Apjohnia laetevirens (Linnaeus) Greville

50.530

Techniques needed MACRO PLANT

Classification Phylum: Chlorophyta; Order: Cladophorales; Family: Cladophoraceae

***Descriptive name** palm tree alga; §green brushweed

Features ***stalk*** (stipe) ***trunk-like*** with a stiff branching pattern in mature plants similar to the canopy of a palm tree or brush bristles

Occurrences throughout southern Australia to S NSW

Usual Habitat often common in shaded rock pools to 16m deep

Variations
1. denuded or young plants may exist only as clumps of upright stalks, but usually characteristic ***rings*** are present on the stalks.
2. cell surfaces are often ***scaly***, coated with encrusting, pinkish coralline algae.

Special requirements
1. cells are large with many nuclei (a condition called ***coenocytic***)
2. chloroplasts are numerous, crowded and ***disc-shaped***

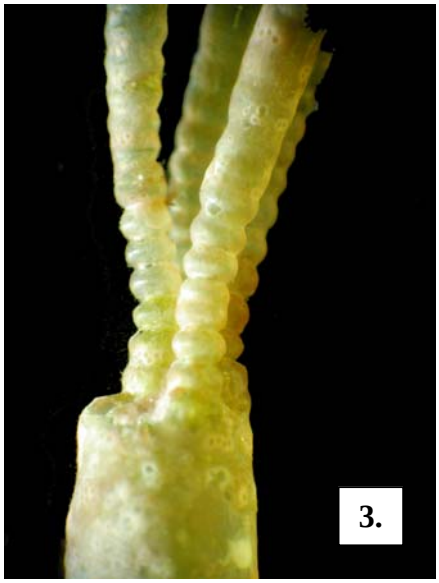
Similar Species distinctive even when young (lacking a branching "canopy") because of the relatively large, stiff cells with shiny surface and basal rings on branches.

Description in the Benthic Flora Part I, pages 181-3

Details of Anatomy

1.

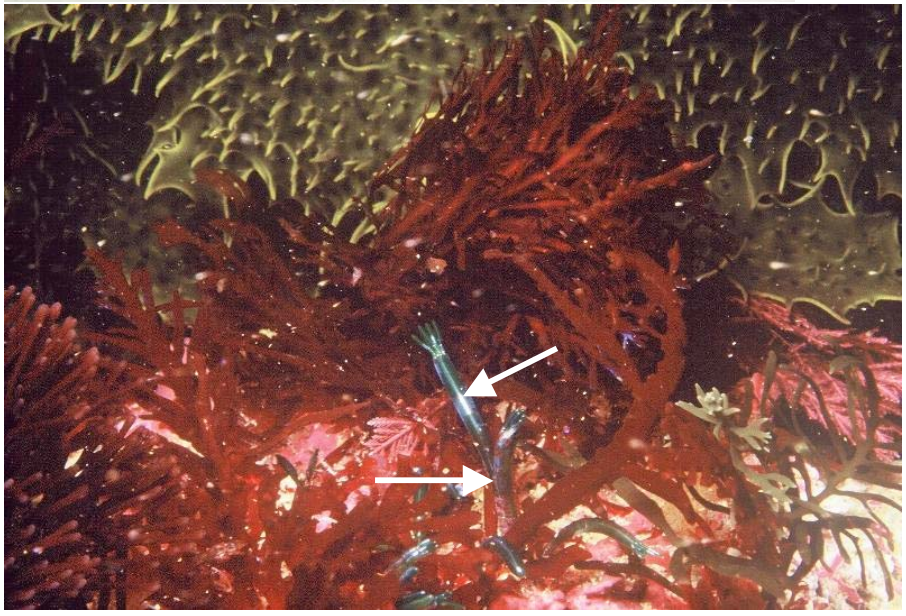
2.



3.

1-3. specimens of *Apjohnia laetevirens* from the Althorpe Islands, (A70553)
1. a whole plant showing the tree-like pattern of growth
2. detail of the branching pattern of a specimen showing the rigid branches and shiny surface
3. bases of branches of a specimen showing the characteristic rings (annuli)

* 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, October 2003, additions made June 2006, March 2009



4-6. Specimens of *Apjohnia laetevirens* Harvey from S Australia

4. from D'Estrees Bay Kangaroo Island, (A12706b), in deeper reef pools showing the branching pattern of a mature plant.
5. from Vivonne Bay, Kangaroo Island, (A6750b) in outer reef pools showing unbranched basal stalks.

6. young or regenerating plants(arrowed) growing amongst red and brown algae, showing the characteristic metallic sheen of living plants and basal stalks just commencing new growth at their tips

Image : D Muirhead, 2006

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