Techniques needed and plant shape

Classification

Phylum: Chlorophyta; Order: Prasiolales (Schizogonales); Family: Prasiolaceae

*Descriptive name

guano-threads (referring to the shape and usual habitat in bird colonies)

Features

plants yellow-green of unbranched threads forming tangled masses on soil or rock associated with bird colonies

Special requirements

view the filaments microscopically to see
1. threads of irregular sizes, with sections of single cell rows (uniseriate) interspersed with those of several rows
2. small cells wider than long, often in pairs or packets of 4
3. view the single central (often star-shaped) chloroplast with its single pyrenoid

Occurrences

cool-temperate N Hemisphere waters and, locally, Kangaroo I., S. Australia

Usual Habitat

on rock or wet soil just above high tide in bird colonies

Similar Species

superficially like several of the unbranched filamentous green algae, and Percursaria in the Ulvaceae, but distinguished by the cells wider than long and the central chloroplast.

Description in the Benthic Flora

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Details of Anatomy

1. threads of various diameters, with single-ranked sections and many-ranked sections with cells in packets of 4
2. detail of cells showing the single central chloroplast with pyrenoid, diagnostic of the Family

* Descriptive names are inventions to aid identification, and are not commonly used

“Algae Revealed” R N Baldock, S Australian State Herbarium, October 2003
4. *Rosenvingiella polyrhiza* (Rosenvinge) Silva, (A5795b), from Pennington Bay, Kangaroo Island, S Australia, just above the intertidal

5. threads stained blue and viewed microscopically (slide 7618)

* Descriptive names are inventions to aid identification, and are not commonly used

“Algae Revealed” R N Baldock, S Australian State Herbarium, October 2003