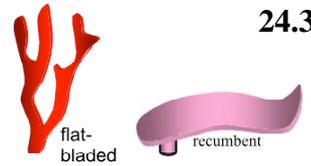


Lobophora variegata
(Lamouroux) Womersley

24.390



MACRO
PLANT



Techniques needed and plant shape

Classification

Phylum: Phaeophyta; Family: Dictyotaceae; Tribe: Zonarieae

***Descriptive name**

black fan-plant; §peacockweed

Features

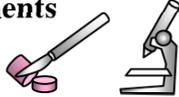


1. plants dark brown, iridescent under water, drying black, of broadly *fan shaped*, overlapping blades, often lying *flat* on rock
2. blades with faint, *concentric* growth rings, felty, (stupose) *underneath*

Variations

blades may be erect at depth, slashed into narrow pieces or cease growth so that the dark line of growing cells may be absent

Special requirements



1. view the line of dark cells at the blade edge (meristem) that continues the growth of the blade
2. cut a slice across a blade to view the central layer (medulla) of large, transparent cells, and the smaller surface (cortex) cells in pairs worldwide in tropical to temperate waters. In Australia, from W Australia, Aldinga S Australia, Pt Phillip Heads, Victoria and N of Sydney, NSW on rock, flat near low tide level, erect at depth

Occurrences

Usual Habitat

Similar Species

Padina species, but these have an in-rolled edge to the blades

Description in the Benthic Flora Part II, pages 253-255

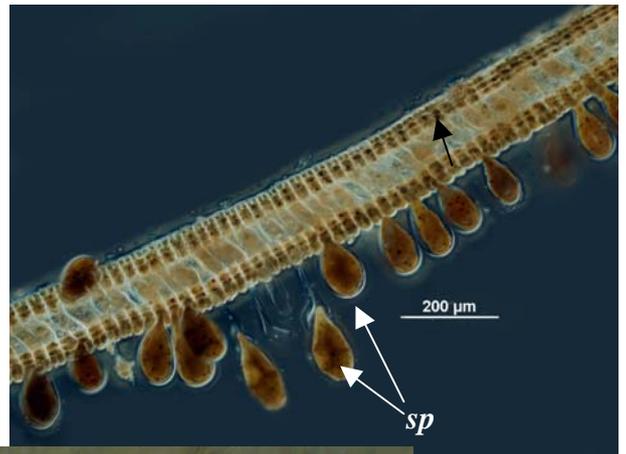
Details of Anatomy



← *mer*

1.

2.



200 μm

sp



pc

3.

co

← *med*

co

Microscope views of *Lobophora variegata*

1. surface view of part of blade edge showing the fringing line of dark, actively dividing cells (meristem, *mer*) and the first of several bands of hairs (*h*) that form concentric rings on the blade (slide 9929)
2. cross section through a patch (sorus) of sporangia (*sp*) (some extruded, some dividing into 8 spores) (A74772)
3. cross section stained blue showing the *single* innermost layer (medulla, *med*) of large cells (*lc*) and *regular rows* of smaller outer cells (cortex, *co*) with surface layers of paired cells (*pc*)

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

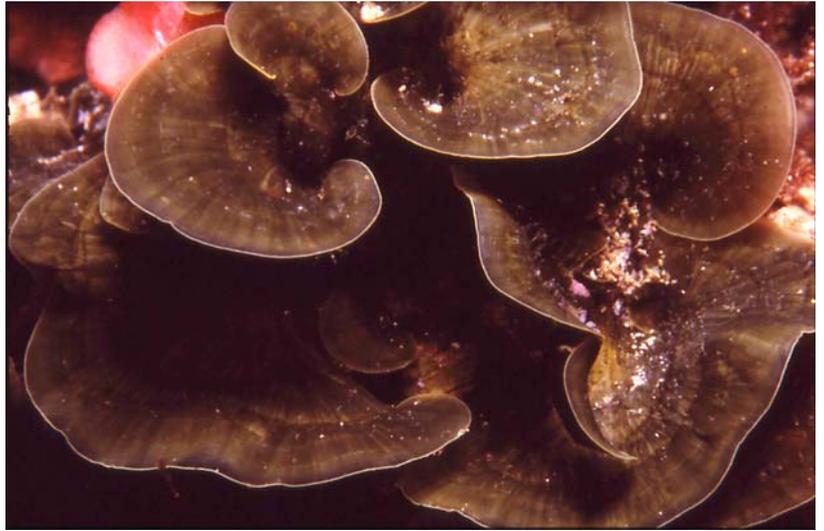
§ name used in Edgar, G. *Australian Marine Life, 2nd Ed.* (2008)

“Algae Revealed” R N Baldock, S Australian State Herbarium, July 2003

4.



5.



6.



Specimens of *Lobophora variegata* (Lamouroux) Womersley from S Australia
 4. from Curlew Point S Australia (A54592)
 5. underwater image from Kangaroo I., Photo: D Muirhead
 6. from Port Noarlunga

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