

Techniques needed and shape



WARNING:
Diagnosis is
best left to experts

Classification

Phylum: Phaeophyta; Order: Chordariales; Family: Leathesiaceae
micro threads

*Descriptive name

a *tiny epiphyte* forming spreading patches on the surface of its brown algal host, *Leathesia difformis*

Features

Special requirements



tease out a plant **including** some of its basal threads embedded in the surface

- (cortical) threads of the host and view microscopically branched basal threads that form a thin layer within the host, **unbranched** outer (cortical) threads arising **directly** from the basal threads, mixed with long, colourless hairs
- single-compartmented (unilocular) sporangia attached to the **basal threads**

Occurrences

only known from Aldinga S. Australia, but possibly more widespread and overlooked because of its size.

Usual Habitat

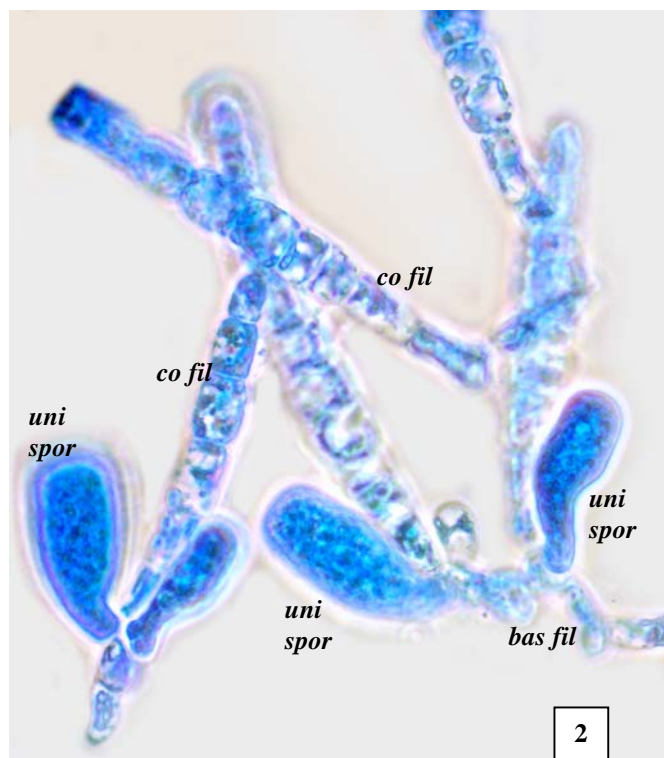
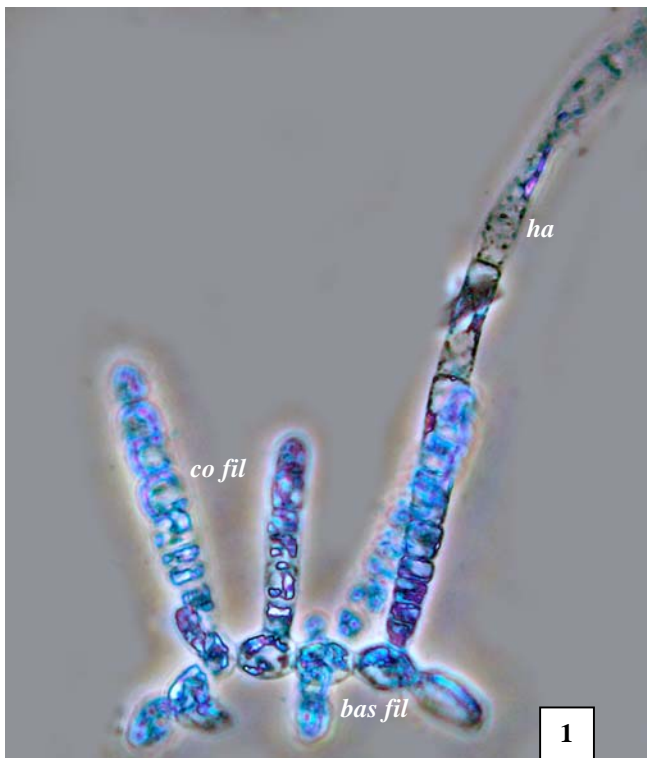
in the lower intertidal on the brown alga, *Leathesia difformis*

Similar Species

other *Strepsithalia* spp and epiphytic members of the Leathesiaceae, (*Acrotrichium*, *Myriactula*). Details of the basal and outer (cortical) layers are needed to separate the genera.

