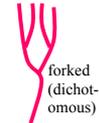
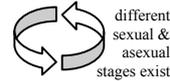


Techniques needed and plant shape



Classification

Phylum: Rhodophyta; Order: Nemaliales; Family: Scinaiaaceae,
(as Family: Galaxauraceae in the Flora).

Huisman (Algae of Australia: Nemaliales, 2006) placed members of Galaxauraceae lacking lime into the new Family: Scinaiaaceae)

Life cycles



only plants belonging to the mature sexual phase (gametophytes), upright and relatively large, are described below.

The asexual spore phase (sporophyte) consists of small crusts with erect threads, practically unknown in the wild

Features

plants *slimy*, 20-60 mm tall, grey-red to red-purple, branches 2-5 mm wide, cylindrical to slightly compressed, forked 1-4 times from near the base

Special requirements



view cross sections microscopically to find:

- in young branches a wide core (medulla) of branched threads, more concentrated in the very centre, outer layer (cortex) of outward pointing chains of small cells about 4 cells long
- in old branches, branches become hollow
- large mature female structures (cystocarps), in a wrapping (involucre) of threads (male structures and spore plants unknown in Australia)

Occurrences

S south America, sub-Antarctic islands. In Australia, Tasmania and one record from S NSW

Usual Habitat

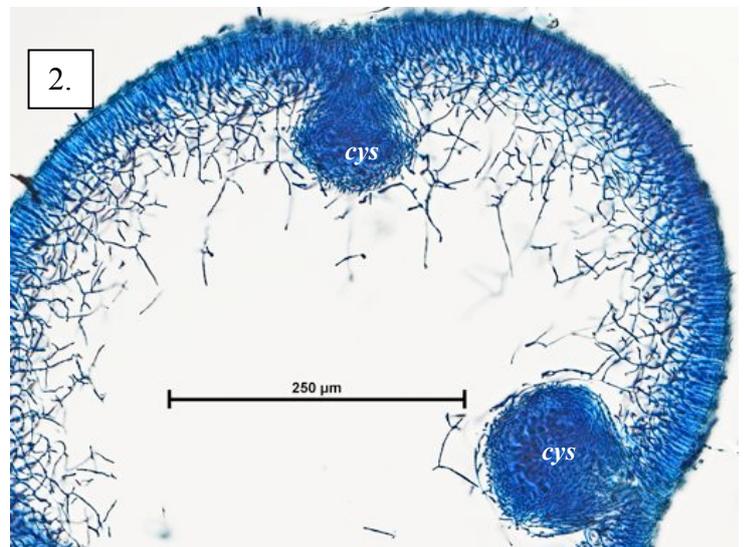
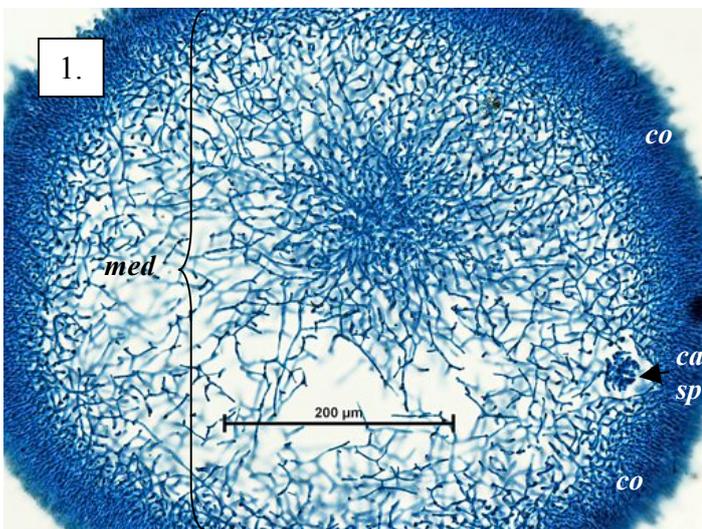
on intertidal rock platforms

