

Techniques needed and shape



Classification

Phylum: Rhodophyta; Order: Gelidiales; Family: Gelidiellaceae
micro-turf alga

*Descriptive name

Features

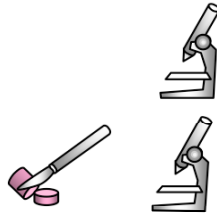


1. minute red-brown turf mixed with other turf species, on rock or shells
2. upright branches are slightly flattened, about 2mm tall growing in usually **unbranched** clumps from a runner (stolon)

Occurrences

from the Black Sea, Mediterranean, Pacific Mexico and S Africa. In southern Australia, from Topgallant I. to Kangaroo I., S. Australia, and possibly more widespread, but overlooked

Special requirements



1. View the tips of branches microscopically to find:
 - single apical cells forming a central thread
 - slightly swollen sporangial regions (stichidia) near the tips, with tetrasporangia in rows of 4
2. If possible, cut across a branch to view microscopically the
 - persistent central thread
 - 2 (to 4) flanking (periaxial) cells generating cells to the sides so that the section is slightly flattened
 - an outer layer (cortex) of smaller cells

Usual Habitat

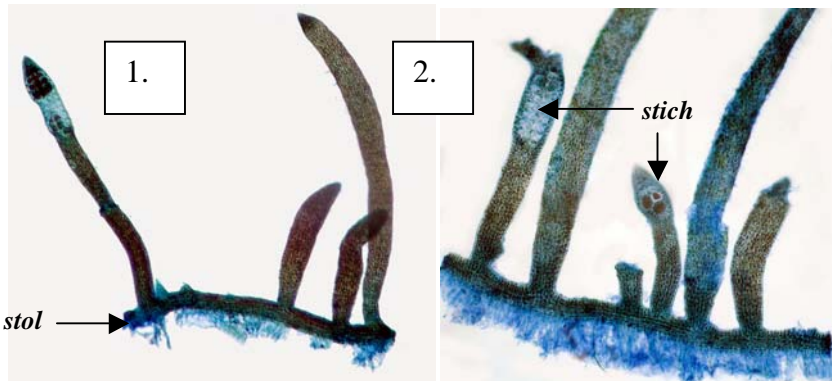
on rock and shell, amongst other turf

Similar Species

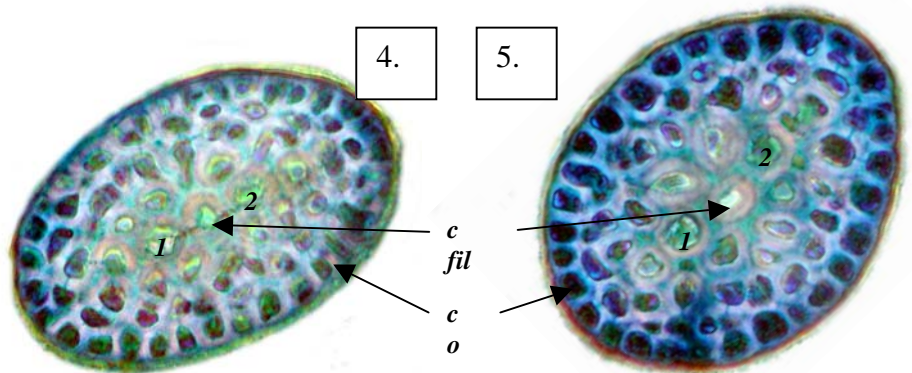
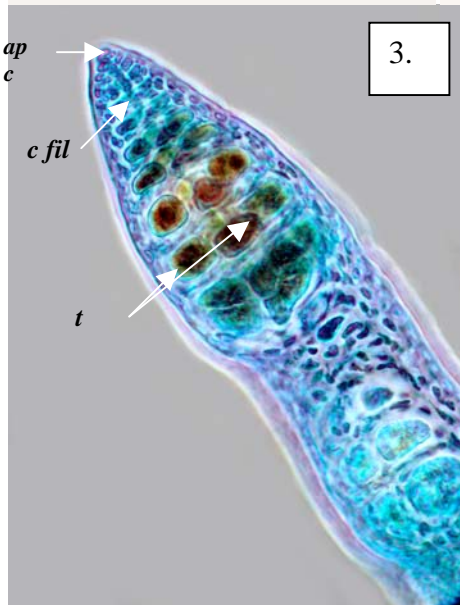
Pterocladia minima, which has shorter but broader upright branches and sporangia in double rows of 4-7