Description in the Benthic Flora Part II, pages 86-88

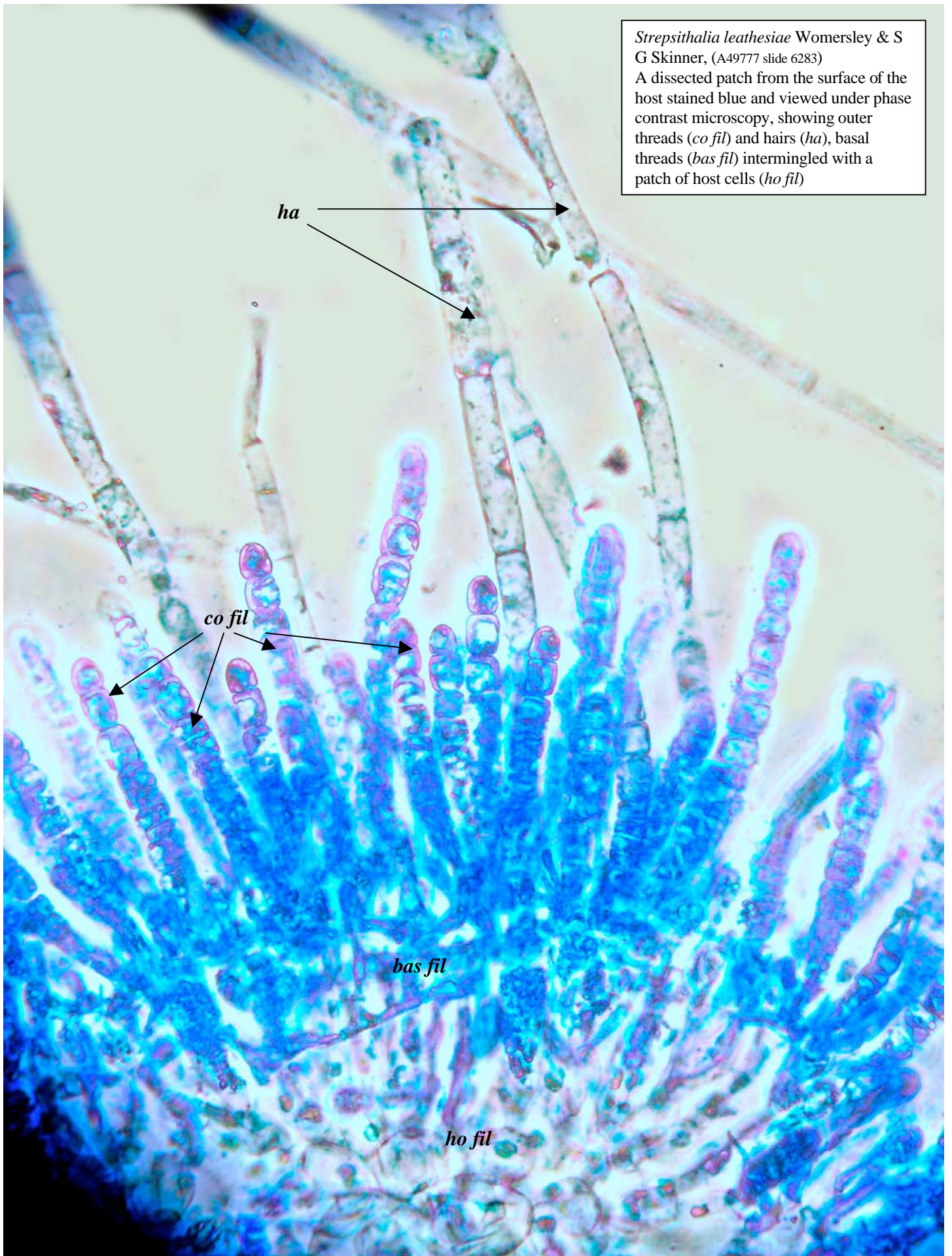
Details of Anatomy



Strepsithalia leathesiae (A49777 slide 6283), dissected from the outer filaments of its host, stained blue and viewed microscopically at different magnifications

1. sparsely branched basal thread (*bas fil*) dissected free of the host's threads; **unbranched** outer layer threads (cortical filaments, *co fil*); and a colourless hair (*ha*) arising **directly** from the basal threads
2. detached threads with club-shaped single-compartmented (unilocular) sporangia, (*uni spor*), two of which arise **directly** from the basal threads

Strepsithalia leathesiae Womersley & S
G Skinner, (A49777 slide 6283)
A dissected patch from the surface of the
host stained blue and viewed under phase
contrast microscopy, showing outer
threads (*co fil*) and hairs (*ha*), basal
threads (*bas fil*) intermingled with a
patch of host cells (*ho fil*)



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