



MICRO
PLANT

tubular



Techniques needed and plant shape

Classification

Phylum: Chlorophyta; Order: Dasycladales; Family: Dasycladaceae

***Descriptive name**

sandy worm weed

Features



plants 20-60mm tall, of several dark green, spongy cylinders attached at the base, in sand in shallow water

Special requirements



1. cut a cross section of cylinders and view the **wheel-like** internal branching pattern under the microscope (a central, large, **siphon-like** thread with about 10 **radiating** branches branching 2-3 times; the outermost segments club-shaped
2. chloroplasts **minute** and **numerous**
3. cross walls punctured (not visible in the images below) so that the whole of the plant is in essence single cell (a **coenocytic** condition)

Occurrences

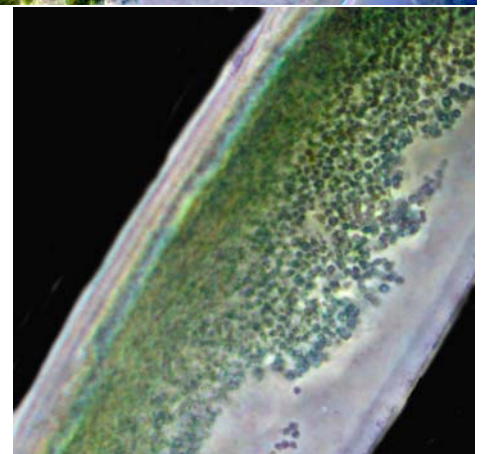
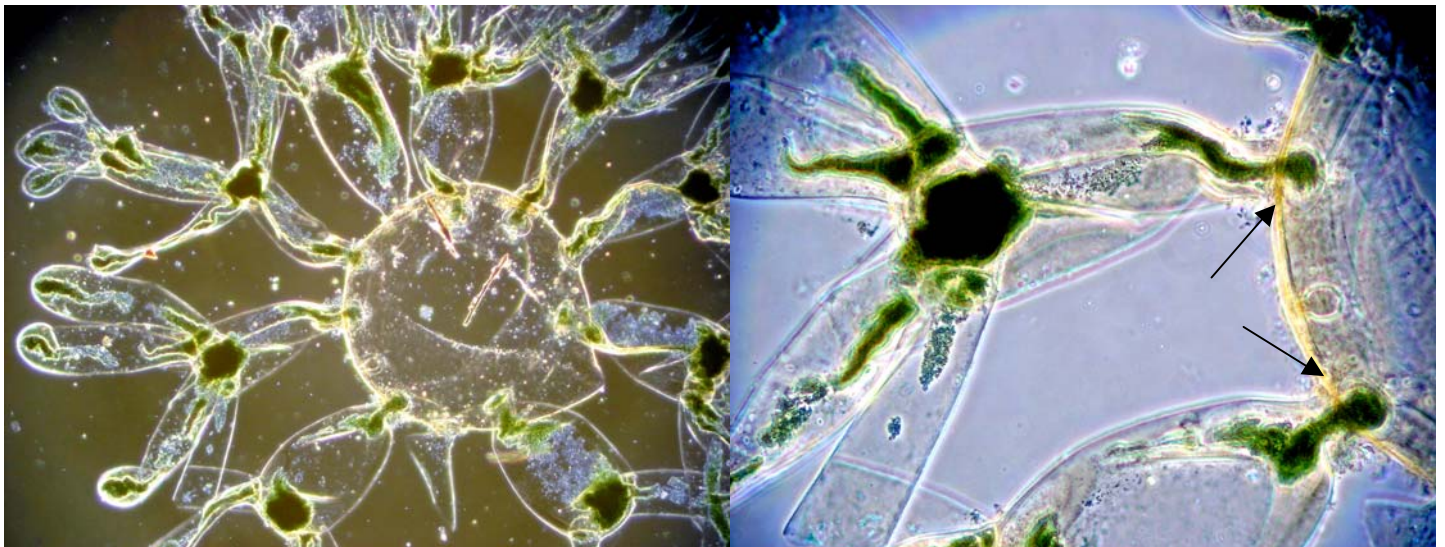
only known from Point Fowler, Great Australian Bight, S. Australia and Hopetoun, W. Australia on sand-covered rock, 2-4m deep, rare, but occurring in dense patches

Similar Species

unique, and allied to tropical species

Description in the Benthic Flora Part I, pages 293-295, 299

Details of Anatomy



Preserved (bleached) specimens of *Dasycladus densus* (slide 044) viewed microscopically at different magnifications

1. cross section through a cylinder, highlighting the wheel-like internal branching pattern
2. detail of the insertion (arrowed) of branched laterals into the central siphon
3. surface view of highly magnified part of a branch show the minute, disc-like chloroplasts

Dasycladus densus Womersley
A 19437



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