



**MACRO
PLANT**



Techniques needed and plant shape

Classification

Phylum: Phaeophyta; Family: Dictyotaceae; Tribe: Zonarieae

***Descriptive name**

narrow forktips; §Agardh's forkweed

Features

1. plants brown, 100-400mm long, flat-branched, blades forked, narrow, numerous **additional** blades arising from the **mid-rib**
2. prominent **mid-rib** vein, side veins **absent** hair tufts generally **scattered**
3. sporangia in **lines** flanking the mid-rib

Special requirements



1. view the **short** line of dividing cells at the blade tips under the microscope
2. cut a section across a fertile blade to view
 - the **gradation** from 2-cells thick at the blade edge to the mid-rib of 12-18 cells thick
 - sporangia in lines **flanking** the mid-rib **protruding** from the surface, leaving a sterile edge to the blades

Occurrences

Victoria and N Tasmania, but, peculiarly also E coast Australia to N Queensland in the shallow water

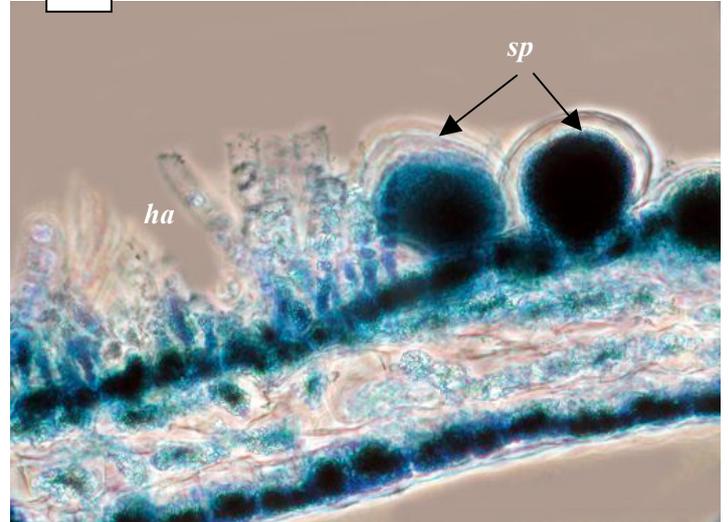
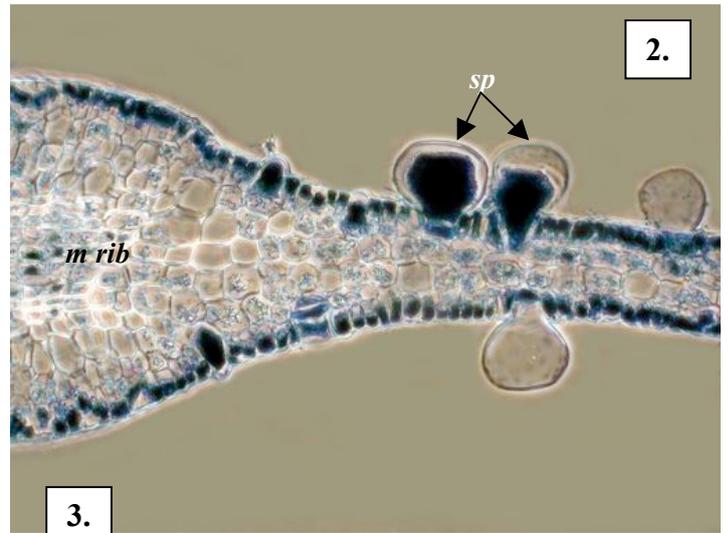
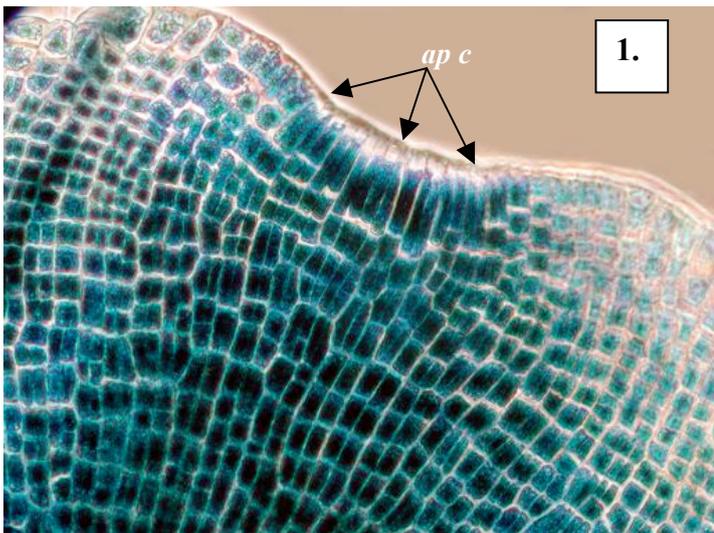
Usual Habitat

