

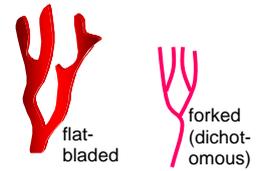
***Halopeltis (Rhodymenia) verrucosa***  
(Womersley) Saunders

45.660

**Techniques needed and plant shape**



MACRO  
PLANT



**Classification**

Phylum: Rhodophyta; Order: Rhodymeniales; Family: Rhodymeniaceae

**\*Descriptive name**

§ a red forkweed, warty red forkweed

**Features**

1. plants red to red-brown, 30-140 (-200) mm long, of obscure cylindrical stalks and slightly gristly, flat, thin, forked blades 3-8 mm wide, usually thicker at the margins; blades often encrusted with bryozoans and hydroids
2. sporangia, if present, in **well-defined** patches (nemathecia)
3. mature female structures (cystocarps), protruding from blades, **warty**, often in clusters

Althorpe I., S Australia to Victoria and E Tasmania.

shallow to deep water (20m) on rock and seagrasses

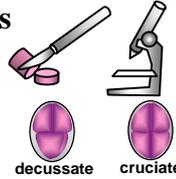
cut cross sections and examine microscopically to find

- narrow outer (cortical) layers of small cells facing outwards, grading rapidly to larger, rounded, inner (medulla) cells with **gaps** between cells
- **well-defined** patches of tetrasporangia, sporangia divided decussately or in a cross pattern (cruciate), mixed with branched, elongate outer (cortical) cells
- **warty** mature female structures (cystocarps) protruding from blades, rows of small cells forming a wall (pericarp) with single opening (ostiole), mass of egg-shaped carposporangia with basal nutritive cells

**Occurrences**

**Usual Habitat**

**Special requirements**



**Similar Species**

*Rhodymenia foliifera* and difficult to separate if cystocarps are absent

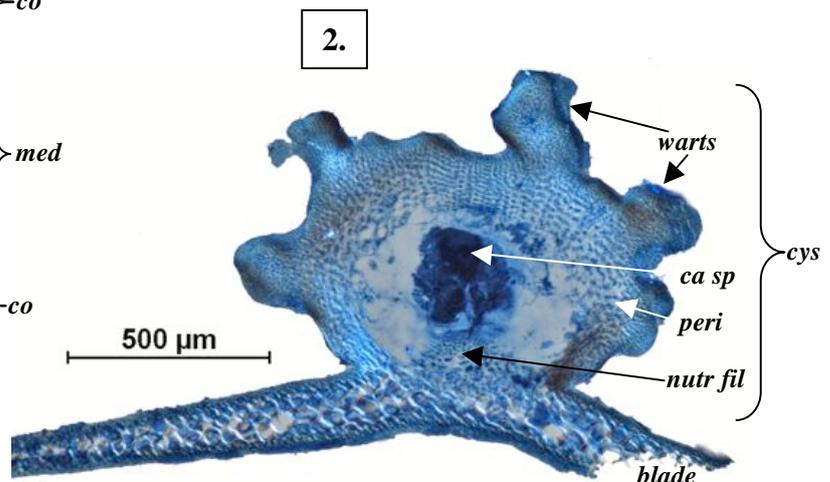
**Description in the Benthic Flora**

Part IIIB, pages 76-78

§NOTE: Saunders, G W & B McDonald (2010) *Botany* vol. 88, pp 639-667 using DNA sequencing, found hidden species within existing members of *Rhodymenia*. This required renaming some of the species described in the Marine Benthic Flora of SA



1.

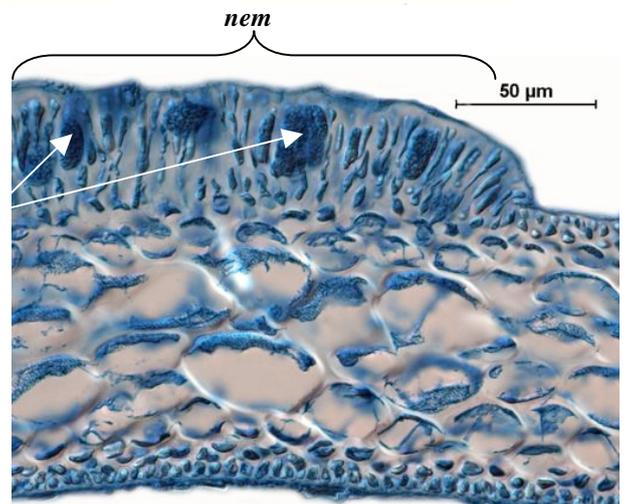


2.

Cross sections of *Halopeltis verrucosa* stained blue and viewed microscopically

1. blade, showing small cells of outer (cortical, *co*) layers, grading rapidly to large cells of the core (medulla, *med*) with spaces between cells (A70717)
2. blade with attached cystocarp showing warty outgrowths (*warts*), mass of carposporangia (*ca sp*), cellular wall (pericarp, *peri*) of rows of small cells and basal nutritive tissue (*nutr fil*) (A43500 slide 14520)
3. edge of a well-defined sporangial patch (nemathecium, *nem*) with tetrasporangia (*t sp*) amongst elongate cells (A43332 slide 15160)

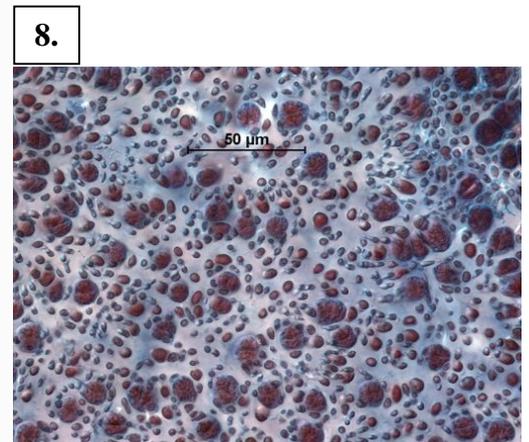
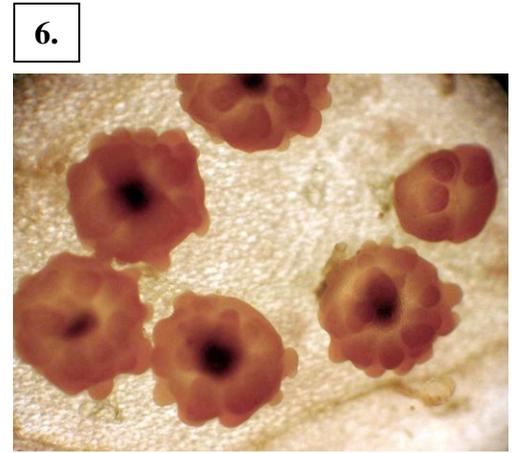
3.



§ name used in Edgar, G. *Australian Marine Life, 2nd Ed.* (2008) for other *Rhodymenia* species

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

“Algae Revealed”, R N Baldock, State Herbarium S Australia, November 2010; edit. November 2013



- 4, 5. *Halopeltis verrucosa* Harvey showing variations in shape of plants and encrustations of coralline red algae and bryozoan and polychaete animals
4. from 2m deep, Cape Buffon S Australia (A62801)
5. from 16 deep, Fluted Cape, Tasmania (A41526)
- 6-8. magnified surface views
- 6, 7 cystocarps of a specimen from Althorpe I., S Australia (A70717)
8. tetrasporangia ringed by cortical cells (A43332 slide 15159)

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