



Techniques needed and shape

Classification

***Descriptive name**

Features

Special requirements



**MACRO
PLANT**

Phylum: Phaeophyta; Order: Chordariales; Family: Chordariaceae
stubby slime strands

plants on rock in shallow water or the intertidal, brown, with slimy main branches (axes) 50-100mm long, and short, stout side branches

cut a cross section and view microscopically to see:

- a middle layer (medulla) initially of threads initially longitudinal, but later replaced with branched, *loosely associated* threads
- surface layer (cortex) with thin, *colourless* (phaeophycean) *hairs* and chains of about 18 brown-coloured (photosynthetic assimilatory filaments) of only *one type* in the cortex
- single-compartmented (unilocular) sporangia at the base of cortical threads

Occurrences

Usual Habitat

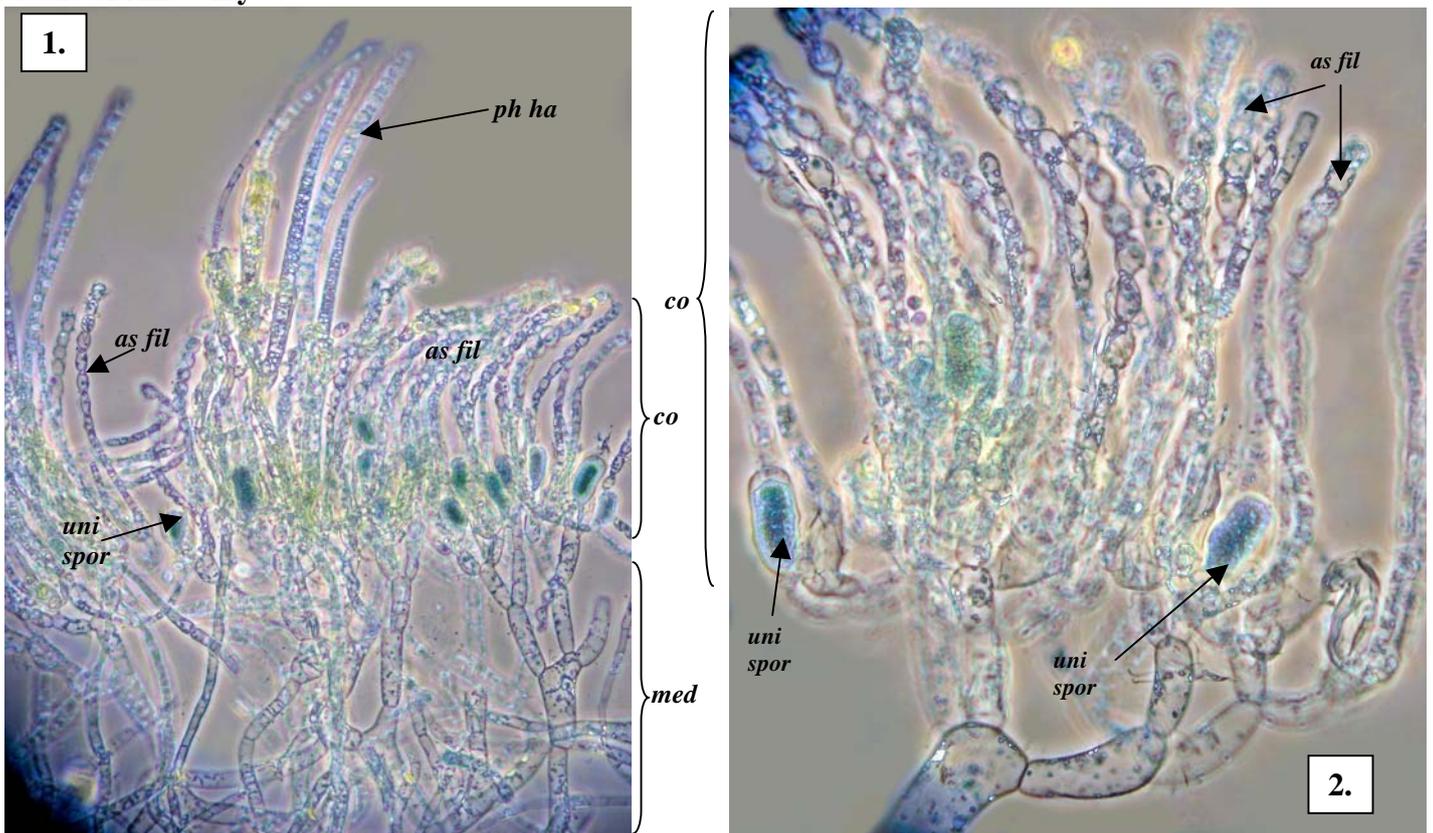
Similar Species

known only from Tasmania on the Tessellated Pavement, Eaglehawk Neck in shallow water or intertidal

other members of the Chordariaceae (*Myriogloea*, *Suringariella*, *Papenfussiella*) but *Mesogloiopsis* differs in that it *has* colourless (phaeophycean) hairs and *lacks* compact filaments in the middle (medulla) layer

