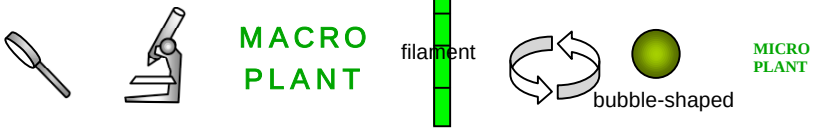
Derbesia marina
(Lyngbye) Solier, including
Halicystis ovalis

50.690

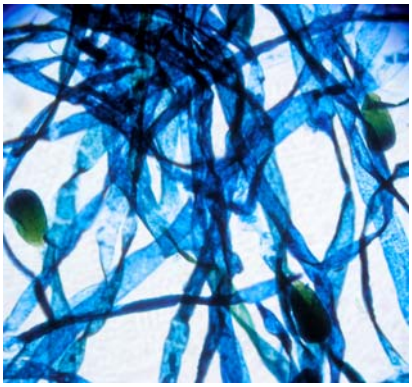
Techniques needed and plant shapes



Classification	Phylum: Chlorophyta; Order: Derbesiales; Family: Derbesiaceae
***Descriptive name**	green threads (spore plant) and §green eyeballs (sexual plant)
Features of the spore plant	plants bright green, 10-40mm tall on rock, threadlike, sparsely branched with no visible cross-walls
Features of the sexual plant	plants only 3-10mm tall, balloon-shaped, on encrusting red coralline algae (previously called *Halicystis marina)*
Variations	chloroplasts may be lens-shaped or circular
Special requirements:	
spore plant	1. view the rarely-divided (***coenocytic***) threads, 30-40µm wide 2. find the dark, egg-shaped spore sacs (sporangia) 80-105µm long, cut off from the filaments by a ***double*** partition.
sexual plant	view the chloroplasts that have no central spots (pyrenoids)
Usual Habitat	from S. Australia to Bruny I., Tasmania and Victoria, in shaded pools
Similar Species	many filamentous algae such as *Cladophora* resemble the spore stage, but *Derbesia* spp have practically ***no cross walls*** *Derbesia tenuissima* has thicker filaments (50-80µm), larger chloroplasts ***with*** pyrenoids and larger, more spherical sporangia.

Description in the Benthic Flora Part I, pages 289-291

Details of Anatomy



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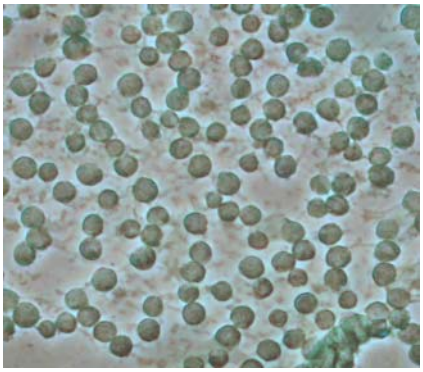

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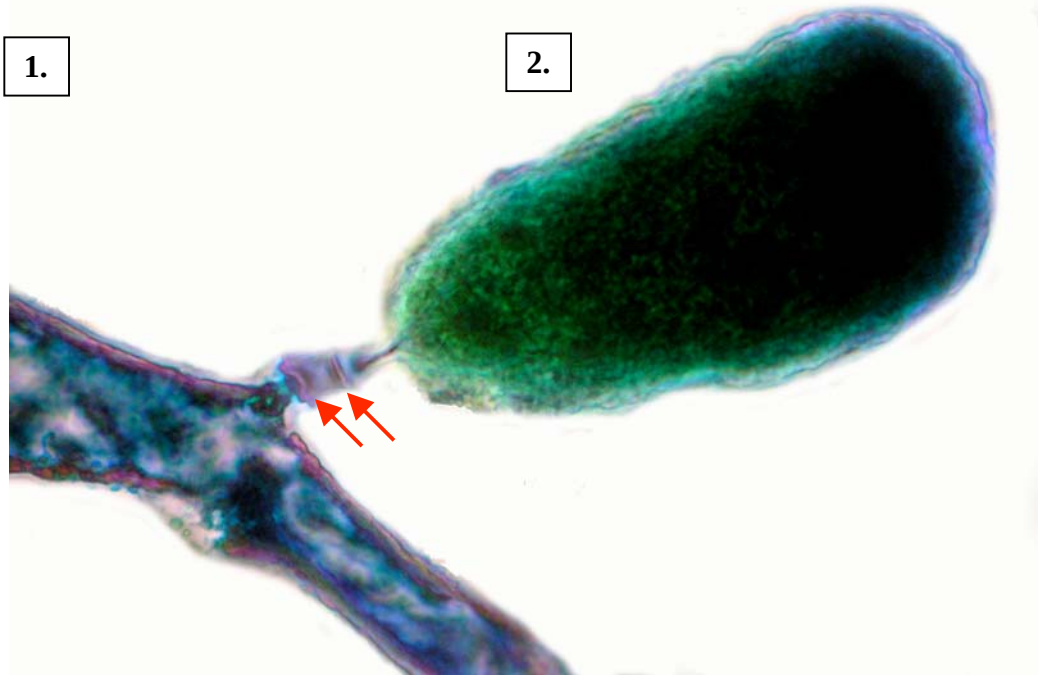

Specimens of *Derbesia marina* viewed microscopically
1. filaments stained with aniline blue to highlight their sparse branching, absence of cross walls and 3 dark sporangia (slide 2725)
2. detail of an egg-shaped sporangium with the double partition in the neck (arrowed) (slide 2725)
3. highly magnified, rounded chloroplasts of the sexual phase (*Halicystis ovalis)*, of *Derbesia marina*, showing the lack of a central dark pyrenoid (slide 15100)

* Descriptive names are inventions to aid identification, and are not commonly used
§ name used in Edgar, G. *Australian Marine Life, 2nd Ed.* (2008)
"Algae Revealed" R N Baldock, S Australian State Herbarium, July 2005

The spore stage of *Derbesia marina* (Lyngbye) Solier (A52839) from Nora Creina, S. Australia

The sexual stage (*Halicystis ovalis*) of *Derbesia marina* (A63938), Ninepin Pt, SE Tasmania

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