth W Australia, to Victoria and around Tasmania,
on seagrasses, large algae, animals such as sea squirts or on rock in shallow to deep water

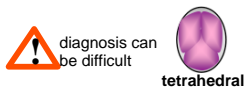
Occurrences

Usual Habitat

Special requirements



1. cut sections of blades and examine microscopically to find
 - narrow outer (cortical) layers of 2-3 layers of small cells
 - inner layer (medulla) **4-10** cells across, of large cells, **mixed with smaller ones** and some threads
2. cut sections of pustulate mature female structures (cystocarps) to find chains of small cells forming a wall (pericarp), single external opening (ostiole), mass of carposporangia, nutritive cells basally, initially threads present, but disintegrating
3. sporangia scattered in the **outer part of the medulla**, divided tetrahedrally

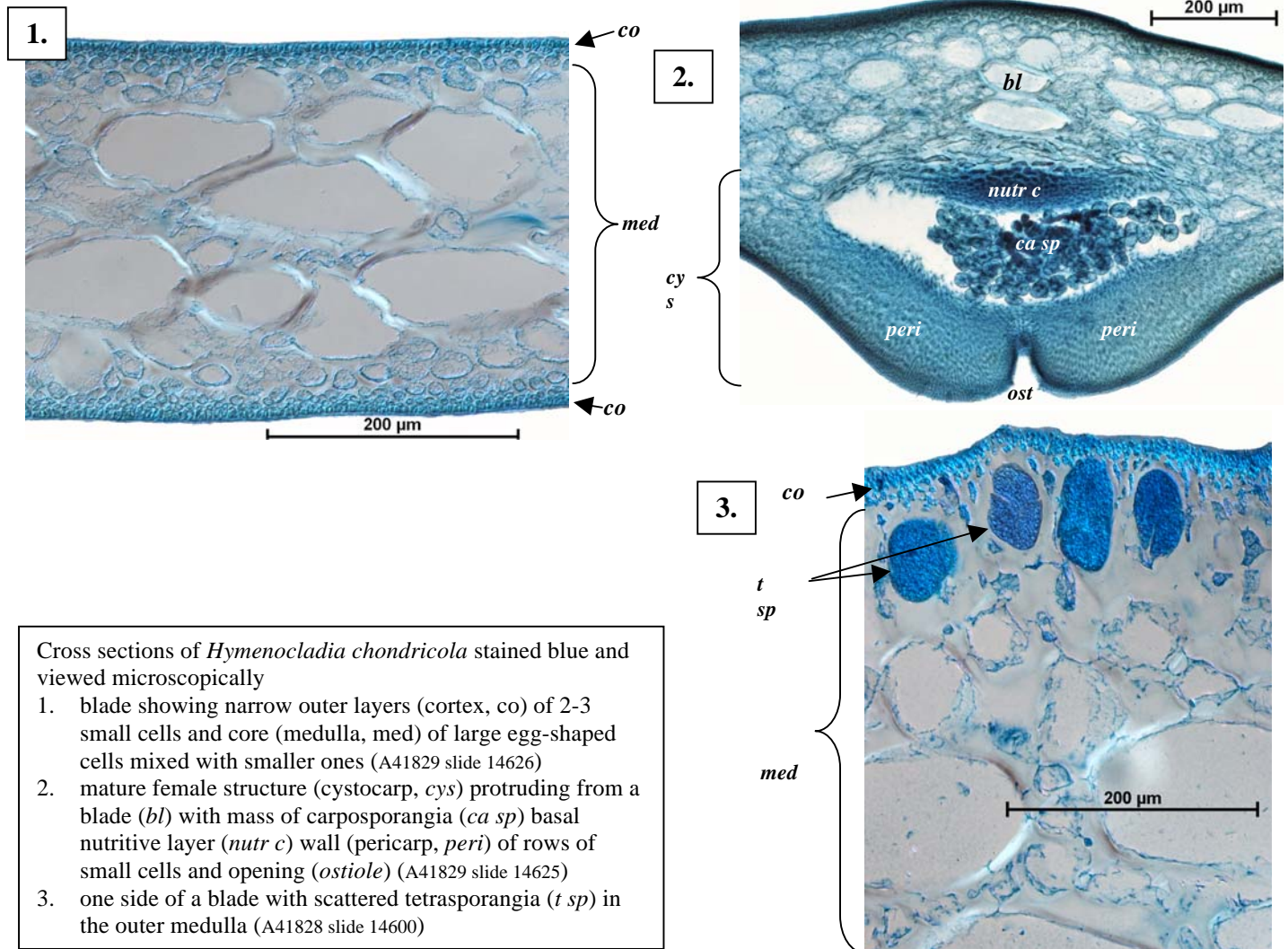


Similar Species

Faucheopsis coronata but that is soft when fresh, with medulla cells ringed in threads

