



MACRO
PLANT



Techniques needed and plant shape

Classification

Phylum: Chlorophyta; Order: Bryopsidales; Family: Caulerpaceae

*Descriptive name

pipe-cleaner caulerpa; "Hedley's caulerpa"

Features

1. plants grey-green, 30-80mm tall
2. main (primary) upright branches arise from a *coarse* runner covered with *branched* spines
3. short side branches *regularly* arise in *2 rows* from upright branches
4. branches are clothed with a dense felt-like mass of fine ultimate branches (ramuli)

Variations

upright axes are occasionally branched

Special requirements



slice across the upright branches to view the short ultimate branches (ramuli). They are short, radiate outwards and are forked *several* times — a feature of the species — ending in microscopic spines

Occurrences

from Rottnest I., W. Australia to Investigator Strait, S. Australia

Usual Habitat

probably a deep water species (at 30m) or in heavily shaded shallow water

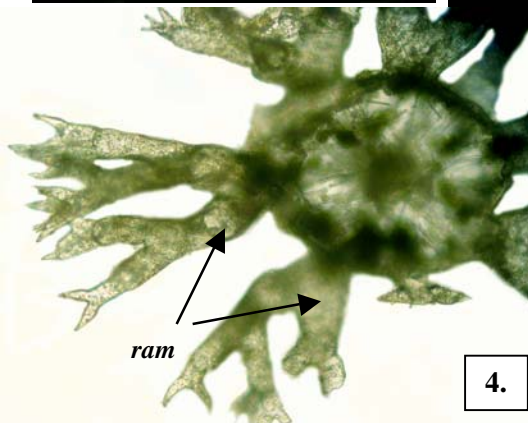
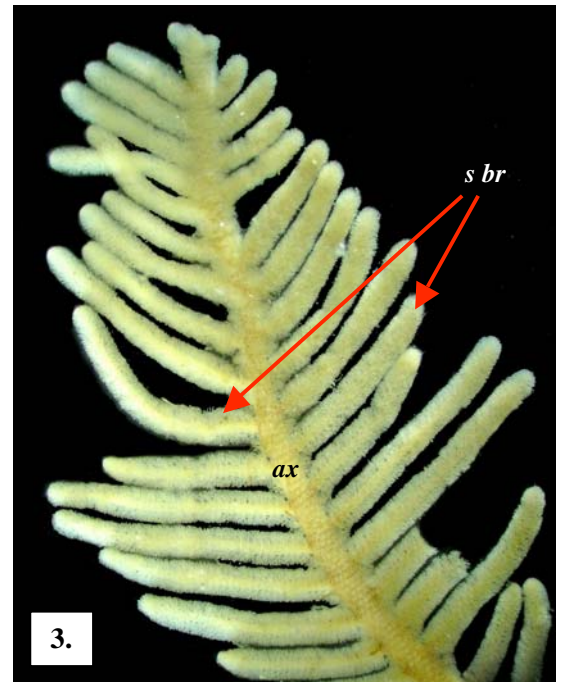
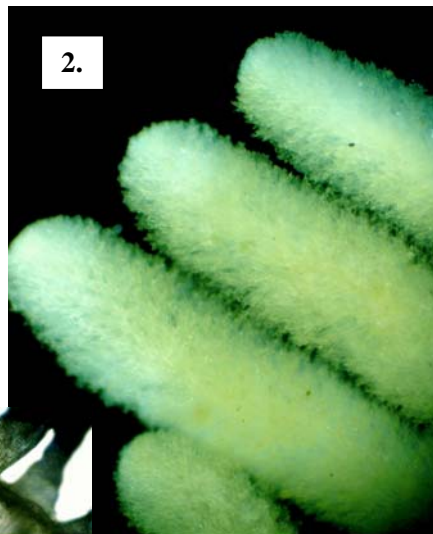
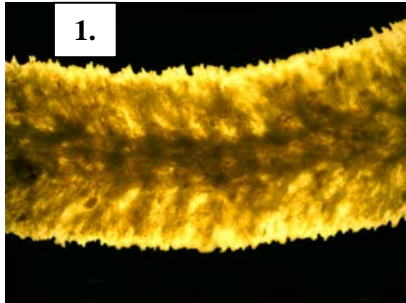
Similar Species

the branching pattern looks superficially like *Caulerpa flexilis* var. *muelleri*, but in that species the ramuli only loosely clothe the branches, are longer and forked only *once*

Description in the Benthic Flora

Part I, pages 261, 263, 268

Details of Anatomy



Microscope views of different magnification of a preserved (bleached) specimen of *Caulerpa hedleyi* (A33741):

1. a back-lit side branch densely clothed with short ramuli
2. top-lit tips of side branches
3. an upright branch (axis, *ax*) with side branches (*s br*) arising in 2 rows (distichously)
4. slice across a branch showing the radiating ultimate branches (ramuli, *ram*), each branched several times and ending in spines (*sp*)

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

§ name used in Edgar, G. *Australian Marine Life, 2nd Ed.* (2008)

"Algae Revealed" R N Baldock, S Australian State Herbarium, June 2005.

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Two views of *Caulerpa hedleyi* Weber van Bosse (A3374) from Pearson I. S. Australia, at 30m, showing the features of this species — the robust branches and the regular, 2-sided (distichous) arrangement of side branches

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