Phycodrys australasica Millar

45.880

Techniques needed and shape



Classification Division: Rhodophyta; Family: Delesseriaceae; Tribe: Nitophylloideae
Group: *Phycodrys*

***Descriptive name** a Veined Cellophane Plant

Features

plants dark red, 30-80mm tall, branching dense, of ***flat***, (complanate), thin, narrow main blades 3-5mm wide, edged in sparse minute spines with midline ***veins*** apparent in lower parts of the plant only. Disc- or lance-shaped bladelets, ***narrow*** at the base, arise from main blade ***edges***

Special requirements

view blades microscopically to find:

- a single apical cell dividing to continue the growth of the blade
- midline veins several cells thick; obscure opposite pairs of side veins
- edges of blades consisting of a single layer of cells (monostromatic)
- in sporangial plants sporangia found in patches (sori) at blade edges and surfaces

Occurrences widely distributed from northern W Australia, southern Australia to NSW and Lord Howe Island

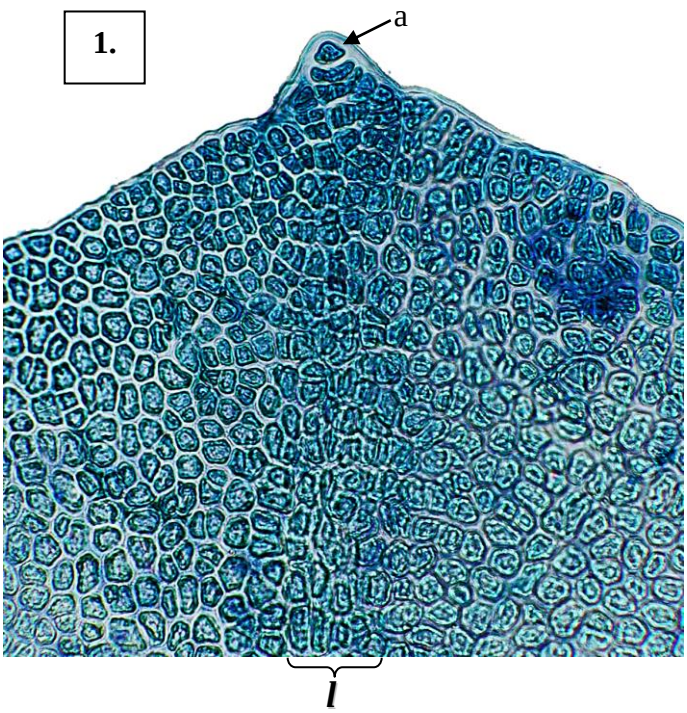
Usual Habitat found throughout the year on rock, from shallow water to 15m

Similar Species *Apoglossum* but this is more delicate and has scattered microscopic veins

Description in the Benthic Flora Part IIID , page 73-77

Details of Anatomy

1.