Similar Species

unique because of the proliferation of extra blades from the mid-line

Description in the Benthic Flora Part II, pages 226,228,231

Details of Anatomy



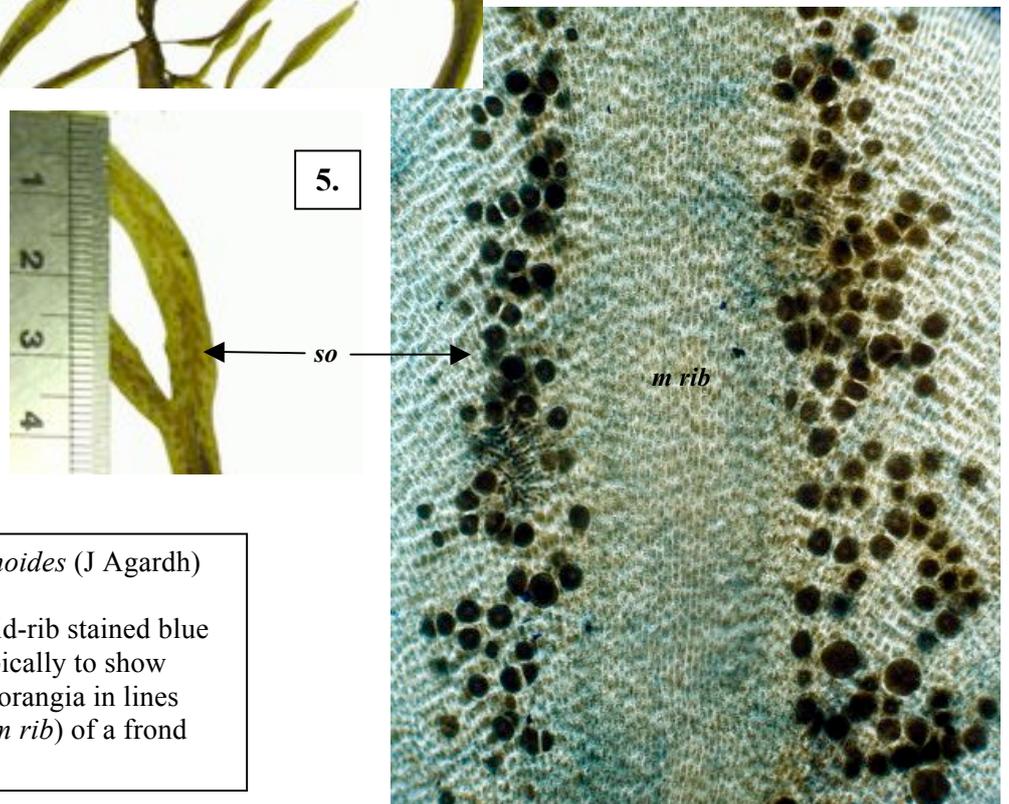
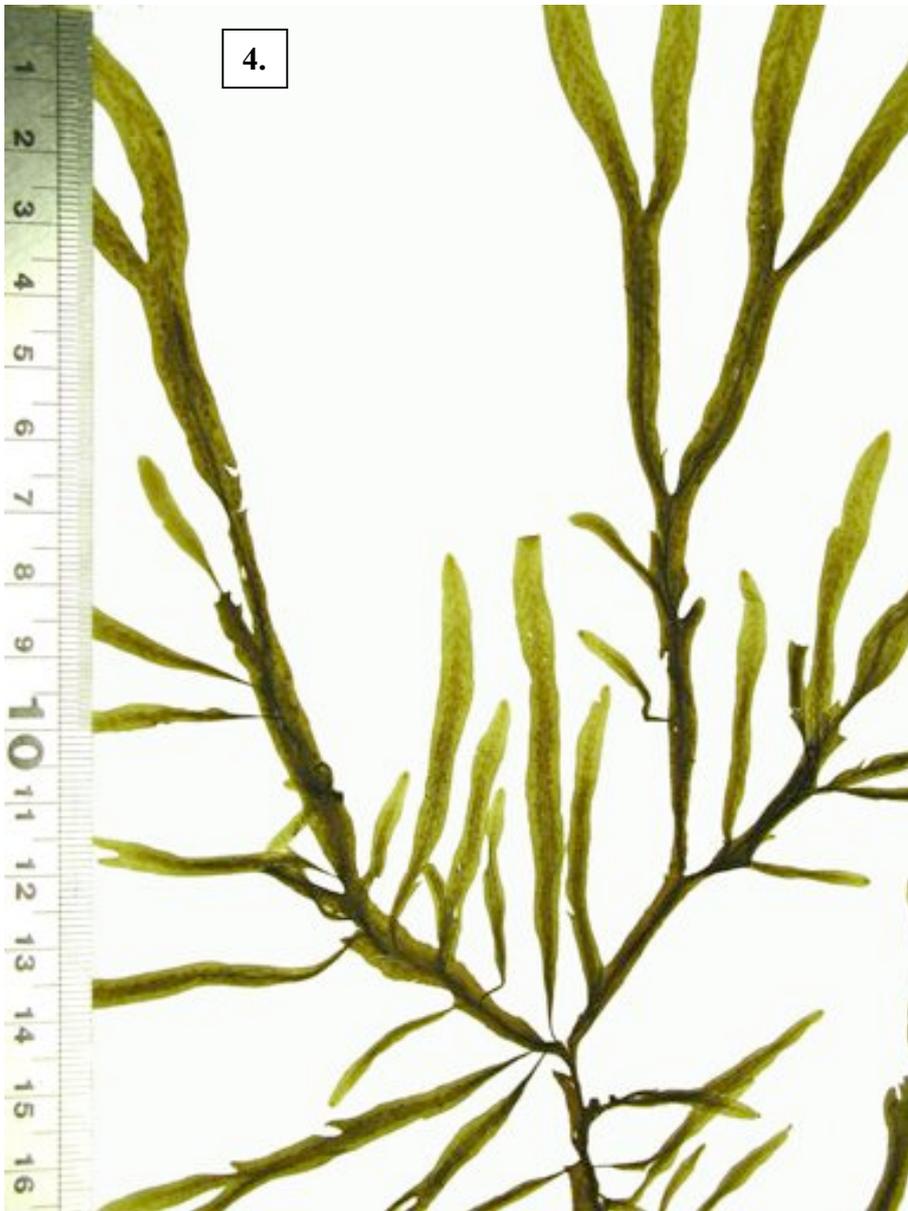
Dictyopteris acrostichoides (A55432 slide 9801) stained blue and viewed microscopically

1. the line of several actively dividing apical cells (*ap c*) from which all other cells are derived
2. slice across a blade near the mid-rib (*m rib*) showing the proximity of sporangia (*sp*) and larger number of cells than the blade edge
3. detail of a hair tuft (*ha*) and sporangia protruding from the surface

* 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; edit. Aug. 2013



4. *Dictyopteris acrostichoides* (J Agardh)
Börjesen (A62319)
5. a surface view of a mid-rib stained blue
and viewed microscopically to show
masses (sori, *so*) of sporangia in lines
flanking the mid-rib (*m rib*) of a frond
(A27455 slide 9802)

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