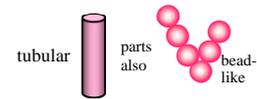


Techniques needed and shape



MACRO
PLANT



Classification

Phylum: Rhodophyta; Order: Gigartinales; Family: Acrotylaceae

*Descriptive name

bubble weed

Features

1. plants are **red-brown**, 100-200+mm tall, of **long**, cylindrical main branches (axes) faintly jointed
2. **prolific**, small, side-branches (ramuli) of 1-3 **egg-shaped** segments on very **narrow** bases cluster the main axes

Occurrences

Geraldton, W Australia to E of Eucla, S Australia

Usual Habitat

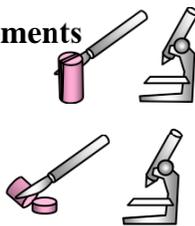
possibly a reasonably deepwater species with restricted western distribution

Similar Species

a distinctive species

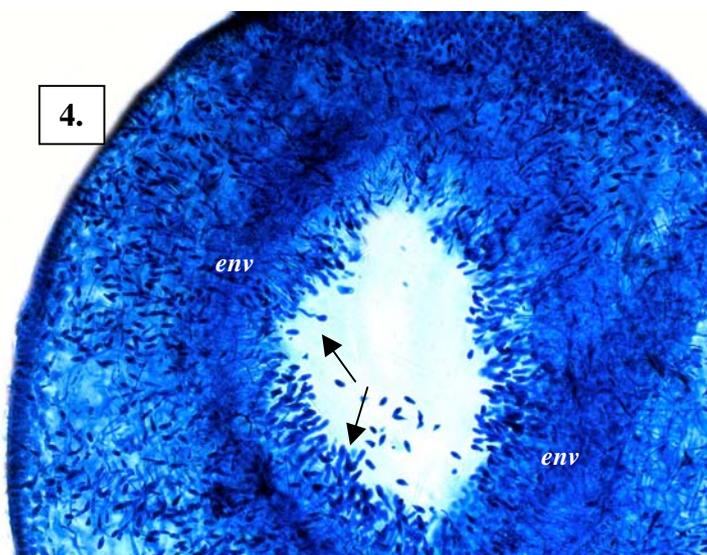
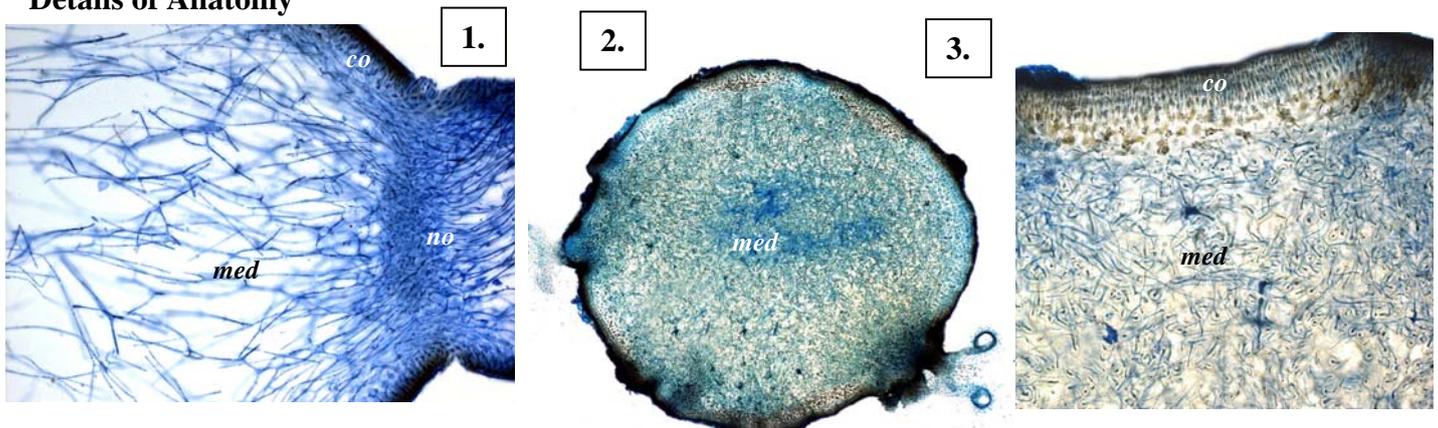
Description in the Benthic Flora Part IIIA, pages 374-376