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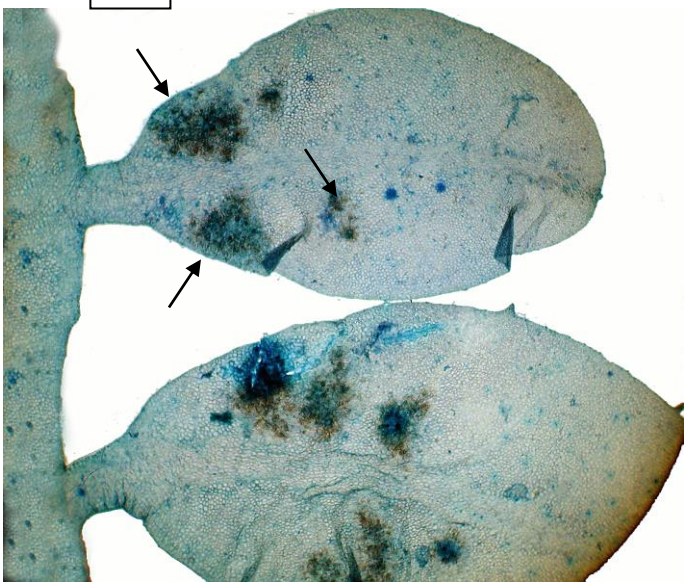
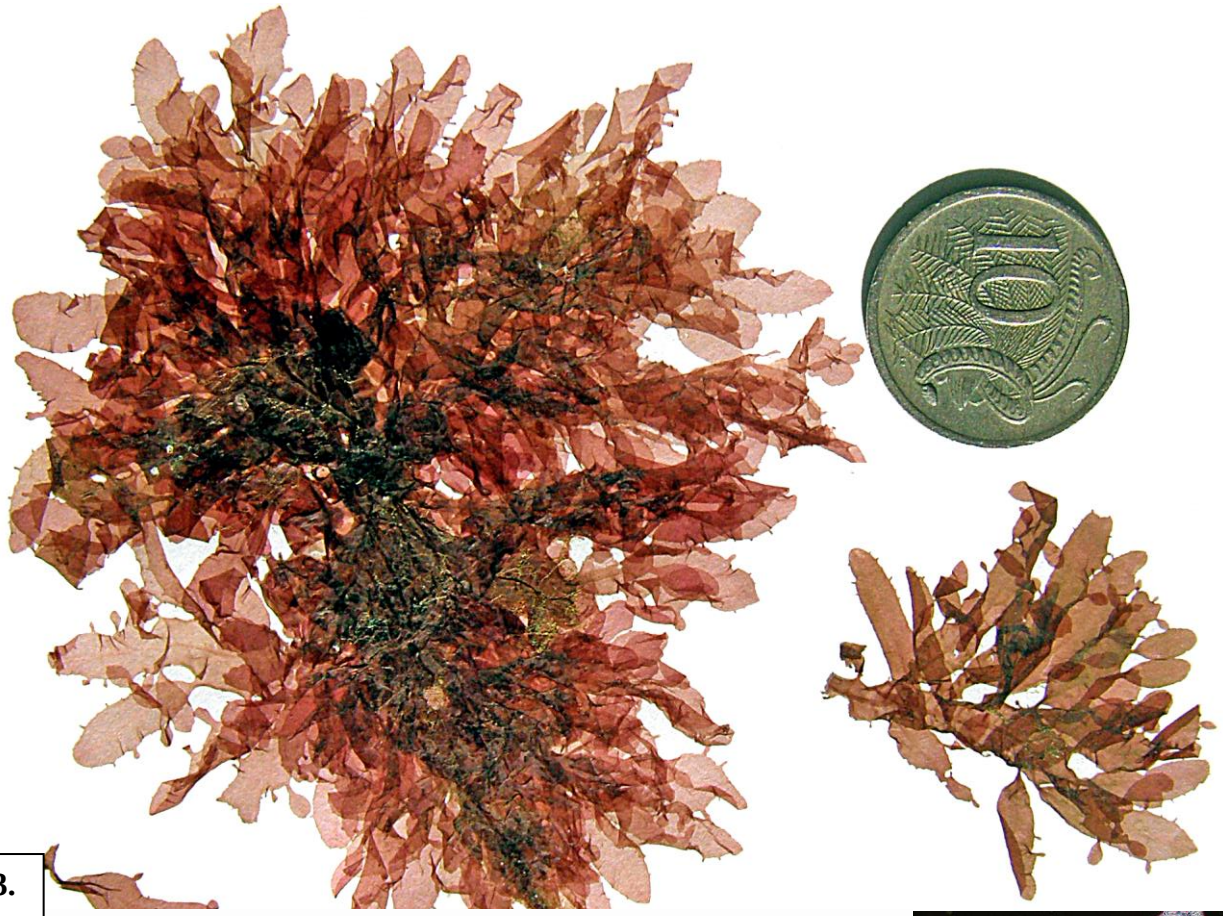


Phycodrys australasica (slide 17207) stained blue and viewed microscopically

1. blade tip: apical cell (***a***) that produces a blade 1cell thick (monostromatic); faint line of cells (***l***) that becomes a midline vein
2. bladelets, basally narrow, at the edge of a main blade; patches of tetrasporangia (***arrowed)***

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

"Algae revealed", R N Baldock, State herbarium S Australia, March 2003; edited July 2014



