

Techniques needed and shape



**MACRO
PLANT**



Classification

*Descriptive name

Features

Occurrences

Usual Habitat

Special requirements



Phylum: Rhodophyta; Order: Gigartinales; Family: Nemastomataceae

slippery leafy red weed

red-red brown, slightly mottled, 100-600mm tall, of slippery single or lobed broad blades, slightly ruffled at the edges, expanding abruptly from a narrow stalk

Europe, Mediterranean, Japan. In Australia, from S Yorke Peninsula S A to Victoria on hard substrates in shallow to deep water

1. cut sections and view microscopically to find

- central mass of intertwined threads
- outer layers of branched tufts facing outwards, inner cells slightly larger grading to small, elongate outermost cells
- prominent club-shaped *gland cells* often in outer layers
- patches each containing few carposporangia, lying beneath openings in depressions in the blade surface (minute male spermatangia on outermost cells also possibly present on the same plant (monoecious condition))

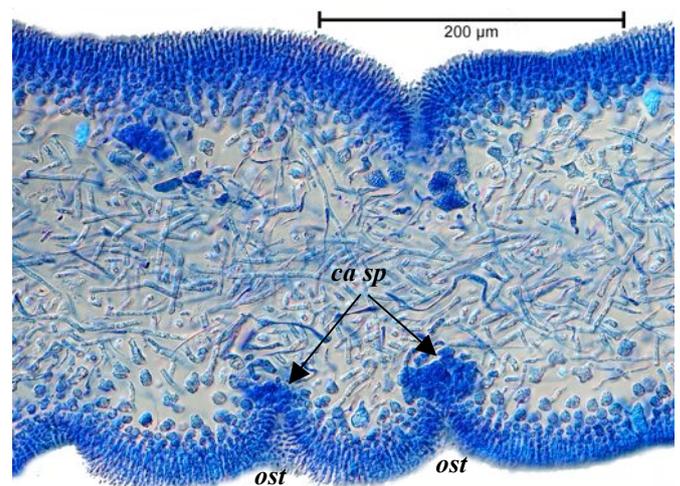
2. sporangial plants unknown in Australia

Platoma spp, but in those species, gland cells and depressed openings for carposporangia are absent

Similar Species

Description in the Benthic Flora Part IIIA, pages 280, 281, 282

Details of Anatomy



1.

2.



3.

Schizymenia dubyi stained blue and viewed microscopically 1, 2.

1. section through blade edge: central (medulla, *med*) mass of threads, branched chains of outer (cortex, *co*) layer and single gland cell (*glc*) (A42391 slide 12280)
2. section through blade: patches of carposporangia (*ca sp*) beneath openings (ostioles, *ost*) in depressions in the blade surface (A42782 slide 5427)
3. extracted cortical tuft: basal medulla thread and branched chains of cells (A34856 slide 5426)

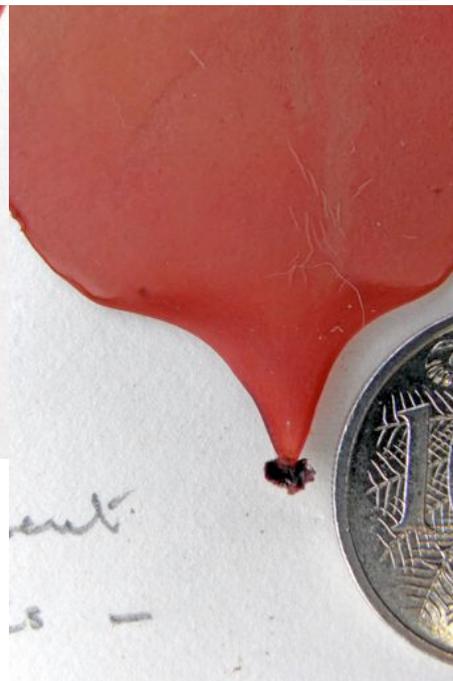


4.



6.

5.



7.

Specimens at different magnifications of *Schizymenia dubyi* (Chauvin ex Duby) J Agardh from shaded reef pools, Cape Lannes, Robe S Australia, showing shapes of blades and basal stalks

4, 5. (A42391)

6, 7. (A46140)