

Padina elegans
Koh ex Womersley

34.390



MACRO
PLANT



flat-
bladed



recumbent

Techniques needed and plant shape

Classification

Phylum: Phaeophyta; Family: Dictyotaceae; Tribe: Zonarieae

*Descriptive name

rolled-edge fan-plant; §elegant padina

Features

1. plants brown, up to 100mm across, of thick, flat, lobes, **ear-shaped** when fresh, drying **fan-shaped** with some lime on the upper surface, lying horizontally on rock
2. prominent **concentric bands** of hairs and sporangia
3. blade edges **in-rolled** upwards and inwards

Variations

blades may become divided

Special requirements.



slice the blade across to view microscopically

- the **2 rows** of cells. The upper row may have cells equal or smaller in size to the lower row
- **concentric bands** of hairs on both sides of the blade
- sporangia also in **concentric** bands or broken patches (sori) lying above hair bands on the **upper side** of the blade only
- sporangia have a **flimsy** cover (indusium)

Occurrences

from Victoria N Tasmania to S NSW

Usual Habitat

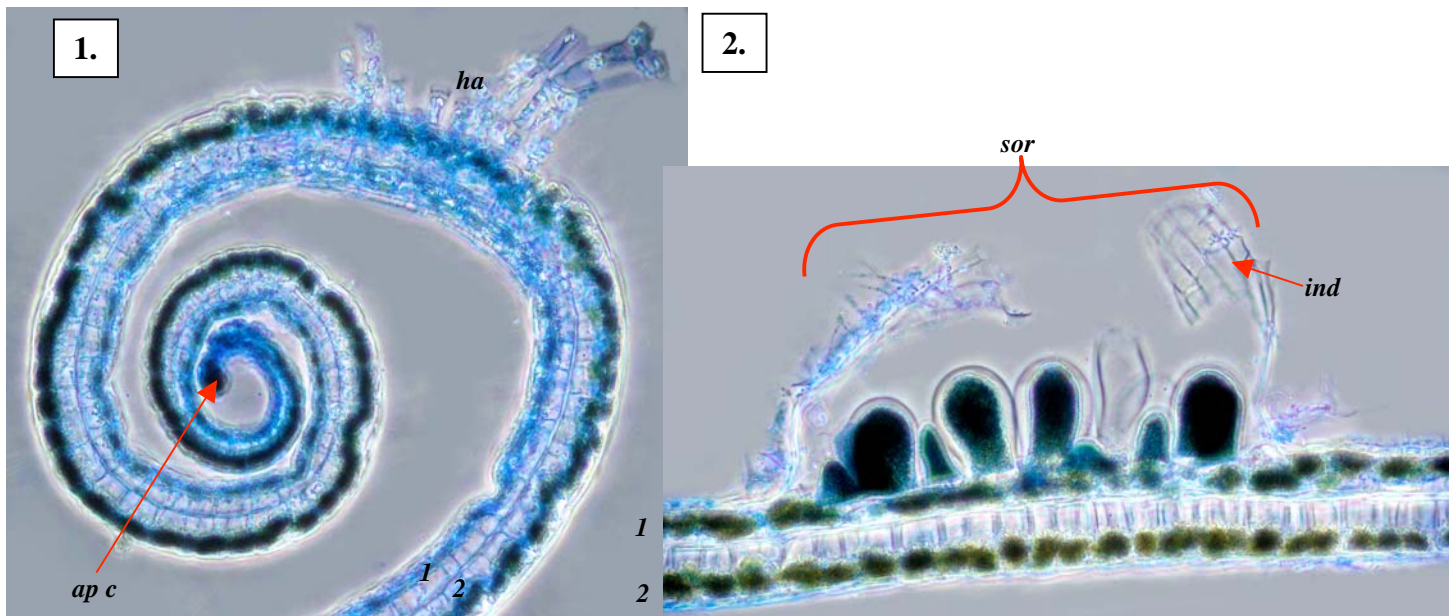
on rock, common in the lower intertidal, wave-washed pools

Similar Species

Padina sanctae-crucis, but that species has sporangia on the **lower** side of the blade; cells of the upper layer are **taller** than those of the lower layer. *Lobophora variegata* has fan-shaped lobes but these are thinner, without upturned edges

Description in the Benthic Flora Part II, pages 220-221

Details of Anatomy



Padina elegans sliced across, stained blue and viewed microscopically (A33329, slide 9675).

1. blade edge, rolled upwards and inwards, showing **two** rows of equal-sized cells (1,2), prominent edge cell (apical cell, *ap c*) and a side view of a hairs (*ha*) that form concentric bands across the blade
2. a patch of sporangia (sorus, *sor*) on the **upper** blade surface, with a **flimsy** (and broken) cover (indusium, *ind*). In this specimen the upper row has smaller blade cells and cell contents have concentrated in a ball on the bottom of cells of both layers.

* 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



Padina elegans Koh ex Womersley (A33865),
20-25m deep, from Pearson I., S. Australia, showing the growing edge which is up-turned and
in-rolled, and concentric bands of hairs and sporangia

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