

Techniques needed and shape



Classification

Phylum: Rhodophyta; Family: Delesseriaceae; Tribe: Nitophylloideae;  
Group: Nitophyllum

\*Descriptive name

thorny-edged red blades

Features



plants red to red-brown, fading to a rose colour, 50-130mm tall, of **thin**, forked or flat-branched blades, 6-12mm wide **fringed** with numerous "thorns" (minute branches)

central coast of W Australia to Victoria

Occurrences

on rock, occasionally on other algae, probably a deep water species (17-70m deep)

Usual Habitat

*Halicnide simulans* with branched thorns, but that species has a prominent mid-rib

Similar Species

Part IIID, pages 126-128

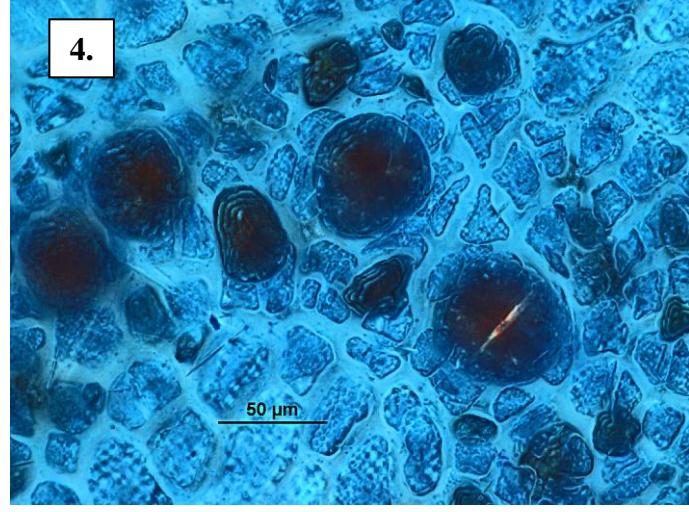
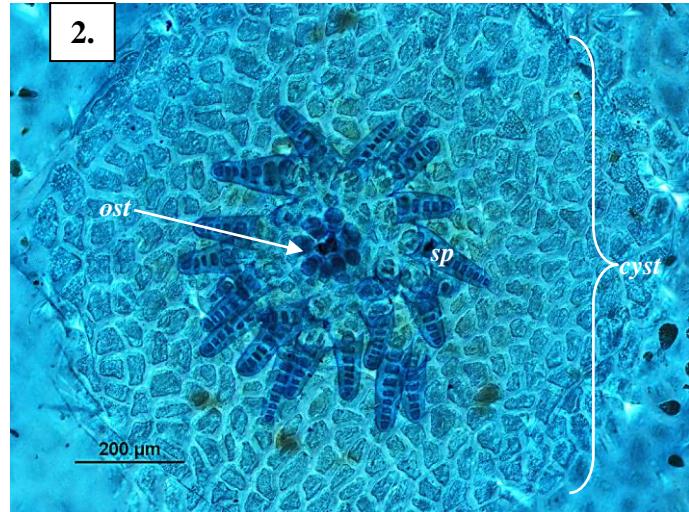
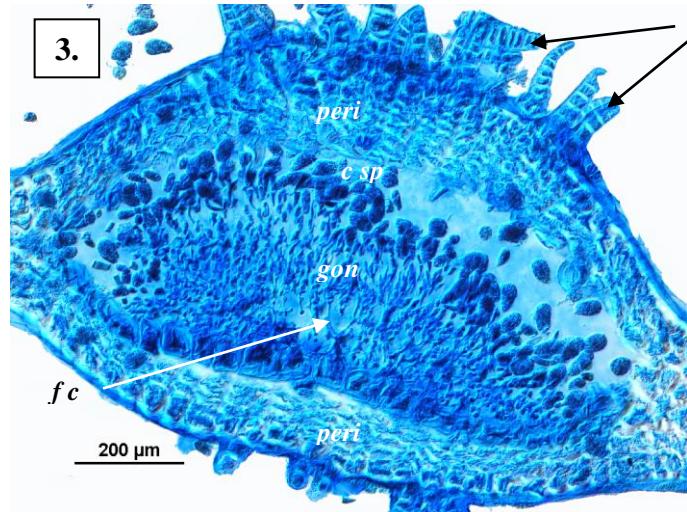
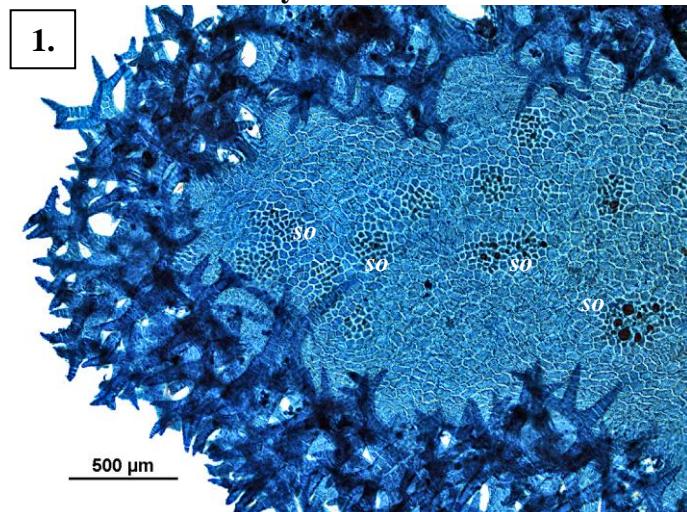
Description in the Benthic Flora

view microscopically to find:



