

# Caulerpa flexilis

Lamouroux

50.650



MACRO  
PLANT



tubular



## Techniques needed and plant shape

## Classification

Phylum: Chlorophyta; Order: Bryopsidales; Family: Caulerpaceae

## \*Descriptive name

feathery Caulerpa; §fern caulerpa”

## Features

1. plants dark green, 50-400mm tall
2. upright branches (axes) arise from a **coarse**, runner, covered with **forked spines**
3. short side branches in **2 rows** along axes are covered with numerous, cylindrical ultimate branches (ramuli) **forked** at their **bases**

## Variations

there are two varieties

upright branches (axes) are occasionally branched

*Caulerpa flexilis* var. *flexilis* is delicate, more flexible with ramuli 200µm wide and separated on the branches

*Caulerpa flexilis* var. *muelleri* (Sonder) Womersley is robust, ramuli denser, overlapping, 300µm wide. Short- side branches are clearly **in 2 rows** (distichous)

## Special requirements

view the ultimate branches (ramuli) under the microscope. They are forked near their bases and may have tiny spines at their tips

## Occurrences

from southern W. Australia to Victoria and Tasmania

## Usual Habitat

common in rock pools to 40m deep, on rough water coasts

## Similar Species

*Caulerpa obscura*, but in that species spines on the runner are forked **several** times.

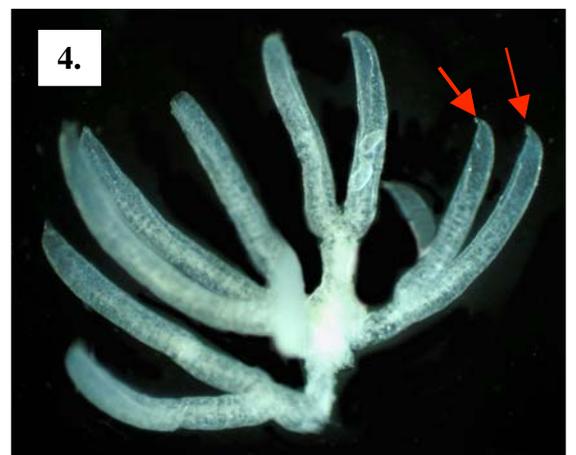
## Description in the Benthic Flora Part I, pages 263, 266-267

## Details of Anatomy



Images at various magnifications of a preserved (bleached) and coloured specimen of *Caulerpa flexilis flexilis* (A6121):

1. near the tip of an upright branch (*u br*), showing the side branches (*s br*) clothed in ramuli
2. detail of a runner (stolon) with dense, forked spines



3. the tip of a side branch, clothed in overlapping ramuli (**ram**)
4. partial cross section showing ramuli forked 1-2 times near their bases. Tiny points at the tips of the ramuli are just visible (red arrows)

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, prepared June 2005



5.

5. *Caulerpa flexilis flexilis* (A9402b), showing dense side branches (*s br*) arising from the narrow upright branches (*ax*), and the coarse runners (stolons, *stol*) (clothed in forked spines)



6.

6. *Caulerpa flexilis flexilis* (A26439) showing the characteristic 2-sided (distichous) pattern of side branches, and the dense clothing of ramuli to the bases of upright branches (axes)

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Specimens of *Caulerpa flexilis* var *muelleri* (Sonder) Womersley from S Australia showing the features of this variety — the more robust branches, the regular 2-sided (distichous) arrangement of side branches and dense clothing of axes branches and stolon with ramuli/spines.

- 7. at Encounter Bay, Victor Harbour
  - 8. Cape Jaffa
  - 9. Snug Cove , Kangaroo I.
  - 10. from Pennington Bay, Kangaroo I (A4387)
- (photos 7-9, D Muirhead)