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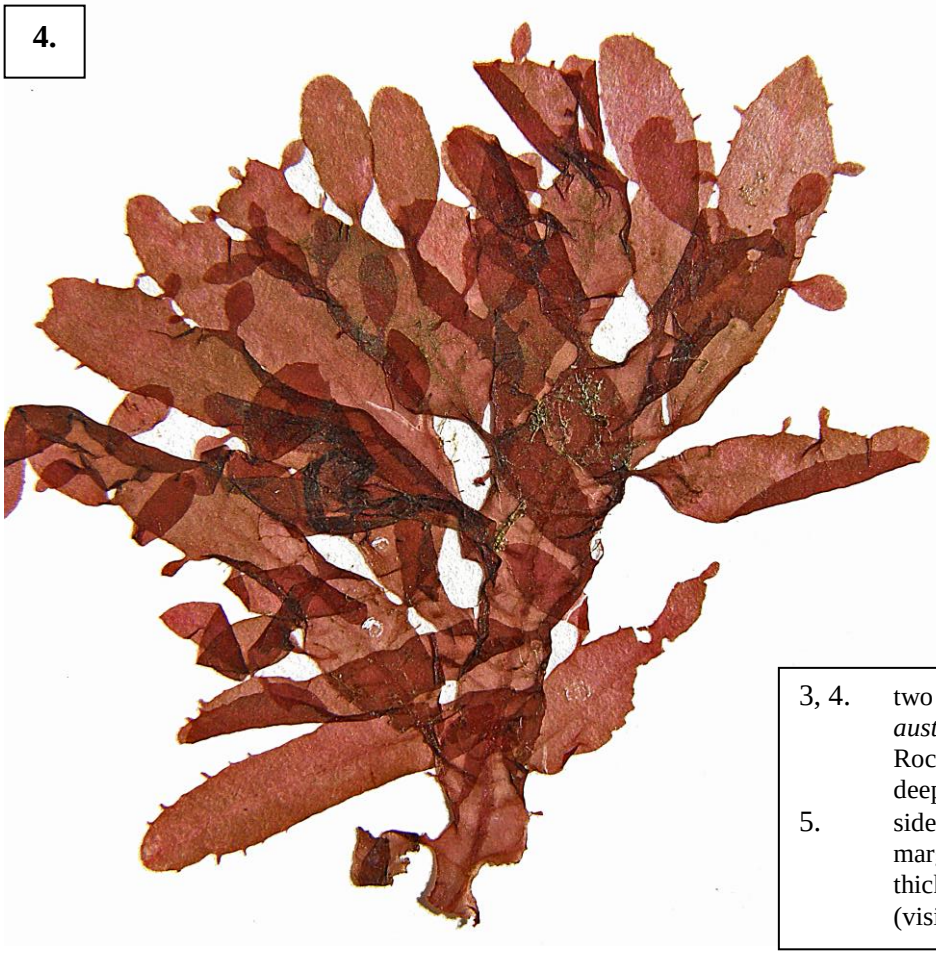

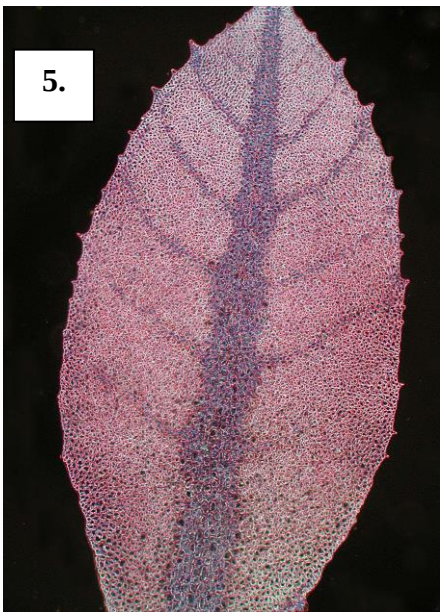

5.

3, 4. two magnifications of *Phycodrys australasica* Millar, A39370, from Crawfish Rock, Westernport Bay, Victoria, 5-10m deep

5. side blade (dark field imaging slide 71207): toothed margins, broad midline vein many-cells thick, faint, opposite, paired side veins (visible only under the microscope)

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