

Padina gymnospora
(Kützing) Sonder

34.390



Techniques needed and plant shape

Classification

Phylum: Phaeophyta; Family: Dictyotaceae; Tribe: Zonarieae

***Descriptive name**

rolled-edge fan-plant with naked spore patches

Features



1. plants brown, darker at the base, robust, up to 200mm across, of *fan-shaped* lobes that split into wedge-shaped pieces
2. blade edges are *in-rolled* upwards and inwards
3. *concentric bands* of hairs and sporangia prominent

Special requirements.



slice the blade across to view microscopically

- **4 rows** of cells in young blades, up to **9** in older parts.
- sporangia in *concentric* bands or broken patches (sori), between hair bands, on *both* (but mainly the upper) sides of blades
- sporangial patches with practically *no* cover (indusium)

Occurrences

worldwide, in the tropics and on the E and W coasts of Australia.

Usual Habitat

in Australia, in relatively shallow water

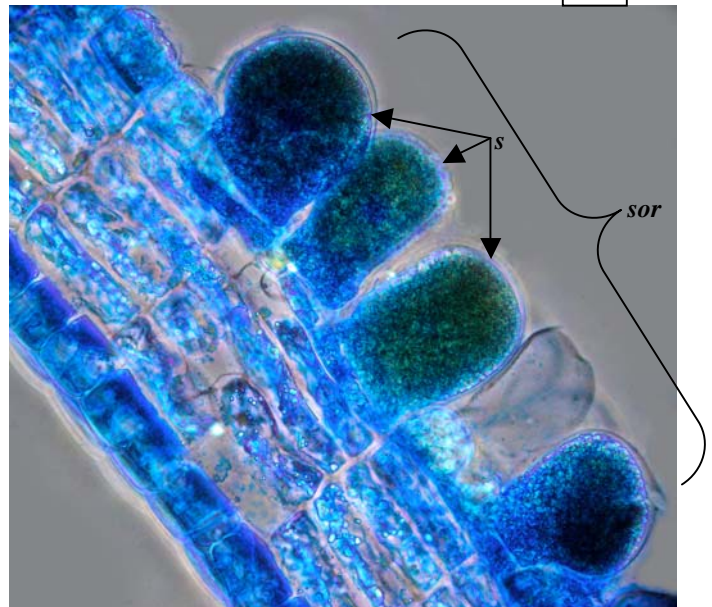
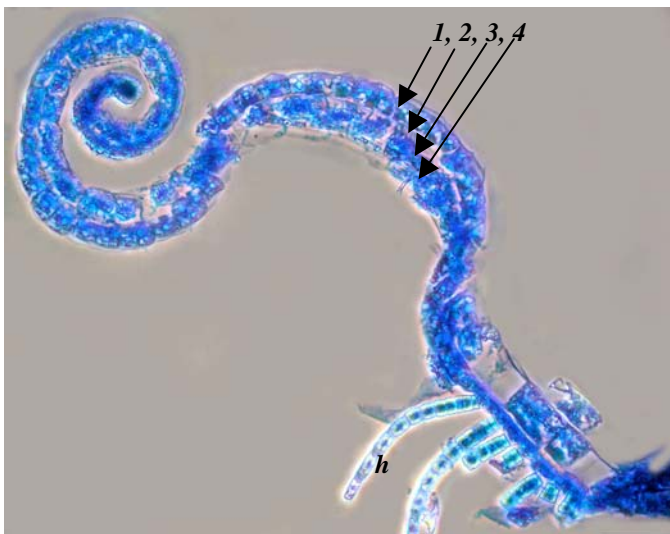
Similar Species

Padina fraseri which also has wedge-shaped splits in mature blades, but that species has only 3 cell layers when viewed in cross-section, and spore patches are covered with a membrane (indusium)

Description in the Benthic Flora Part II, pages 215, 217, 221

2.

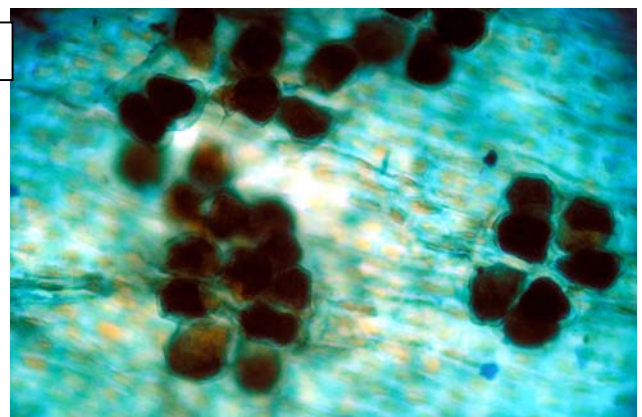
Details of Anatomy



Padina gymnospora (A61585) stained blue and viewed microscopically:

1. a cross section (slide 12784) showing
 - the upturned and in-rolled edge
 - a band of hairs (*h*) on the underside
 - 4 cell rows (*1,2,3,4*)
2. a cross section through a patch (sorus, *sor*) of sporangia (*sp*) showing 6 rows of cells and *lack* of sporangial cover (indusium), a characteristic of this species (slide 12784)
3. surface view showing clusters of sporangia

2.





Two specimens of *Padina gymnospora* (Kützing) Sonder (A50606) from Hamelin Bay, W Australia



* Descriptive names are inventions to aid identification, and are not commonly used
"Algae Revealed" R N Baldock, S Australian State Herbarium, July 2003