Description in the Benthic Flora Part IIIA, pages 120, 123-4

Details of Anatomy



1-3.: *Gelidiella antipai* (A61663 slide 12928) stained blue and viewed microscopically:
 1-2. two views of plants detached from shell, with horizontal runner (stolon, *stol*) with single rhizoid threads on their undersides, and pointed upright branches, some developing tetrasporangia (becoming stichidia, *stich*).
 3. detail of the pointed tip of an upright branch showing a single apical cell (*ap c*) and central thread (*c fil*) and 4 tetrasporangia (*t sp*) in each row of a stichidium (*stich*)

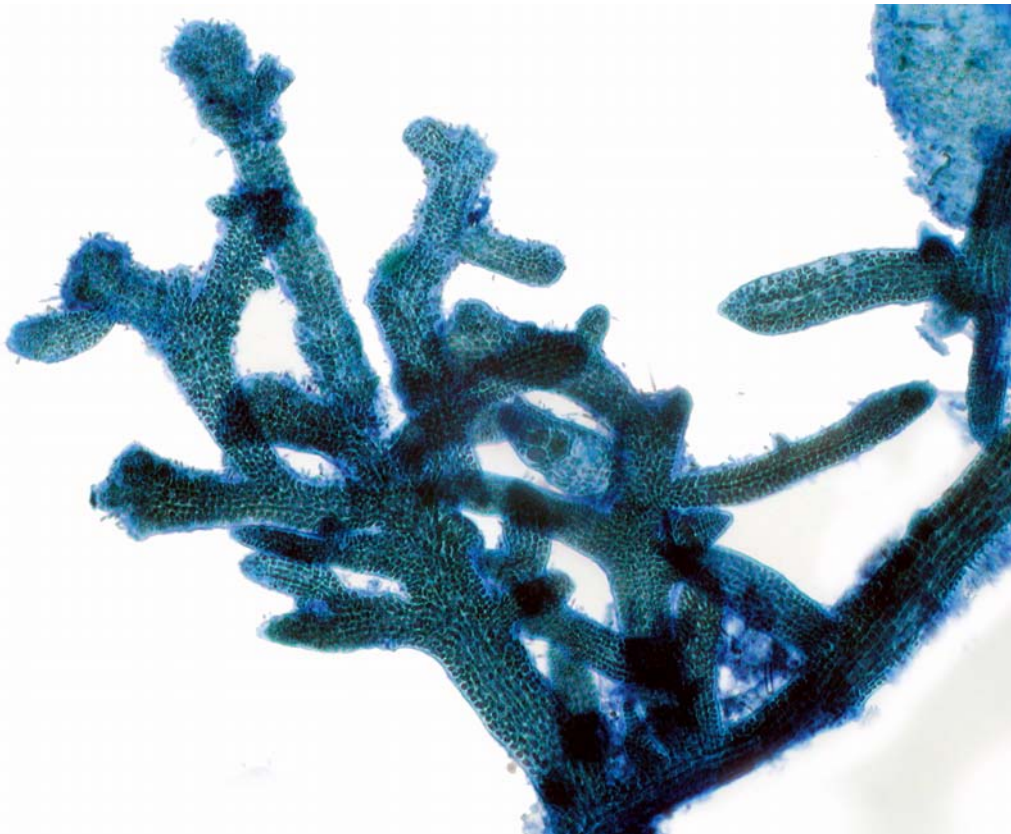


4, 5: a slice across branches with central thread (*c fil*) 2 flanking (periaxial) cells, (*1,2*) and 2 layers of outer cells (cortex, *co*) (A61675 slide 12949)

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



Gelidiella antipai Celan, (A61675) 10m deep on *Haliotis* shell from Wedge I., S



Gelidiella antipai Celan, stained blue and viewed microscopically, showing branched upright parts from a horizontal runner, and surface cells (A61663 slide 12927)

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