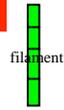


Techniques needed and plant shape



WARNING:
diagnosis of this
feature is best
left to experts



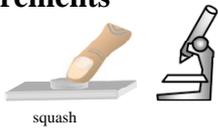
Classification

***Descriptive name**

Phylum: Rhodophyta; Order: Acrochaetales; Family: Acrochaetiaceae
thread parasite of *Helminthocladia*

Features

Special requirements



plants consist of **microscopic** prostrate threads **mingled** with the outer forked branches of *Helminthocladia australis* and erect threads, often unbranched. Squash a piece of the host, *Helminthocladia* species, and view microscopically the outer (cortical) host cells in which the parasite will be found. Notice:

- host threads **branched** several times, ending in **inflated**, club-shaped cells
- parasite plants of a very **thin** runner and erect thread of cylindrical cells, often unbranched; bunches of smaller cells (carposporangia) and stalkless, egg-shaped spores (monosporangia) scattered along the filaments may occur.

Occurrences

Usual Habitat



WARNING:
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left to experts

known only from Antechamber Bay, Kangaroo I., S. Australia, probably more widespread but overlooked.

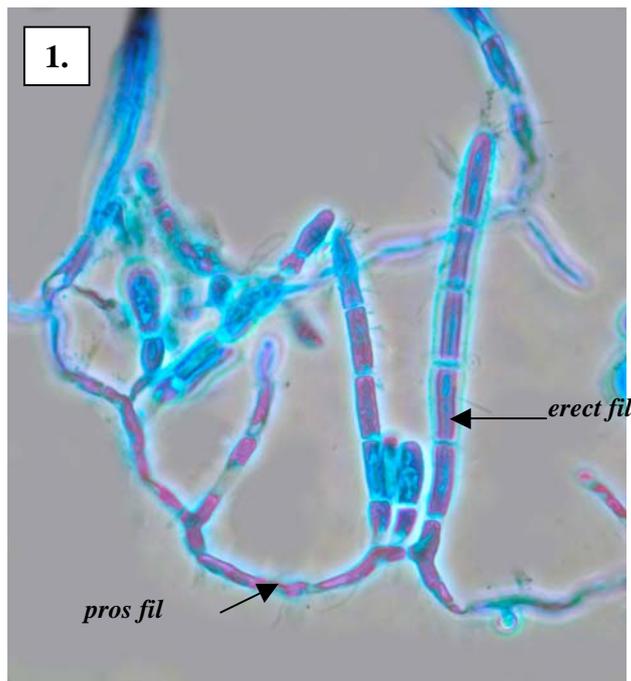
within tissues of *Helminthocladia australis* and *H. densa*, on jetty piles. The hosts can also be infested with *Audouinella liagorae*.

Similar Species

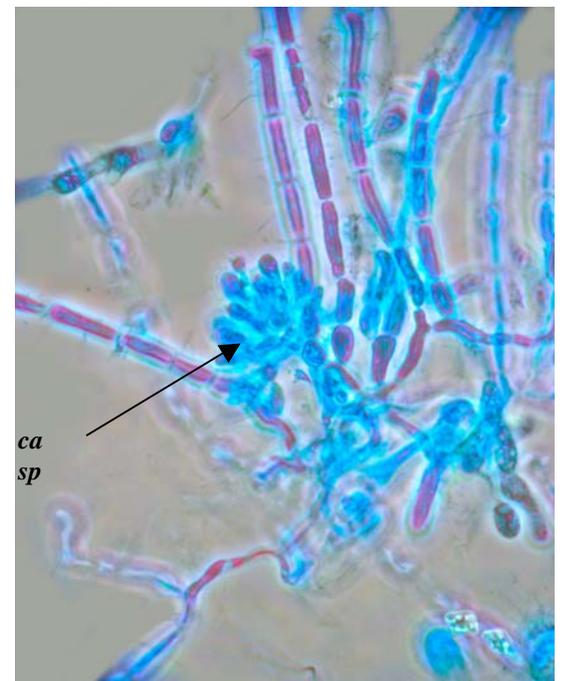
other endophytic *Audouinella* species. *A. blumii* has very **thin** prostrate runners.

