Champiocolax lobata
Womersley

A SPECIES WITH FEW RECORDS

45.680

Techniques needed and plant shape

MICRO PLANT

parasite

Classification Phylum: Rhodophyta; Order: Rhodymeniales; Family: Champiaceae

***Descriptive name** *Champia* warts

Features
Special requirements

plants form tiny, wart-like outgrowths 2-4mm tall on the host, *Champia viridis*
view the warty growths microscopically to find:

- faint bands indicating the presence of internal partitions or diaphragms and single, small opening at tips indicating the presence of cystocarps.
- cut a section through the point of contact of plant with host and view microscopically to find a basal, curved line of box-shaped cells clamping the plant to the host, rhizoid-like threads penetrating the host tissues, hollow sections separated by diaphragms one cell thick, thin threads crossing the spaces between diaphragms, outer (cortical) layer of small, coloured cells facing outwards and capable of photosynthesis.

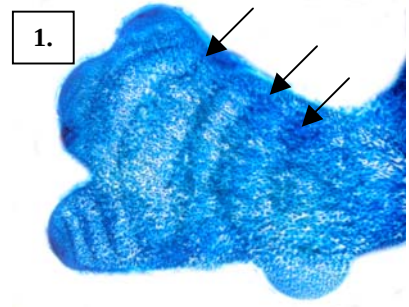
Occurrences Stenhouse Bay, S. Australia to Warrnambool, Victoria, possibly overlooked elsewhere because of its size and intimate connection with the host.

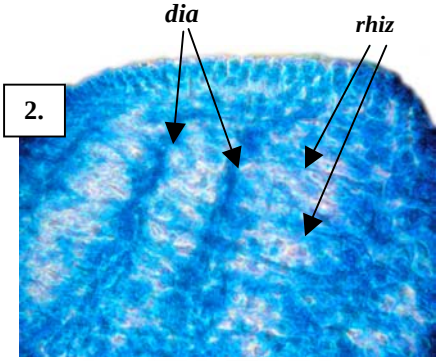
Usual Habitat all plants are partly parasitic on *Champia viridis*

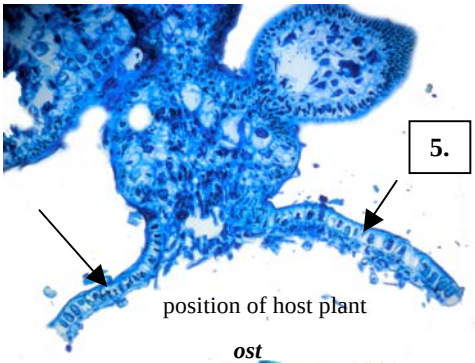
Similar Species unique

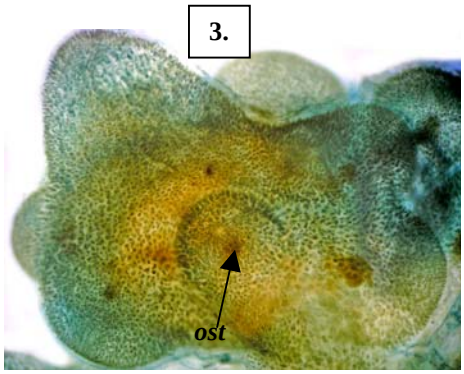
Description in the Benthic Flora Part IIIB, pages 118-119

