



Techniques needed and plant shape

Classification

Division: Phaeophyta; Family: Dictyotaceae; Tribe: Zonarieae

***Descriptive name**

felted fan-tips

Features

1. plants medium brown, 50-150mm long with slender, felted axes below, and flat, **fan-shaped** blades above
2. blades have midline **hairy** (stupose) patches near their bases

Variations

edges of the fans may be frayed

Special requirements



1. view the blade tips microscopically to see the marginal growing region
2. view the regular rows of surface cells

Slice a **lengthwise** section of a fertile blade to view

- 6 cell layers
- inner (medulla) layers of equal-sized cells with **sloping** end walls
- sporangia on stalks (pedicels) of several cells

Occurrences

from the Head of the Bight to Newcastle NSW

Usual Habitat

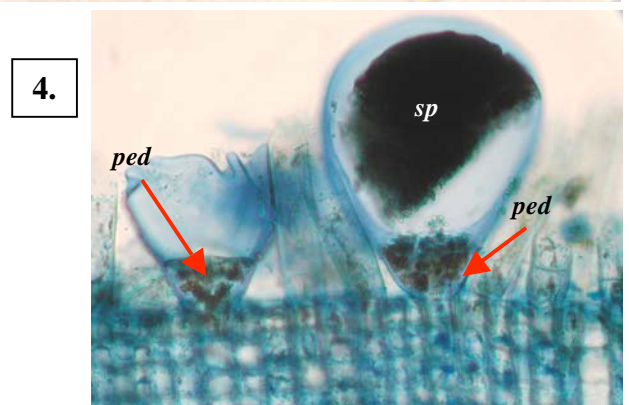
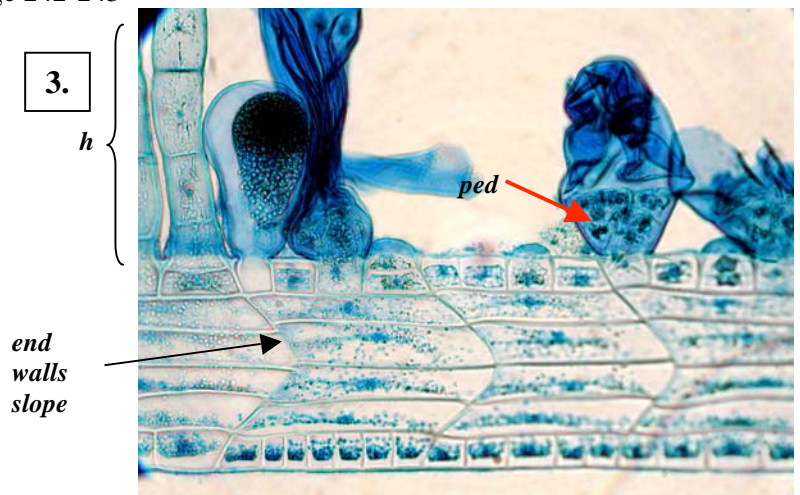
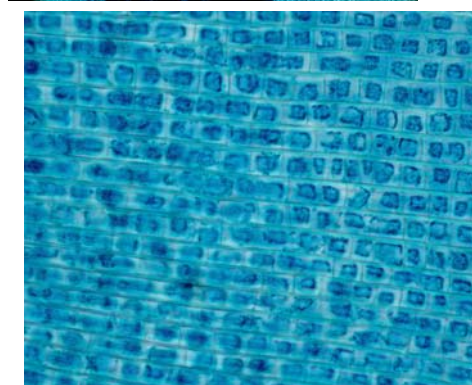
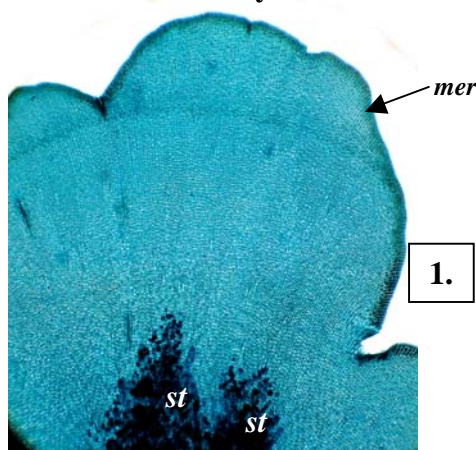
on rock, from low tide in shaded pools to 38m depth

Similar Species

Zonaria species, but surface cells, in some of these species, are paired

Description in the Benthic Flora Part II , page 242-243

Details of Anatomy



Homoeostrichus sinclairii stained blue and viewed microscopically

1. tip of a dividing fan-shaped blade showing marginal growing region (meristem, *mer*) and midline felted (stupose, *st*) patches in the lower part (slide 9882)
2. surface cells, in regular lines, but not paired as in some *Zonaria* species (slide 9882)
3. slice **along** a blade showing a hair (*h*), the stalk (pedicel, *ped*) of several cells at the base of a (crumpled) sporangium and inner (medulla) cells of equal size with **sloping** the end walls, unique to this species (slide 9880)
4. two sporangia (*sp*) (LH one empty) showing the pedicels (*ped*) consisting of several cells



Homoeostrichus sinclairii (Hooker & Harvey) J Agardh, (A27100) in shallow water
from Snapper Point, Port Lincoln, S Australia