Description in the Benthic Flora Part IIIA, pages 65-67

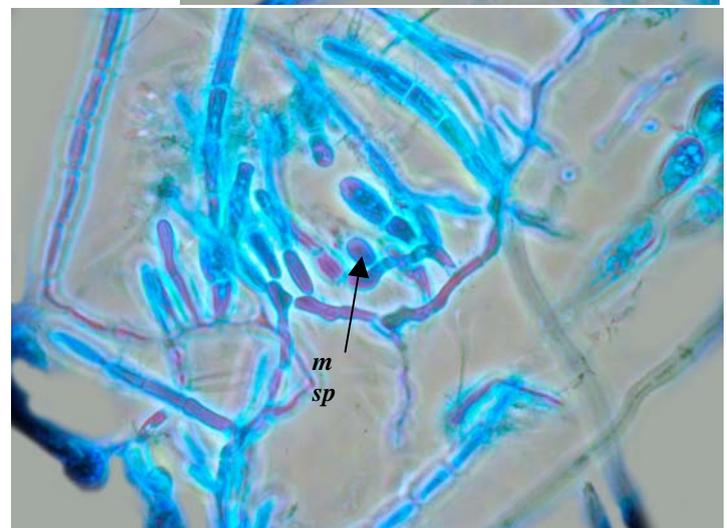
Details of Anatomy



2.



