Callithamnion pinnatum Womersley

A SPECIES WITH FEW RECORDS

45.800.48

Techniques needed and plant shape

Classification Phylum: Rhodophyta; Order: Ceramiales;
Family: Ceramiaceae; Tribe: Callithamnieae

***Descriptive name** two-sided red tufts

Features
Special requirements

plants red-brown, to 80mm tall, of tufted threads, side branches in one plane view microscopically to find:

- main branches (axes) of box-shaped cells naked (***ecorticate***) near plant tips, clothed (corticated) by thread-like rhizoids lying ***in the sheaths*** of cells in lower parts, ***forked*** (dichotomous) in one plane (***alternately pinnate***), ending in a short conical or pointed (spinous) cell
- tetrasporangia, divided tetrahedrally, in small clusters on side branches, single or paired on ***short*** stalks (pedicels)

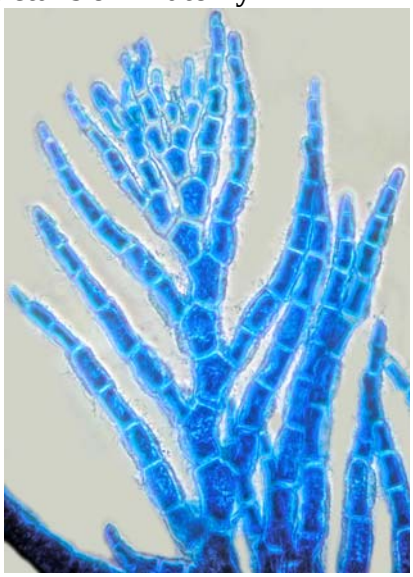
Occurrences Victoria only, at Pt Phillip Heads and Warrnambool

Usual Habitat (epiphytic) on *Caulerpa brownii* and *Laurencia* in shallow water

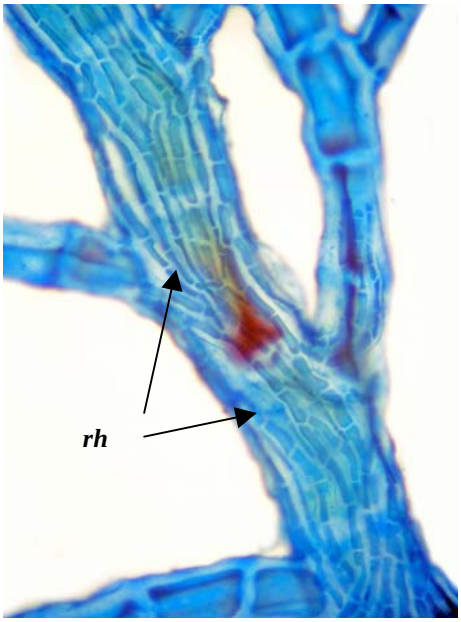
Similar Species *Callithamnion obstipum* and *C. violaceum* also have 2-sided branching but these species have no cortication, and tetrasporangia are stalkless

Description in the Benthic Flora Part IIIC, pages 234, 236-237

Details of Anatomy



1.

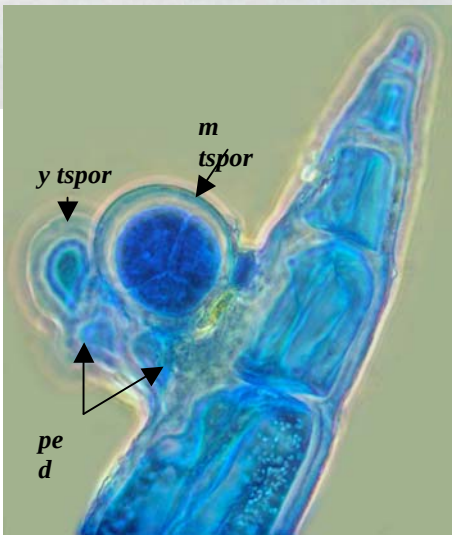


2.

3.

Callithamnion pinnatum, stained blue and viewed microscopically showing
1. 2-sided (alternately pinnate) branching pattern (A22945 slide 15685)
2, 3 A18379 slide 9075
2. clothing (cortication) of thread-like rhizoids (*rh*) lying within the sheath of lower branches
3. single or paired tetrasporangia (*t spor*) in clusters on short stalks (pedicels)

* Descriptive names are inventions to aid identification, and are not commonly used
"Algae Revealed" R N Baldock, S Australian State Herbarium, February 2007



4. *Callithamnion pinnatum* Womersley, A38053, from Egg I., Nuyts Archipelago, S Australia, 32-38m deep.
5. A18379 slide 9075 stained blue and viewed microscopically to show conical apical cell, mature and young tetrasporangia (*m tspor*, *y tspor*) on short stalks (pedicels, *ped*)

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