Similar Species

—

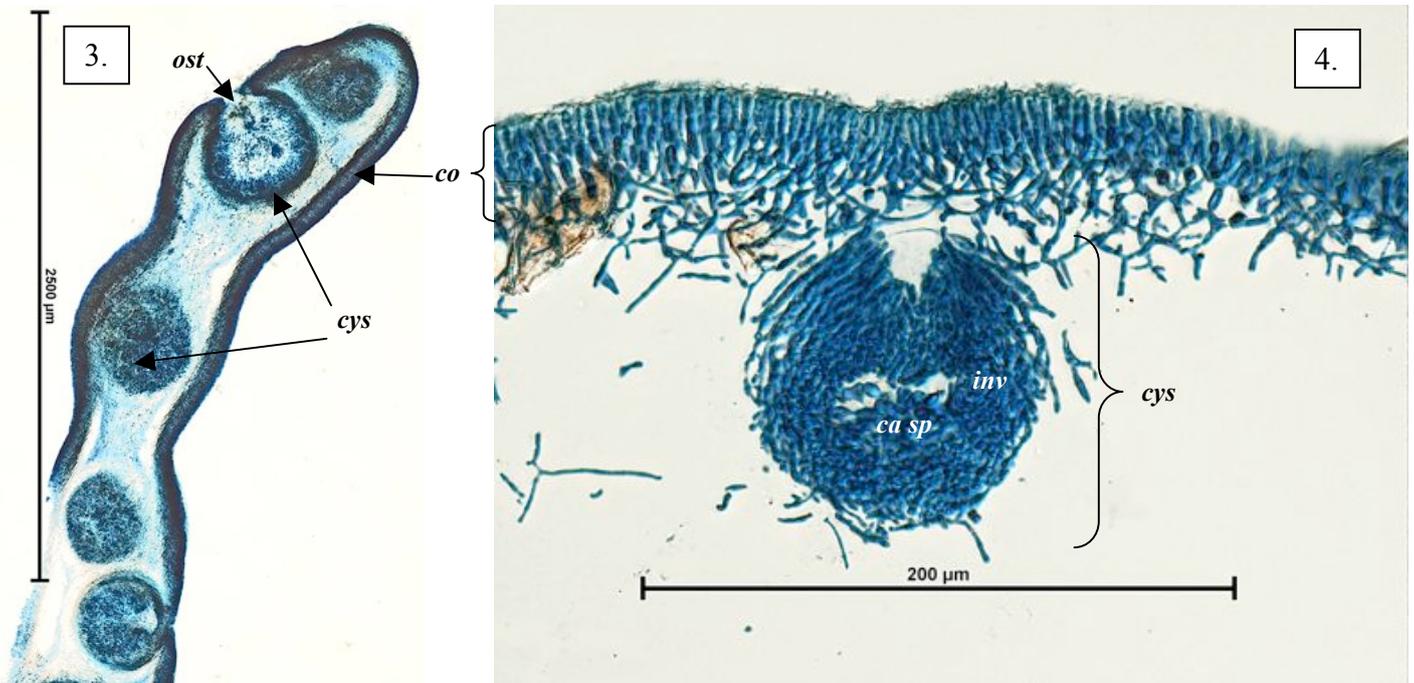
Description in the Benthic Flora Part IIIA, pages 110, 111

Details of Anatomy



Nothogenia fastigiata A56468 slide 9111:

1. cross section of a young branch, central mass (medulla, *med*) of branched threads, more concentrated centrally, outer layer (cortex, *co*) of chains of small cells facing outward and young female structure (carposporophyte, *ca sp*)
2. cross section of an older branch, with central hole and maturing female structures (cystocarps, *cys*)



Nothogenia fastigiata:

3. lengthwise section (A58690 slide 10645) showing several mature female structures (cystocarps, *cys*) lying in the central space of the branch, one with a prominent opening (ostiole, *ost*) in the coloured outer layer (cortex, *co*)
4. cross section (A56468 slide 9111) through the outer layer (cortex, *co*) consisting of chains of outward-pointing cells; mature female structure (cystocarp, *cys*) of spores (carposporophyte, *ca sp*) wrapped in an involucre (*inv*) of threads



Nothogenia fastigiata
 (Bory) P G Parkinson
 A57076, on a rock
 platform, Eaglehawk
 Neck Tasmania