Description in the Benthic Flora

Part IIIB, pages 111-113



Cross sections of *Hymenocladia chondricola* stained blue and viewed microscopically

1. blade showing narrow outer layers (cortex, co) of 2-3 small cells and core (medulla, med) of large egg-shaped cells mixed with smaller ones (A41829 slide 14626)
2. mature female structure (cystocarp, cys) protruding from a blade (bl) with mass of carposporangia (ca sp) basal nutritive layer (nutr c) wall (pericarp, peri) of rows of small cells and opening (ostiole) (A41829 slide 14625)
3. one side of a blade with scattered tetrasporangia (t sp) in the outer medulla (A41828 slide 14600)

§ name used in Edgar, G. *Australian Marine Life*, 2nd Ed. (2008)
*Descriptive names are inventions to aid identification, and are not commonly used
“Algae Revealed”, R N Baldock, S Australian State Herbarium December 2010

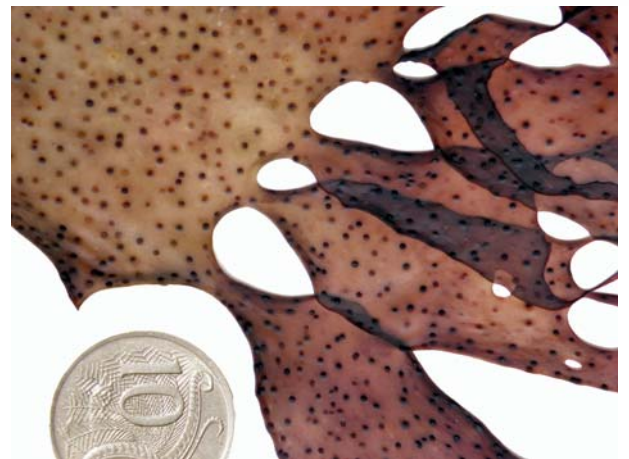
4.



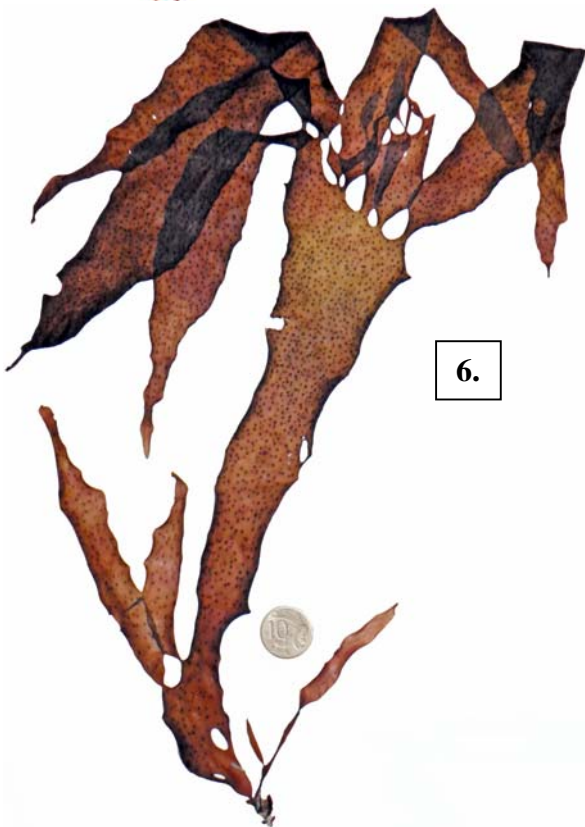
5.



7.



6.



8.



Hymenocladia chondricola (Sonder) J Lewis from South Australia

- 4. drift plant from Robe (A0904)
- 5. drift plant from Port MacDonnell with small fringing branches throughout the single blade (A61781)
- 6, 7 drift plant from Stinky Bay, Nora Creina with characteristic terminal streamers, also magnified showing pustulate cystocarps (A63563)
- 8. detail of male patches (sori) on the surface of a plant from Robe (A0906)

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