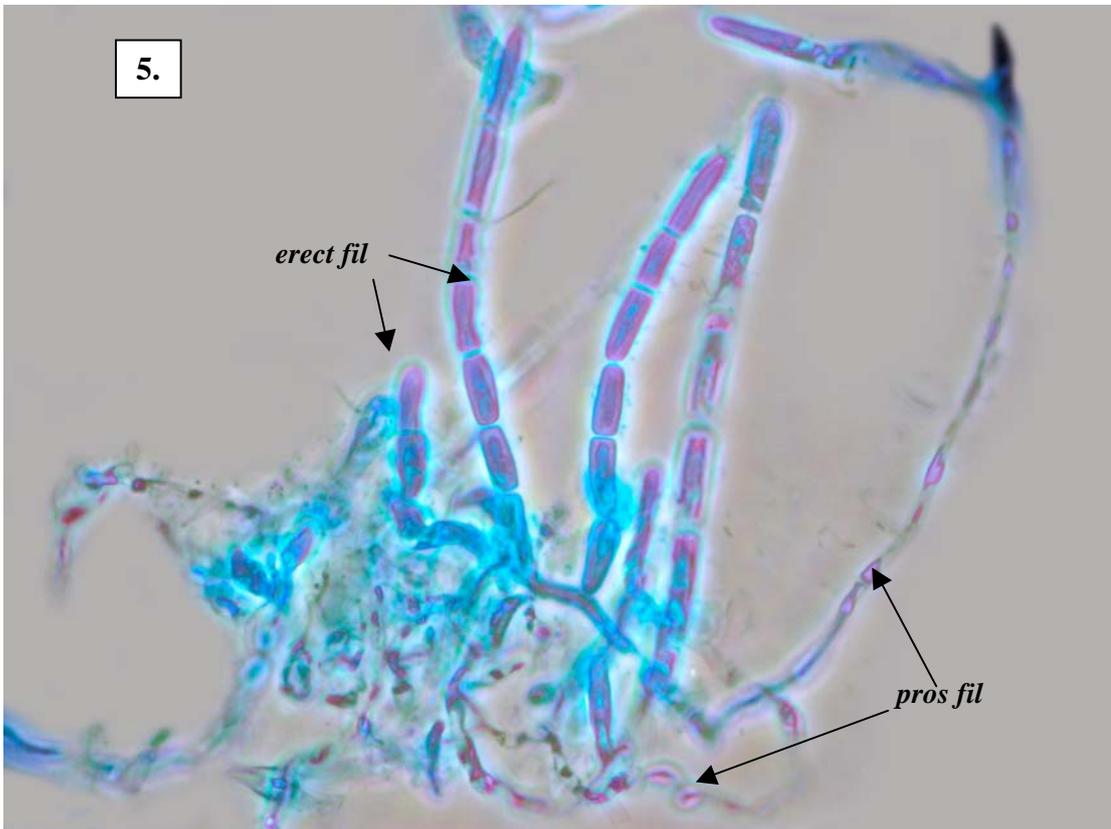
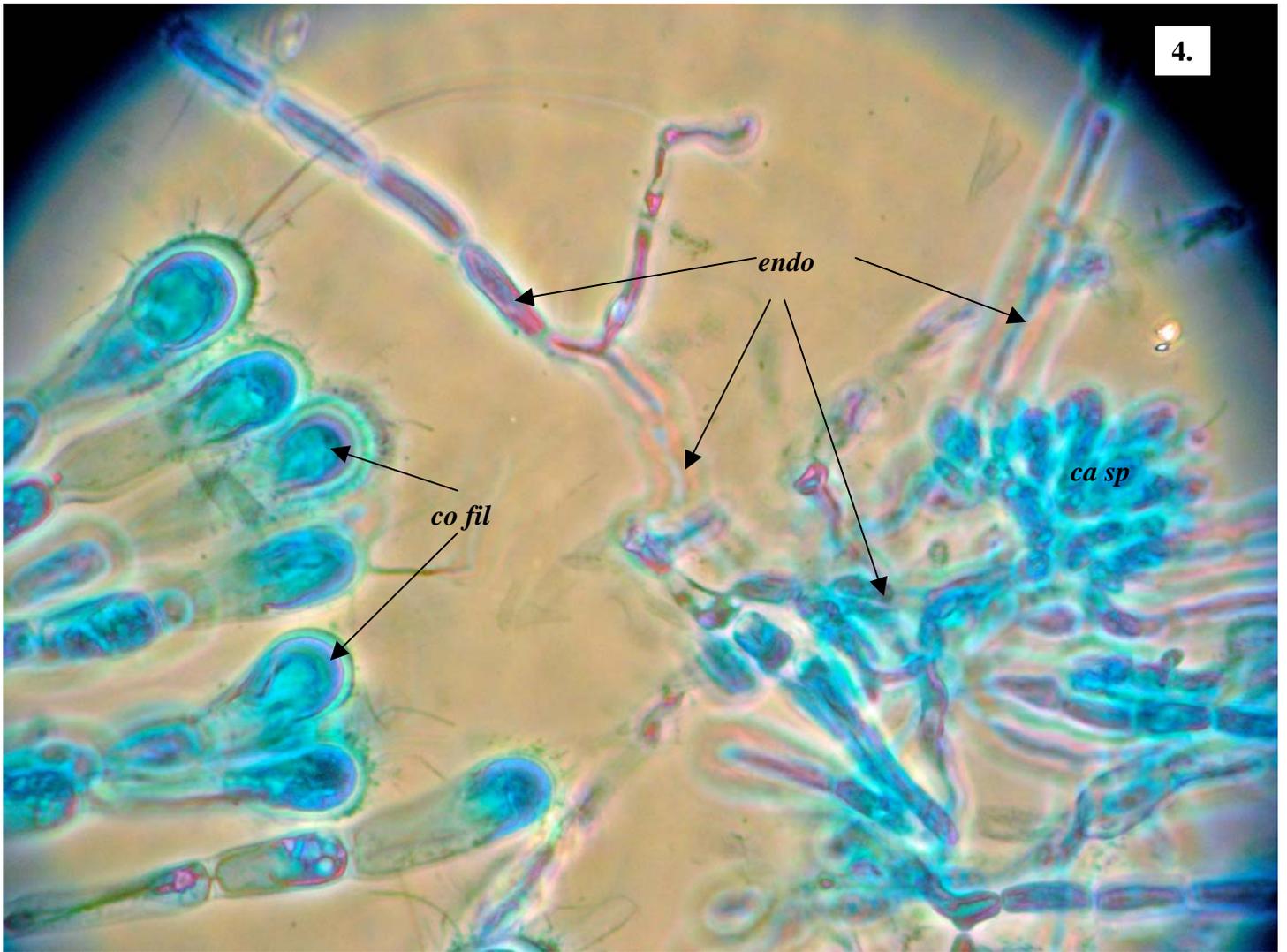
3.



Audouinella blumii, (A32121 slide 1731), teased out from the outer (cortical) layer of the host, stained blue and viewed microscopically at different magnifications

1. prostrate (*pros fil*) and erect (*erect fil*) threads showing the contrast in thickness
2. bunches of carposporangia (*ca sp*)
3. single monosporangium? (*m sp*)

* Descriptive names are inventions to aid identification, and are not commonly used
"Algae Revealed" R N Baldock, S Australian State Herbarium, December 2005



Audouinella blumii,
 Woelkerling A32121, slide
 1731 from Antechamber
 Bay, Kangaroo I., S.
 Australia stained blue and
 viewed microscopically at
 different magnifications

4. comparison of filaments
 of the outer layer of the
 host (cortical filaments,
co fil) with the
 endophyte (*endo*)
 portion of which shows
 a bunch of
 carposporangia (*ca sp*)

5. plant extracted from
 host tissues, showing
 the thin prostrate
 threads (*pros fil*) and
 erect filament (*erect fil*)