



MICRO PLANT



filament

Techniques needed and plant shape

Classification

Phylum: Chlorophyta; Order: Ulotrichales; Family: Ulotrichaceae

*Descriptive name

green surface fuzz

Features



plants form a light green fuzzy coating on the filamentous green alga, *Chaetomorpha linum* or the red alga *Pterocladia lucida*

Special requirements



1. view microscopically *unbranched* threads *increasing* in diameter *upwards*, attached to the host plant by a *clear, conical cup*, an important distinction separating the genus from other filamentous algae that attach by fine threads or rhizoids
2. cells relatively *small* (4-6 µm in diameter) and 4-6 times long as broad.
3. chloroplasts with *single* (-2) circular *pyrenoids*
4. there may be a tuft of bacteria at the tips of filaments

Occurrences



known only from Kellidie Bay, (Coffin Bay) S. Australia, and Strickland Bay, (Rottneet Island) W. Australia, but possibly more widespread as it is easily overlooked because of its diminutive size

Usual Habitat

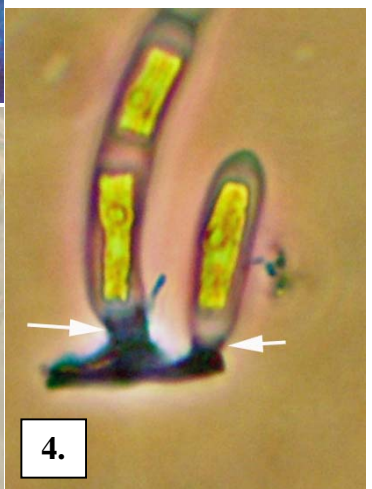
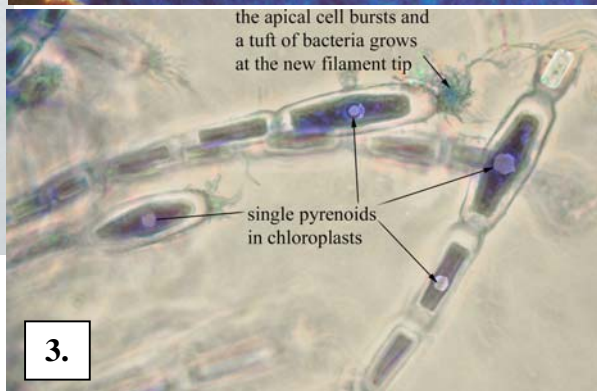
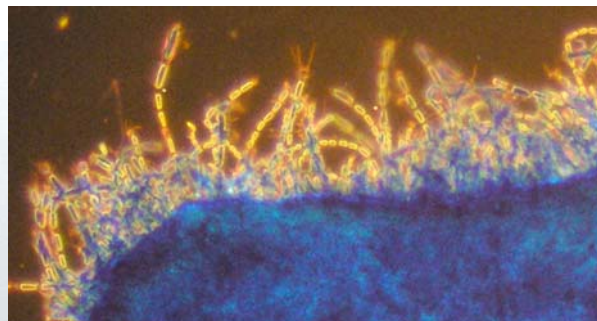
only known attached to 2 species of algae

Similar Species

superficially like many filamentous species, especially some species of the green genus *Cladophora*, but filaments are *longer*, 4-10 times *wider* and *branched* in *Cladophora*

Description in the Benthic Flora Part I, pages 129-131

Details of Anatomy



1. red algal host, *Pterocladia lucida*, with a coating of fine filaments of *Uronema marinum*. **Insert:** enlarged portion (A51119)
- 2-4. microscope detail of threads (slide 7454) showing: -
2. filaments on the edge of the blue-stained host plant
3. increase in diameter of threads upwards, chloroplasts with single pyrenoids and tufts of bacteria terminally
4. bases of 2 filaments, with cup-shaped attachment (arrowed)