- blades **1-cell thick**, edges fringed with rigid, thorny branches; random pattern of cells, veins **absent**
- in female plants: scattered swollen female structures (cystocarps) with an opening ringed by tiny, spiny threads
- in sporangial plants, scattered patches (sori) of tetrasporangia divided tetrahedrally

Special Requirements



*Haraldiophyllum erosum* stained blue and viewed microscopically

1. surface view of a blade tip: fringe of spiny, branched threads, patches (sori, **so**) of developing tetrasporangia (*slide 20558*)
2. surface view of a swollen female structure (cystocarp, **cyst**): opening (ostiole, **ost**) ringed by spines (**sp**) (*slide 20558*)
3. cross section of a cystocarp: fusion cell (**fc**), carposporangia (**c sp**) at the tips of much branched tissue (gonimoblast, **gon**), wall of cells (pericarp, **peri**), surface, spiny threads (arrowed) (*slide 17548*)
4. surface view of a cluster of tetrasporangia (*slide 20558*)

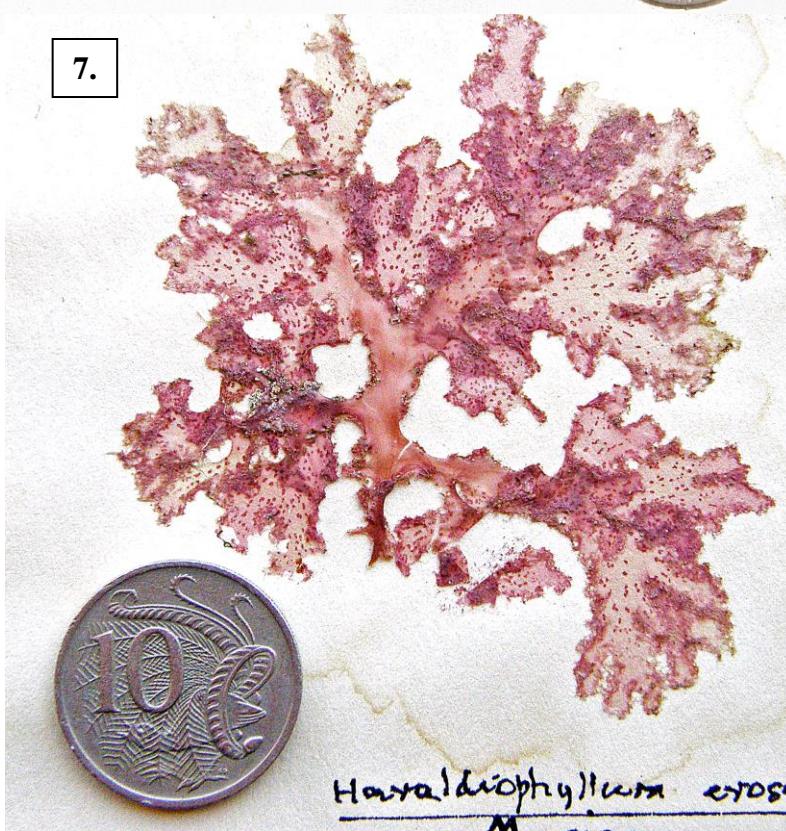
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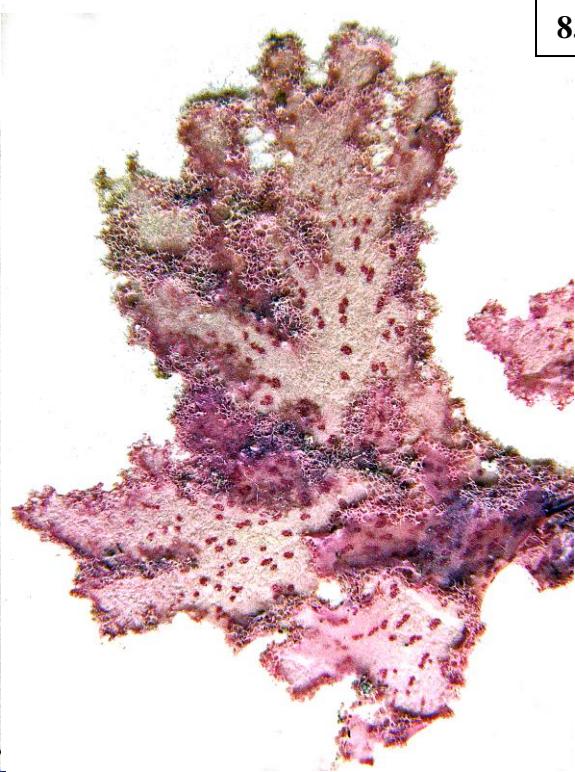
6.



7.



8.



Pairs of different magnifications of *Haraldiophyllum erosum* (Harvey) Millar & Huisman showing the dense fringe of microscopic spines, lack of veins and scattered tetrasporangial patches

5, 6. a drift plant from Seal Bay, Kangaroo I., S Australia (A32951)

7, 8. a drift tetrasporangial plant from Queenscliff, Victoria (A25787)