

Techniques needed



MACRO
PLANT



Classification

Division: Phaeophyta; Family: Dictyotaceae; Tribe: Zonarieae
rare brown straps

*Descriptive name

Features



1. plants are dark brown, 80-160 mm long, flat-bladed and irregularly branched
2. hair tufts are scattered across the blades; blade edges may be sparsely toothed
3. there are **no** central veins

Occurrences

the Gulf regions of S Australia

Usual Habitat

a little known species from 6m deep. Fertile plants are unknown.

Similar Species

Taonia, *Dictyota diemensis* and *Dilophus*. A cross section viewed microscopically is needed to confirm identification

Description in the Benthic Flora

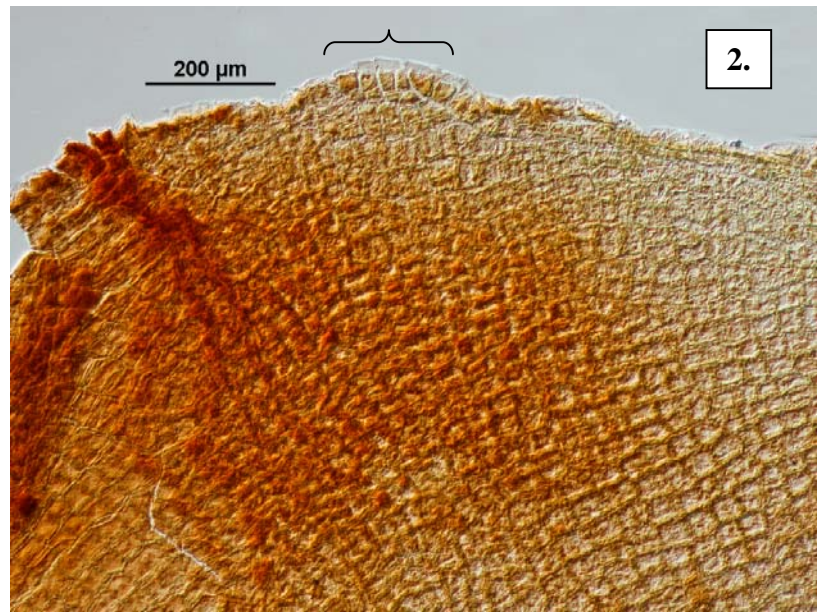
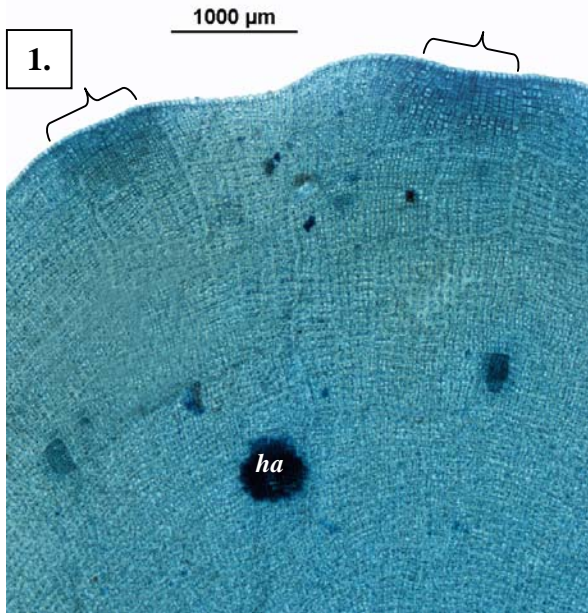
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Special Requirements

1. view plant tips microscopically to see the short lines of dividing cells (meristems) at rounded or slightly depressed blade tips
2. cut a cross section of a blade and view microscopically to find:
 - the innermost part (medulla) of large cells, in **5-6 irregularly arranged** rows
 - outermost layers (cortex) of **small** cells that may be divided outwardly
 - numerous hair tufts with the bases of hairs **sunken** into the blade

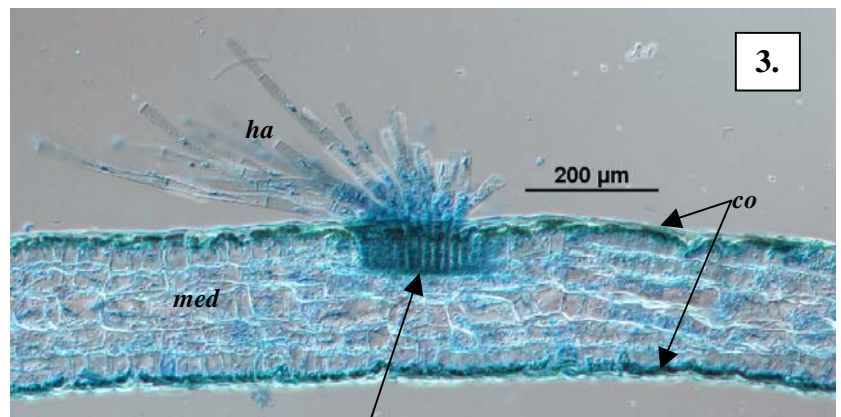


Details of Anatomy



Spatoglossum australasicum viewed microscopically

1. surface view of a specimen stained blue showing two lines of growth (meristems) (bracketed) and an hair tuft (*ha*) (A8289 slide 1423)
2. an unstained blade edge with detail of the line of dividing cells (meristem, bracketed) that continue the growth of the blade (A34905 slide 9823)
3. a cross section of a blade stained blue, showing the un-ordered rows of large middle (medulla, *med*) cells, small outermost (cortical, *co*) cells, hair tuft (*ha*) with hair bases sunken into the blade (arrowed) (A34905 slide 9823)



4.



5.



4, 5. Two magnifications of *Spatoglossum australasicum* Kützing, (A34905) from 6m deep at Tiparra Reef, S Australia, showing the sparsely toothed blade edges and scattered hair tufts