Description in the Benthic Flora Part II, pages 113-116

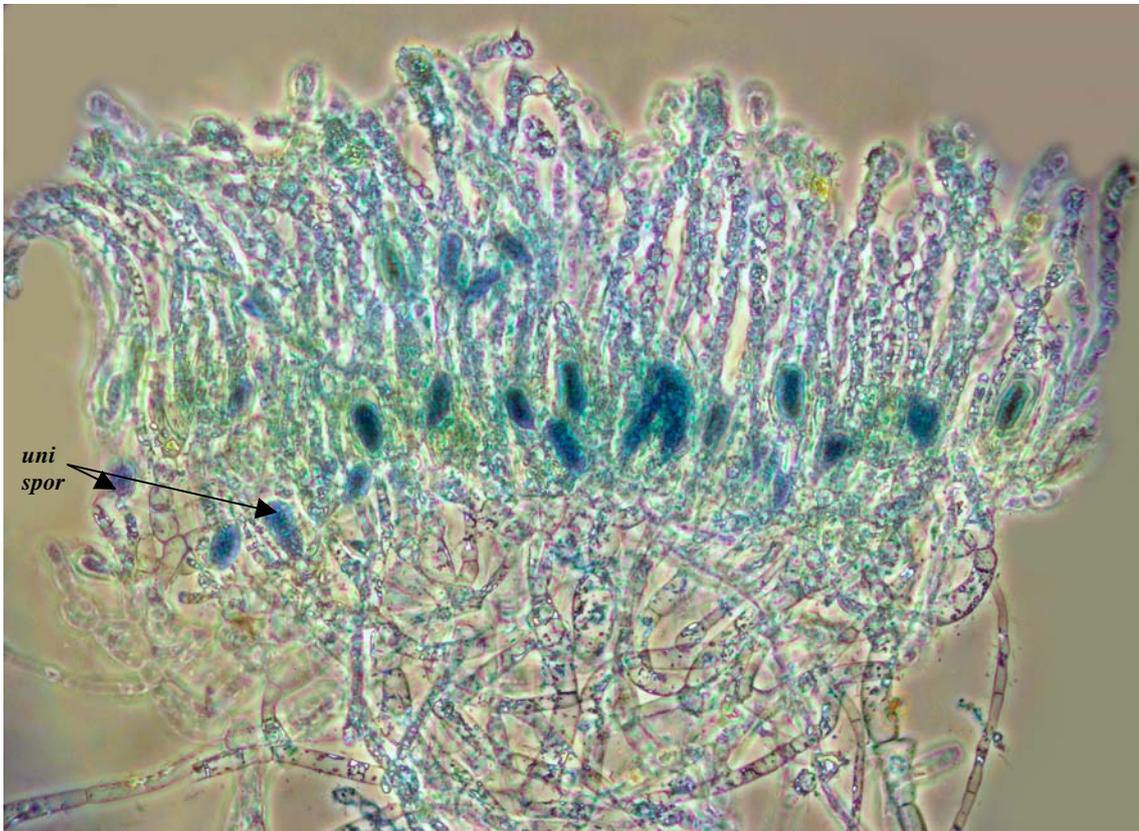
Details of Anatomy



1, 2. Dissected pieces of *Mesogloiopsis tasmanica*, (A30075, slide 9303) stained blue and viewed microscopically at different magnifications showing:

- mass of loosely associated, branched middle filaments (medulla, *med*)
- outer layer (cortex, *co*) of *chains* of coloured, cells (assimilatory filaments, *as fil*), bead-like towards the tips, thin colourless hairs (phaeophycean hairs, *ph ha*) and *ovoid* single-compartmented (unilocular) sporangia (*uni spor*)

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



co

med

4. *Mesogloiopsis tasmanica*, (A30075, slide 9303), showing loose, branched filaments of the medulla (*med*), simple chains of cells in the cortex (*co*), and layer of single-compartmented (unilocular) sporangia (*uni spor*)

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