

Pachydietyon polycladum
(Kützing) Womersley

34.390



MACRO
PLANT



Techniques needed and plant shape

Classification

Division: Phaeophyta; Family: Dictyotaceae; Tribe: Dictyoteae

***Descriptive name**

slingshot tips (referring to the forked branching)

Features

1. plants brown, branches **narrow, numerous** and **spreading** (divergent)
2. bases tangled with host seagrasses
3. hair tufts often at the base of forked branches

Variations

Special requirements



1. view the tips microscopically to find the **single** apical cell
2. cut a slice across **older** branches. The middle (medulla) has a single layer of **large** cells, the outer (cortex) consists of 2-5 layers of small cells

Occurrences

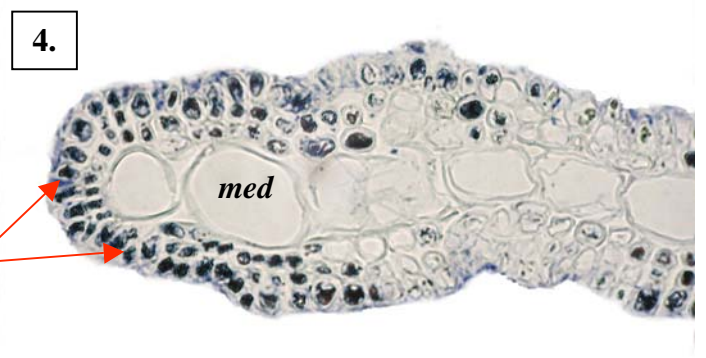
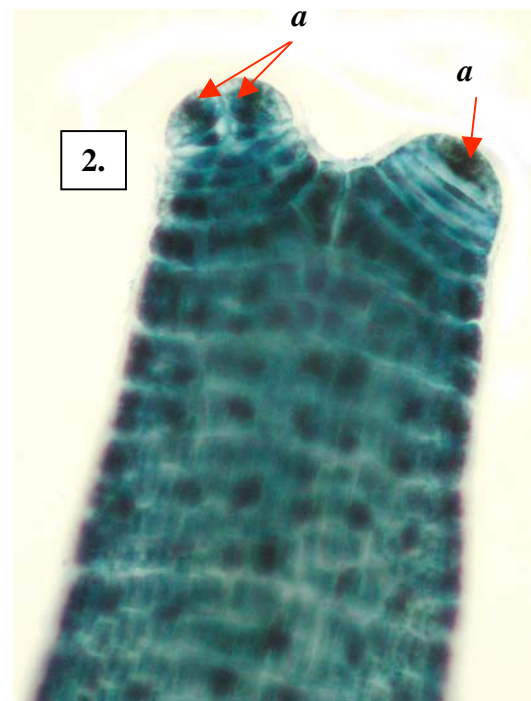
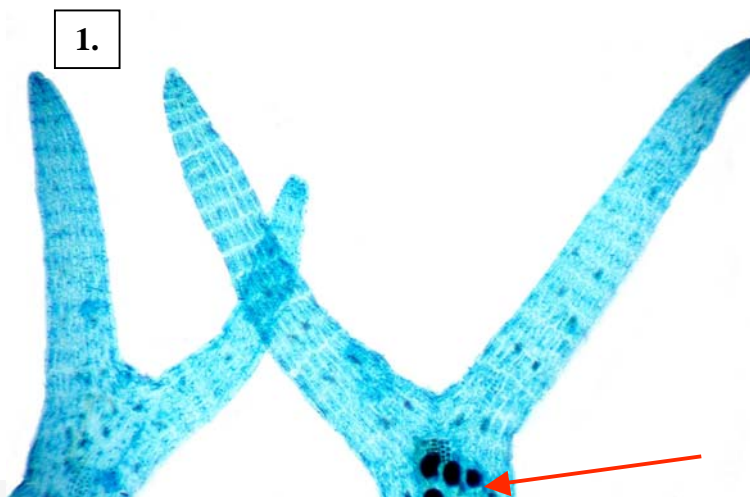
Geraldton, W Australia around S Australia and Tasmania to Sydney, NSW
in calm waters on seagrasses

Usual Habitat

Similar Species

a distinctive species

Description in the Benthic Flora Part II , page 211
Details of Anatomy



Pachydietyon polycladum stained blue and viewed microscopically

1. diverging branch tips ("slingshots") with a tuft of hairs and reproductive organs at the base of the fork (arrowed) (slide 9617)
2. dome-shaped apical cells (*a*). The left cell has recently divided lengthwise into two (slide 9616)
3. cross section of a **young** branch; middle (medulla, *med*) large **and** small outer (cortical, *co*) cells in a single layer (slide 9616)
4. cross section of a **mature** branch with outer (cortical, *co*) cells in **several** layers (slide 9616)



Two magnifications of *Pachydictyon. polycladum* (Kützing) Womersley (A46760), on seagrass (*Amphibolis antarctica*) in shallow water, Elliston S Australia

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