Porphyra woolhousiae Harvey

45.040

Techniques needed and plant shape

MACRO PLANT

Sexual plant

This is a stage in the whole life cycle of the species

Classification Phylum: Rhodophyta; Order:Bangiales; Family: Bangiaceae

***Descriptive name** epiphytic laver; rosy laver

Features plants ***delicate***, ***rosy*** or red-purple, oval or elongate, 20-170mm long, growing on other algae (***epiphytic***)

Occurrences southern hemisphere cooler waters (New Zealand and subantarctic islands, S South America). In Australia, scattered records from St Kilda, S Australia to Victoria and Tasmania

Usual Habitat ***on other algae*** in shallow water

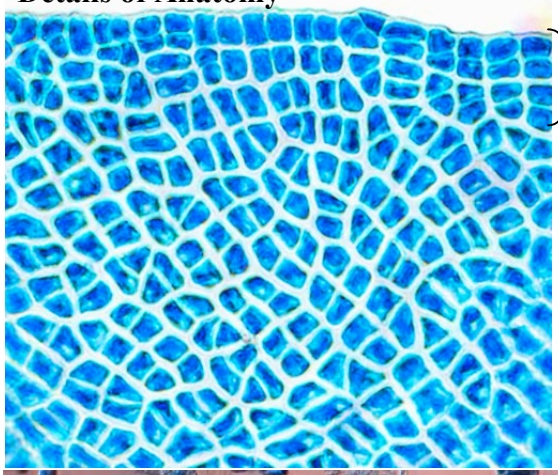
Special requirements view edges of blades microscopically.

1. blades are one cell thick. Growth is from several rows of cells (meristems) at the blade edge and also within the blade where adjacent cells may be of unequal sizes
2. male spermatangia occur as packets of 16-64 tiny spermatia at blade edges. Blade edges disintegrate, releasing the spermatia.
3. female structures and spore plants (called the conchocelis stage) are unknown

Similar Species young plants of other *Porphyra* species, but these grow on rock

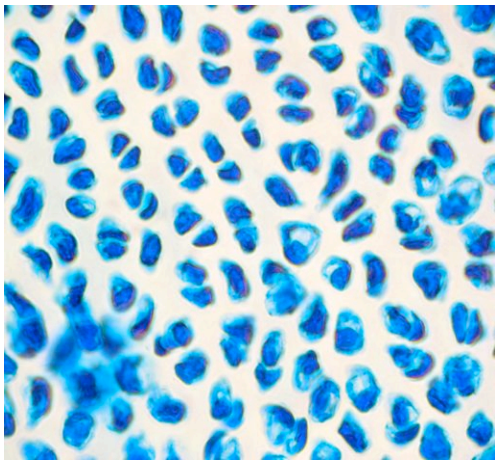
Description in the Benthic Flora Part IIIA, pages 37-38

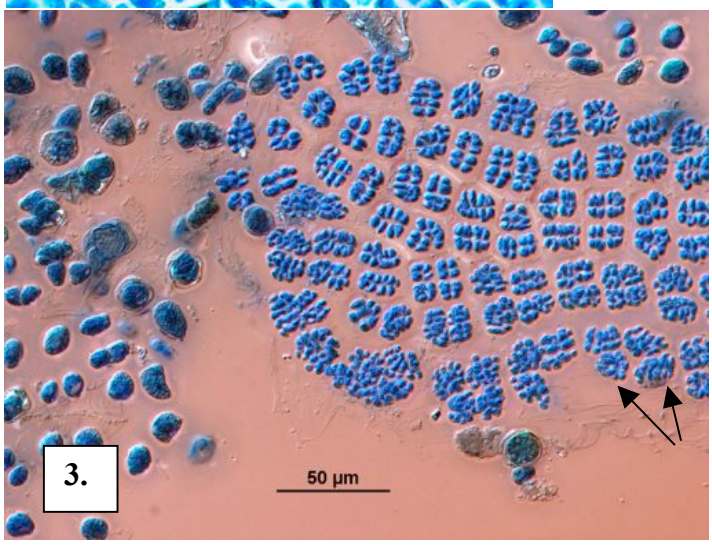
Details of Anatomy



1.

2.





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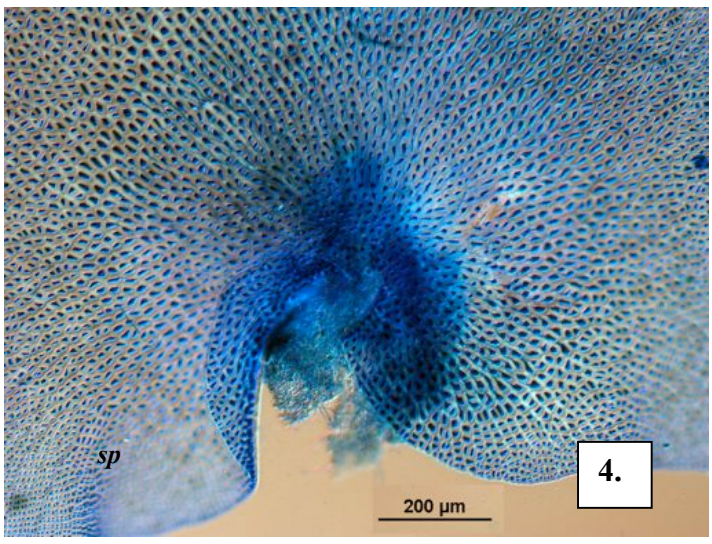

4.

Porphyra woolhousiae stained blue and viewed microscopically

1. blade edge with several rows of dividing cells (meristem, *meri*) (A44234 slide 4984)
2. middle blade cells showing cells of unequal sizes (A44234 slide 4984)
3. blade edge with packets of 16-64 spermatia (*sp*), some being released by the disintegration of the blade (A42722 slide 4514)
4. base of a blade with cells forming rhizoids at lower ends combining into an attachment in the notch at the blade base (A43289 slide 4707)

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

"Algae Revealed" R N Baldock, S Australian State Herbarium January 2010

Specimens of *Porphyra woolhousiae* Harvey showing variations in colour and shape

5. a drift plant from Blackmans Bay, NSW (A4984)
6. from the Barcoo marina near West Beach, S Australia attached to the green alga *Rhizoclonium* 1m deep on a floating pontoon (A89001)
7. from St Kilda, S Australia, 1.5m deep, on the red alga *Gigartina* (A42722)

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