

Techniques needed and plant shape



filament



epiphyte

MICRO PLANT



flat-branched

Classification

Phylum: Rhodophyta; Order: Ceramiales;
Family: Ceramiaceae; Tribe: Ceramieae
red fern

***Descriptive name**

Features



plants small, about 20mm tall, red; branches alternate, spreading, flat and faintly banded

Special requirements



view microscopically to find

- upright threads (axes) of box-shaped cells **abruptly** coming to a point at branch tips, **naked** except for clearly separated rings of small (corticating) cells where the axial cells join together (the nodes), producing smaller cells both **upwards** (acropetally) and **downwards** (basipetally); some cells appearing glandular
- tetrasporangia in the **outer** parts of rings (corticating cells), naked, with **no wrapping** (involucre)

Occurrences

known only from Port Phillip Heads and Western Port, Victoria

Usual Habitat

probably epiphytic, but collected only in 1886, 1889

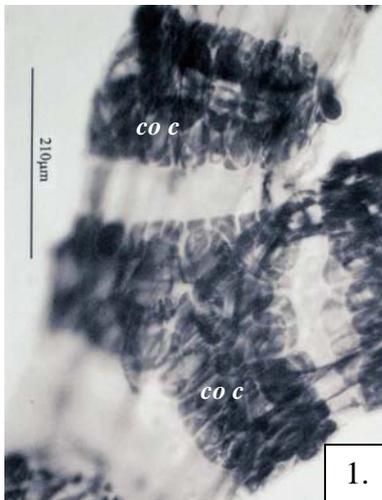
Similar Species

superficially like *Ceramium lenticulare* in the flat-branching pattern, but in that species axial cells are spherical; only narrow, lens-shaped gaps occur between corticating rings; tetrasporangia are immersed or wrapped in an involucre

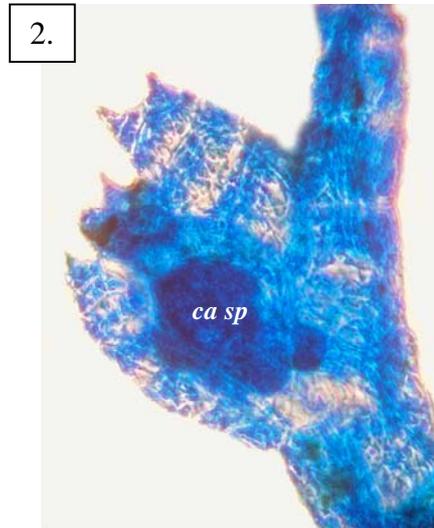
Description in the Benthic Flora

not listed. See Womersley, H B S (2004) Additions to the marine algal flora of southern Australia. *Trans Roy. Soc. S Aust.* **128** (2), 209-211 from which the black & white images below are taken

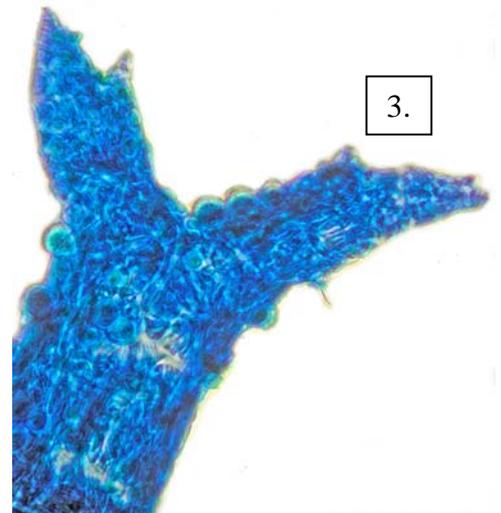
Details of Anatomy



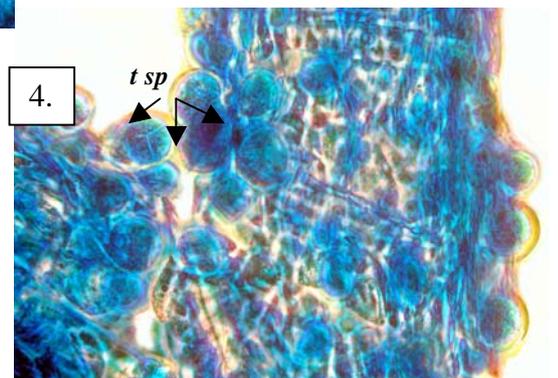
1.



