Techniques needed and plant shape

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

*Descriptive name
red fern

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

Details of Anatomy

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)

* Descriptive names are inventions to aid identification, and are not commonly used
“Algae Revealed” R N Baldock, S Australian State Herbarium, February 2007
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Ceramium wilsonii
Womersley MEL 45466.