



MICRO
PLANT



Techniques needed and shape

Classification

Phylum: Chlorophyta; Order: Cladophorales; Family: Cladophoraceae

***Descriptive name**

false Cladophora

Features

plants form low *cushions* of green, tangled threads, a few mm tall

Variations

see below

Occurrences

widespread in Atlantic islands, the Mediterranean, E. N. America, Caribbean, W. S. America and W. Africa. In Australia, known from Long Reef, NSW, Coolangatta, Queensland and Cape Lannes, SE of S. Australia

Special requirements



view the threads microscopically to find

1. cells may be very long, but **narrow**, about 200µm in diameter
2. side branches occur as **outgrowths of the main axis**, diagnostic of the genus
3. cell contents may be rounded into **balls** in some threads

Usual Habitat

S. Australian plants have only been found in **shaded** caverns in the intertidal **attached** to rocks. Elsewhere plants may be attached to other algae (epiphytic) or occur as loose, floating balls (see Børgesen, F (1913). The Marine Algae of the Danish West-Indies. Part 1. CHLOROPHYCEAE. *Dansk Botanisk Arkiv Bd 1* (4) page 42)

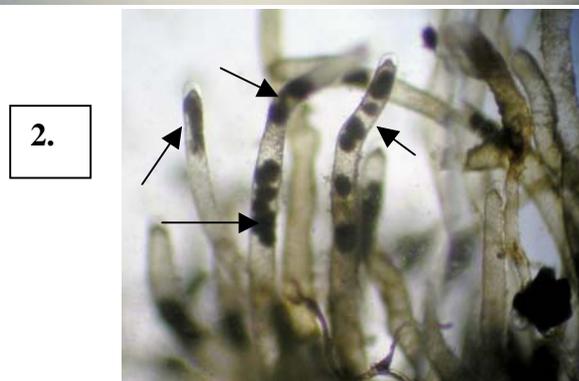
Similar Species

superficially like many filamentous algae (*Cladophora*, *Ulothrix*) but the connection of side branches to the main axis without a basal cell wall is unique (see image below). Separated from *Cladophoropsis magna* because *C. membranacea* is **attached** and not floating and has narrower threads. It differs from *C. herpestica* because the rhizoids do **not** arise adjacent to a branch

Description in the Benthic Flora

not available

Details of Anatomy



Preserved, bleached specimens of *Cladophoropsis membranacea*, (A56498), from Cape Lannes, S. Australia, enlarged to show:

1. elongate cells with branches arising as outgrowths (arrowed), and thin rhizoids (*rhi*)
2. cells with cell contents rounded into balls (arrowed)
3. detail of a side branch(arrowed) arising as an outgrowth without a basal cell wall, characteristic of the genus



Cladophoropsis membranacea
(Hofman Bang ex C. Agardh)
Børgesen, (A56405), from a shaded
cavern, 0.5m above a pool, Cape
Lannes, SE of S. Australia



A preserved ,
(bleached) specimen
of *Cladophoropsis*
membranacea,
(A56498), from a small
cavern 1m above an
intertidal rock pool,
Cape Lannes, S.
Australia. The tangled
mass of threads with
few cross walls that
trap sand grains can
be seen.