

Techniques needed and plant shape



Classification

Phylum: Rhodophyta; Order: Ceramiales;  
Family: Ceramiaceae; Tribe: Callithamnieae  
dense red tufts

\*Descriptive name

Features

Special requirements



plants dark red-brown, densely tufted, about 120mm tall  
view microscopically to find:



- main branches (axes) **forked** (dichotomous) of threads of naked (**ecorticate**), **elongate** cells narrowing rapidly over about 8 cells at tips, unique **hooked** (circinnate) short branches on basal branches
- **stalkless** tetrasporangia, divided tetrahedrally
- carposporophytes, the product of fertilisation, with **paired** masses of sporangia and a wrapping (**involucre**) formed from vegetative branches below the sporangia

Occurrences

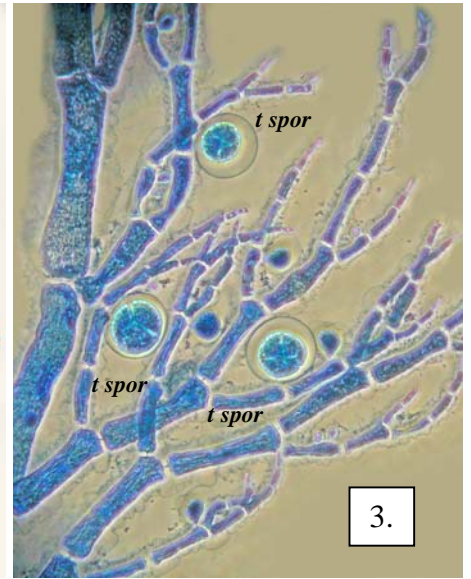
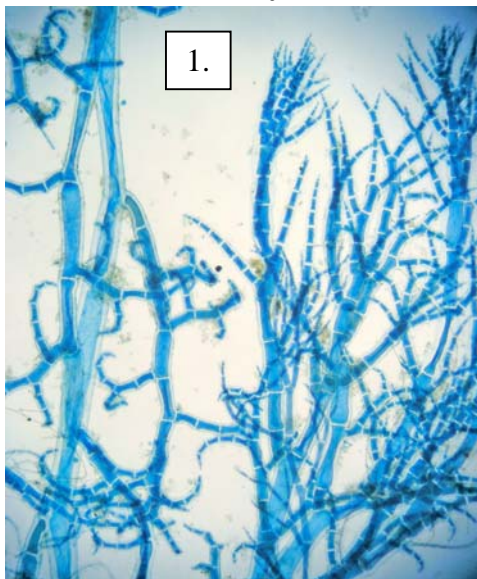
Usual Habitat

Similar Species

from Elliston, N Spencer Gulf, and a tyre reef off Pt Noarlunga S Australia  
in deep water (10-20m)  
*Callithamnion confertum*, also tufted, but that species has no hooked  
branches or involucre about the carposporangia

Description in the Benthic Flora Part IIIC, page239-241

Details of Anatomy



*Callithamnion circinnatum* stained blue and viewed microscopically at different magnifications

1, 2. A57453 slide 10288

1. LH side: basal parts with short, hooked side branches. RH side: forked apical branches tapering rapidly over about 8 cells

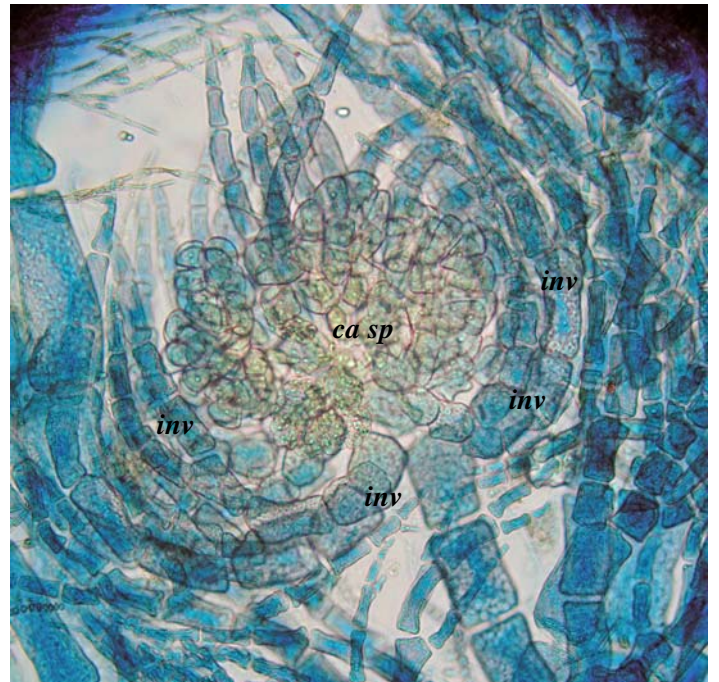
2. detail of basal hooked (circinnate) short branches

3. A46048 slide 5521: stalkless tetrasporangia (*t spor*) divided tetrahedrally

4.



5.



4. *Callithamnion circinnatum* Womersley  
A57453 showing the densely tufted habit  
and dark red colour
5. specimen stained blue and viewed  
microscopically to show a  
carposporangial mass (*ca sp*) with  
vegetative branches forming a  
wrapping (involucre, *inv*) basally  
(A57453 slide 10288)