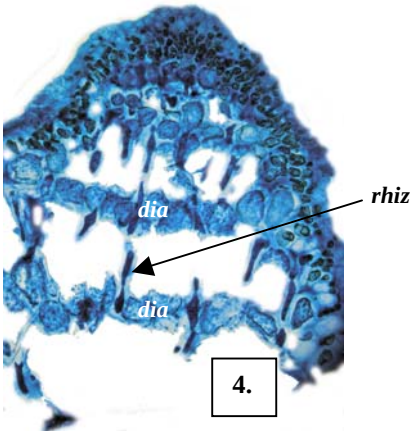
Details of Anatomy

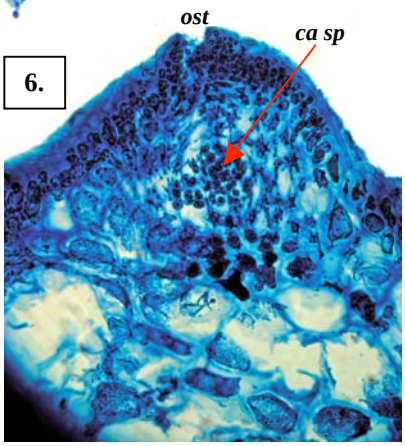






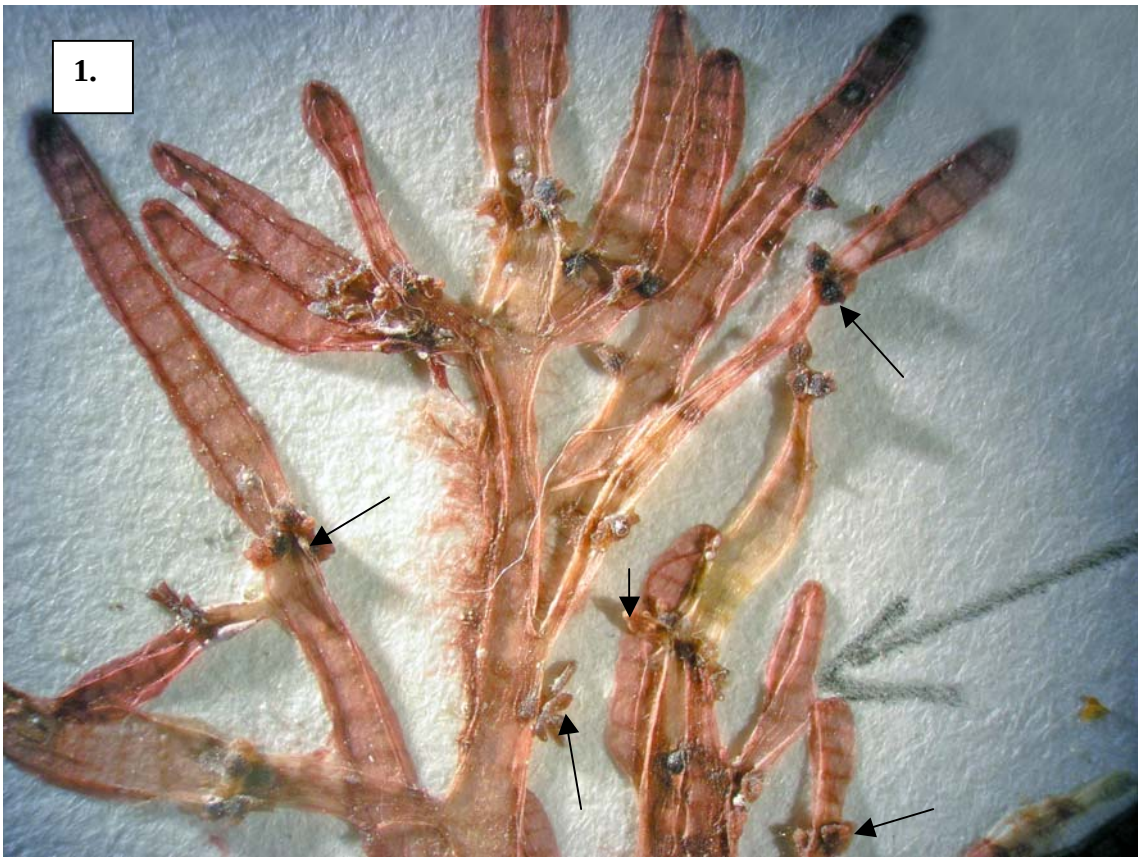


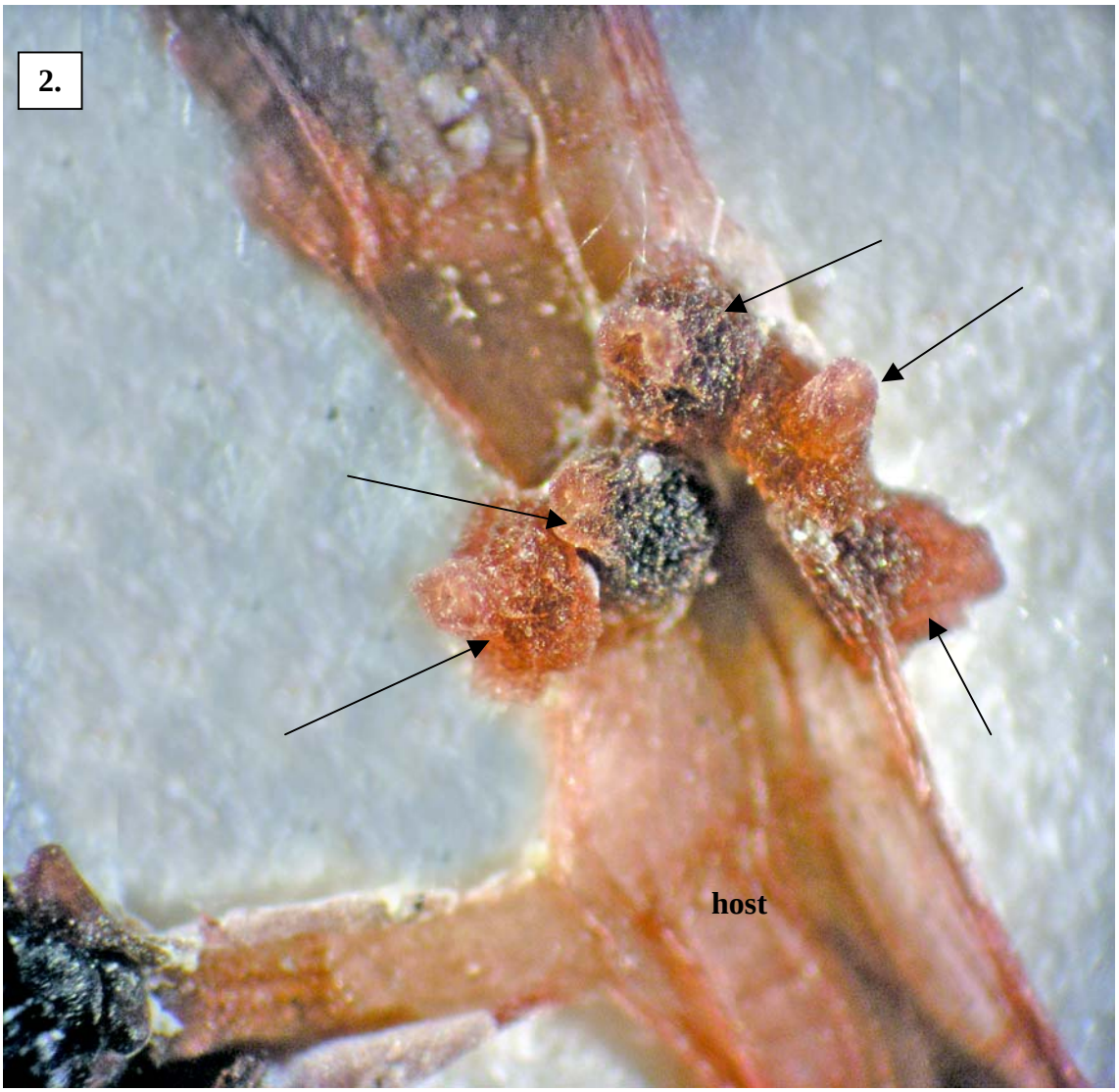




1-3. surface views (A10937 slide 15203) *Champiocolax lobata* stained blue and viewed microscopically at different magnifications:
1, 2. bands corresponding to the positions of diaphragms (*dia*) that separate internal spaces crossed by rhizoids (*rh*).
3. warty lobes including some cystocarps opening by small holes (ostioles *ost*).
4-6. lengthwise sections stained blue and viewed microscopically at different magnifications
4. hollow internal parts separated by diaphragms (*dia*) one cell thick, crossed by scattered rhizoids (*rhiz*) (A39536 slide 14697)
5. curved line of box-shaped cells (arrowed) clamping the plant to its host (A39536 slide 14699)
6. cystocarp with single opening (ostiole, *ost*), and carposporangia (*ca sp*) (A39536 slide 14700)

* Descriptive names are inventions to aid identification, and are not commonly used
"Algae Revealed" R N Baldock, S Australian State Herbarium, January 2006





7, 8. *Champiocolax lobata* Womersley, A44564, 3-7m deep, from Stenhouse Bay, S. Australia.

7. pressed, dried specimen of the host, *Champia viridis*, with some of the warty parasitic plants arrowed.

8. detail of several plants on the surface of the host

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