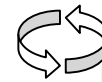


Derbesia tenuissima
 (de Notaris) Crouan & Crouan, including
 sexual stage *Halicystis parvula*

50.690



MACRO
PLANT



bubble-shaped

MICRO
PLANT

Techniques needed and shape

Classification

Phylum: Chlorophyta; Order: Bryopsidales; Family: Derbesiaceae

***Descriptive name**

green threads (spore plant) and green bubbles (sexual plant)

Features of the spore plant

plants bright green, 10-60mm tall, on rock or other plants, threadlike, sparsely branched, cross-walls absent

Features of the sexual plant

plants only 6-10mm tall, balloon-shaped, on encrusting red coralline algae

Special requirements:

spore plant



1. view the rarely-divided (*coenocytic*) filaments, 50-80µm wide
2. find the dark spore sacs (sporangia), 200-300µm long, cut off from the filaments by a *double* partition.

sexual plant

the chloroplasts have a central spot — the *pyrenoid*

Occurrences

from W Coast, S. Australia to Tasmania

Usual Habitat

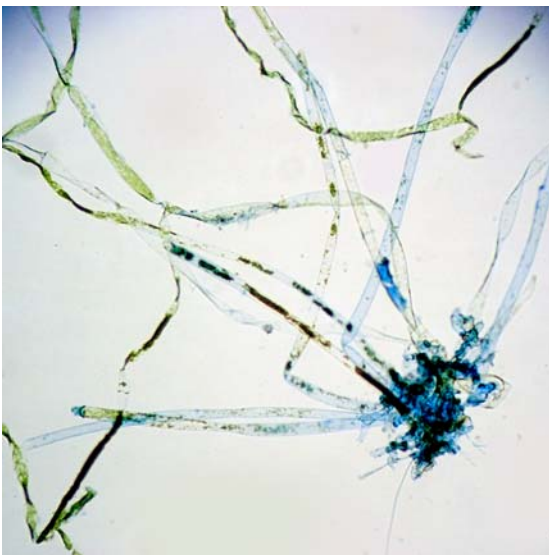
in reef pools and marina pylons

Similar Species

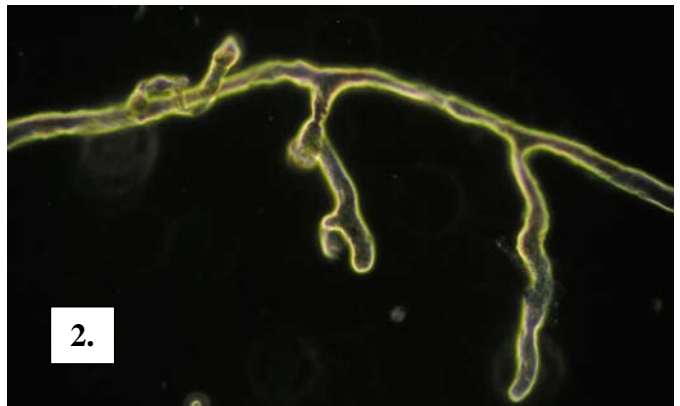
many filamentous algae such as *Cladophora* resemble the spore stage, but *Derbesia* spp have practically no cross walls. *Derbesia marina* has thinner filaments (30-40µm wide), smaller chloroplasts *without* pyrenoids and smaller, egg-shaped sporangia.

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

Details of Anatomy



1.



2.



3.



4.

Derbesia tenuissima (spore stage only) viewed microscopically

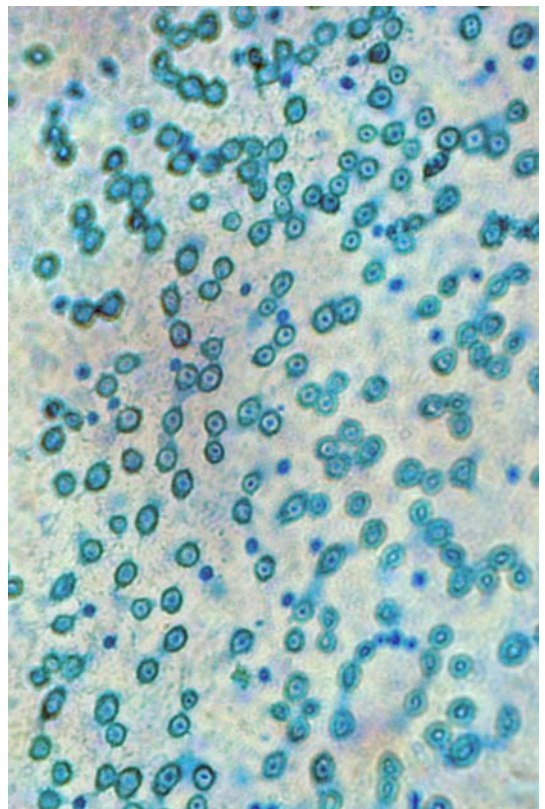
1. filaments stained blue to highlight the sparse branching from basal rhizoids, cross walls absent (slide 9547)
2. basal rhizoids highlighting the undivided (coenocytic) structure (slide 013)
- 3, 4. sporangium showing the narrow neck with double partition (slide 013)

* Descriptive names are inventions to aid identification, and are not commonly used
 "Algae Revealed" R N Baldock, S Australian State Herbarium, July 2005

5.



7.



6.



5. *Derbesia tenuissima* (A52985) (spore plant) Pt Adelaide, S Australia, on a pontoon
6, 7. specimens of the sexual plant of *Derbesia tenuissima*, (= *Halicystis parvula*) (A56396)
6. whole plant (A56396) from Nora Creina, S. Australia
7. microscope view of chloroplasts stained blue, showing prominent central pyrenoids (slide 9066)

* Descriptive names are inventions to aid identification, and are not commonly used
"Algae Revealed" R N Baldock, S Australian State Herbarium, July 2005