Special Requirements



1. cut a young segment lengthwise and view microscopically to find a **broad** core (medulla) filled with dense, **loose, interconnecting** threads and **narrow** outer (cortex) layer of equal-sided cells, the inner slightly larger than surface ones
2. cut a cross section of a main branch (axis) to view the core **packed** with threads and outer layers **thickened** with outward pointing rows of cells
3. find products of fertilisation (cystocarps) **embedded** in the bubble-shaped segments. Cut a cross section to view the **envelope** of threads and branched fertile threads bearing carposporangia at their tips protruding **inwards** into a central cavity

Details of Anatomy



Claviconium ovatum stained blue and viewed microscopically, showing

1. a window cut lengthwise through the pinched connector (node, *no*) between two egg-shaped segments, with wide core (medulla, *med*) of threads, loosely packed except at nodes and compact outer layer (cortex, *co*) (A33615 slide 4869)
- 2, 3. two magnifications of a cross section through a main axis showing the compact mass of core threads and rows of cortex cells (A34228 slide 4865)
- 4 cross section through a segment with an embedded cystocarp showing the envelope of threads (*env*), central cavity and inward directed fertile threads bearing carposporangia (arrowed) (A33615 slide 4866)



4.

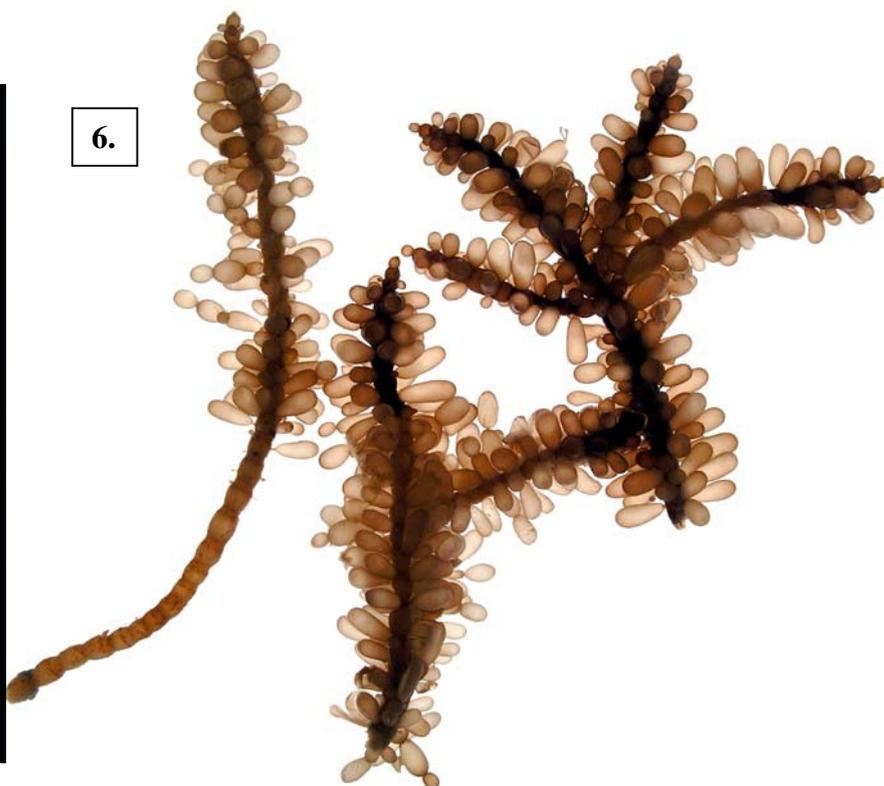
4, 5. Two views of a pressed plant of *Claviconium ovatum* (Lamouroux) Kraft & Min-Thein, (A51275), found as drift at Yanchep, W Australia



5.



7.



6.

6, 7. Two views of preserved (bleached) specimens of *Claviconium ovatum* (A34228) from Eyre, W Australia showing details of the jointed main axes and short side branches of chains of egg-shaped segments