Techniques needed and plant shape

Classification
Phylum: Chlorophyta; Order: Bryopsidales; Family: Caulerpaceae

*Descriptive name
fluffy Caulerpa

Features
1. plants dark green, 60-220mm tall
2. upright branches (axes) arise from a coarse, naked runner
3. ultimate branches (ramuli) are cylindrical, dense, branched, on all sides of upright branches and may end in a point

Special requirements
view the ultimate-branches (ramuli): they are 2-3mm long and branch a short distance from the axis 3-5 times, into thin, linear parts up to 0.5mm across

Occurrences
from SW W. Australia to Pt Phillip Heads, Victoria

Usual Habitat
in shaded rock pools to 50m deep, on rough water coasts

Similar Species
Caulerpa obscura, but in that species ramuli fork where they join onto the upright branch (axis), end in a ring of 1-3 microscopic points, and the runner is covered in short spines

Description in the Benthic Flora
Part I, pages 261, 263, 265

Details of Anatomy

Two magnified views of a preserved (bleached) and colourised specimen of Caulerpa cliftonii (A27340)
1. tip of an upright branch (axis), showing the crowded ultimate branches (ramuli) that obscure the branching pattern
2. dissected piece of axis, showing the cylindrical (terete) axis (ax) and an ultimate branch (ramulus) branched several times (1,2,3,4) with the alternating, linear parts. The ramulus branches a short distance (bracketted) from the axis – an important species feature

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

“Algae Revealed” R N Baldock, S Australian State Herbarium, June 2005
Two magnifications of *Caulerpa cliftonii* Harvey, (A28958) from a shaded rock pool, Cape du Couedic, Kangaroo I., S Australia showing the dense branched ramuli that obscure the upright axes, and a naked runner (stolon, *stol*) from which the axes arise. One ramulus (circled) has been detached to show its branching pattern.

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“Algae Revealed” R N Baldock, S Australian State Herbarium, June 2005