2.



3.

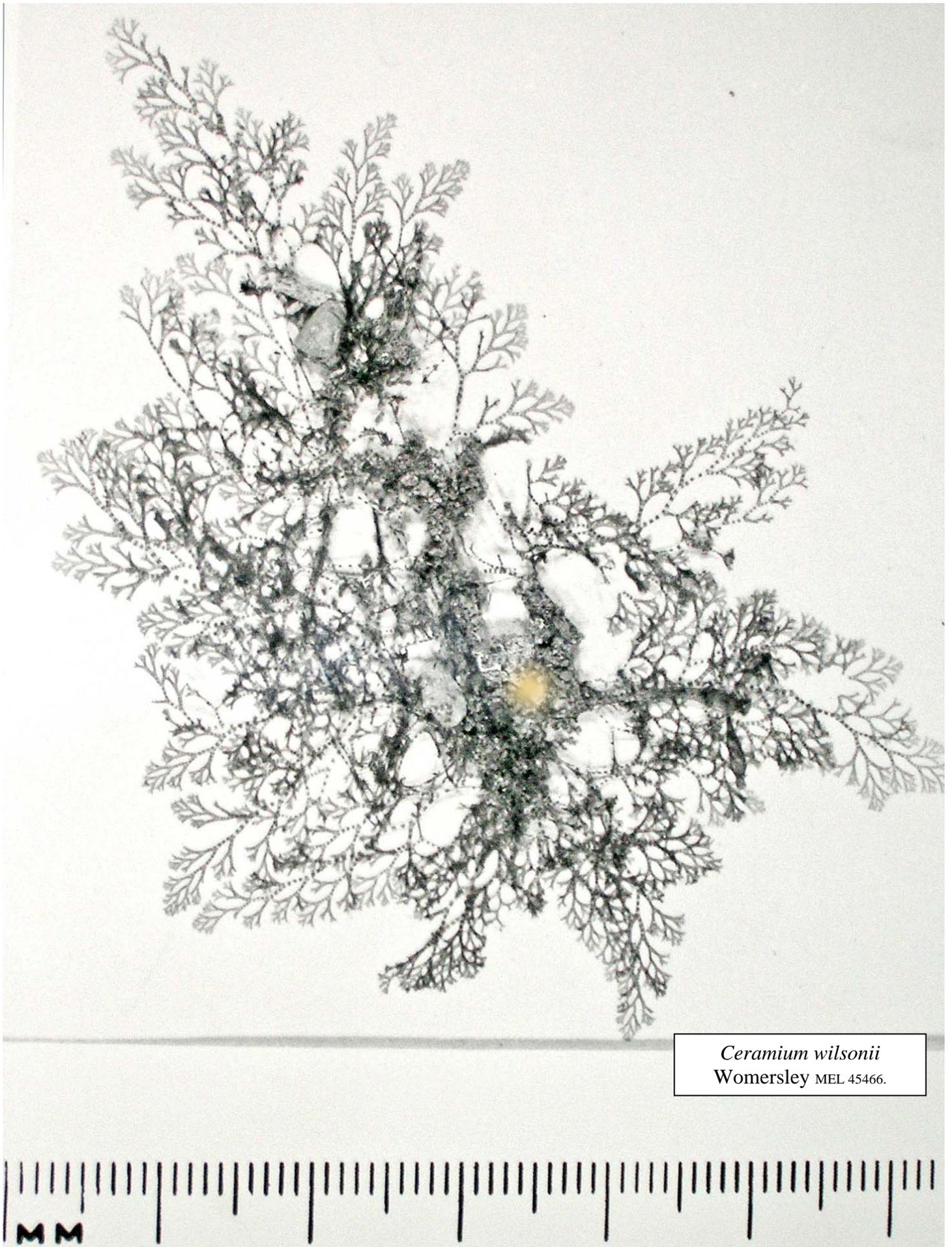


4.

t sp

Ceramium wilsonii slides stained blue and viewed microscopically.

1. rings of corticating cells (*co c*) (MEL 454660 slide 20397)
2. position of the mass of carposporangia (*ca sp*) in the angles between several short branches (A70002 slide 20398)
3. abrupt ends to branches (A70001 slide 20397)
4. exposed tetrasporangia (*t sp*) on 2 adjacent branches (A70001 slide 20397)



Ceramium wilsonii
Womersley MEL 45466.

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