

Techniques needed and plant shape



Classification

Phylum: Phaeophyta; Family: Dictyotaceae; Tribe: Zonarieae

*Descriptive name

black flanged blades

Features

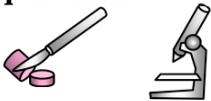


1. plants dark brown, drying **black** consisting of flat (complanate) forked, long, narrow blades and generally scattered hair tufts
2. blades have a **prominent** midrib and **narrow** “flanges” (wings)

Variations

1. irregular branching may result from damage due to grazing
2. lower blades may be eroded to midline veins only

Special requirements



1. view the row of dividing cells (meristem) in a slight depression at the blade tips
2. slice across a blade to view the 4-7 rather jumbled cell rows of in the blade wings (“flanges”) and up to 20 cell rows in the midrib

Occurrences
Usual Habitat

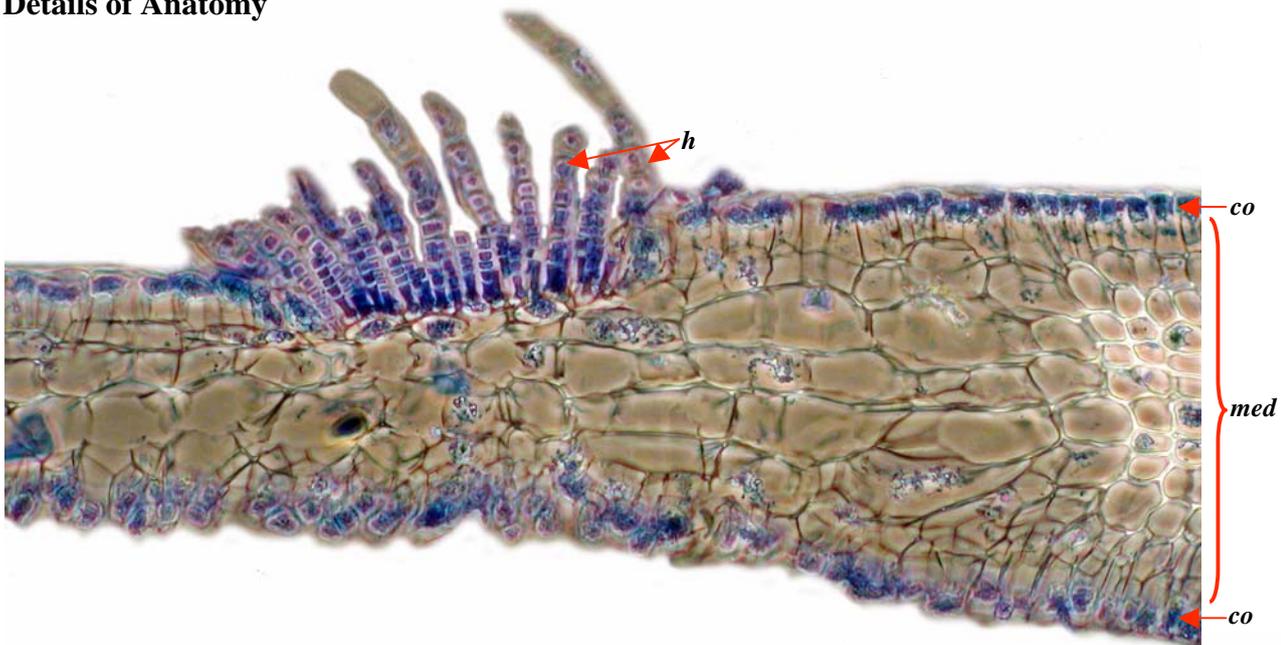
from Eyre Peninsula to Victoria and N Tasmania
on rock, sometimes in large patches, in reef pools or shallow water of rough coasts

Similar Species

some plants intergrade with *Dictyopteris muelleri*, but this species generally has wider blades and the middle (medulla) of blades has 2 cell rows only

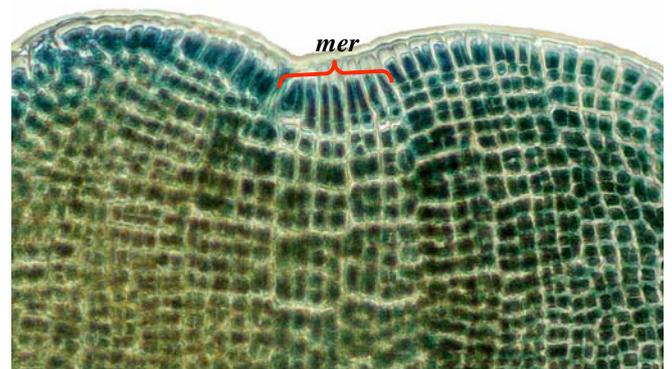
Description in the Benthic Flora Part II, pages 227-229

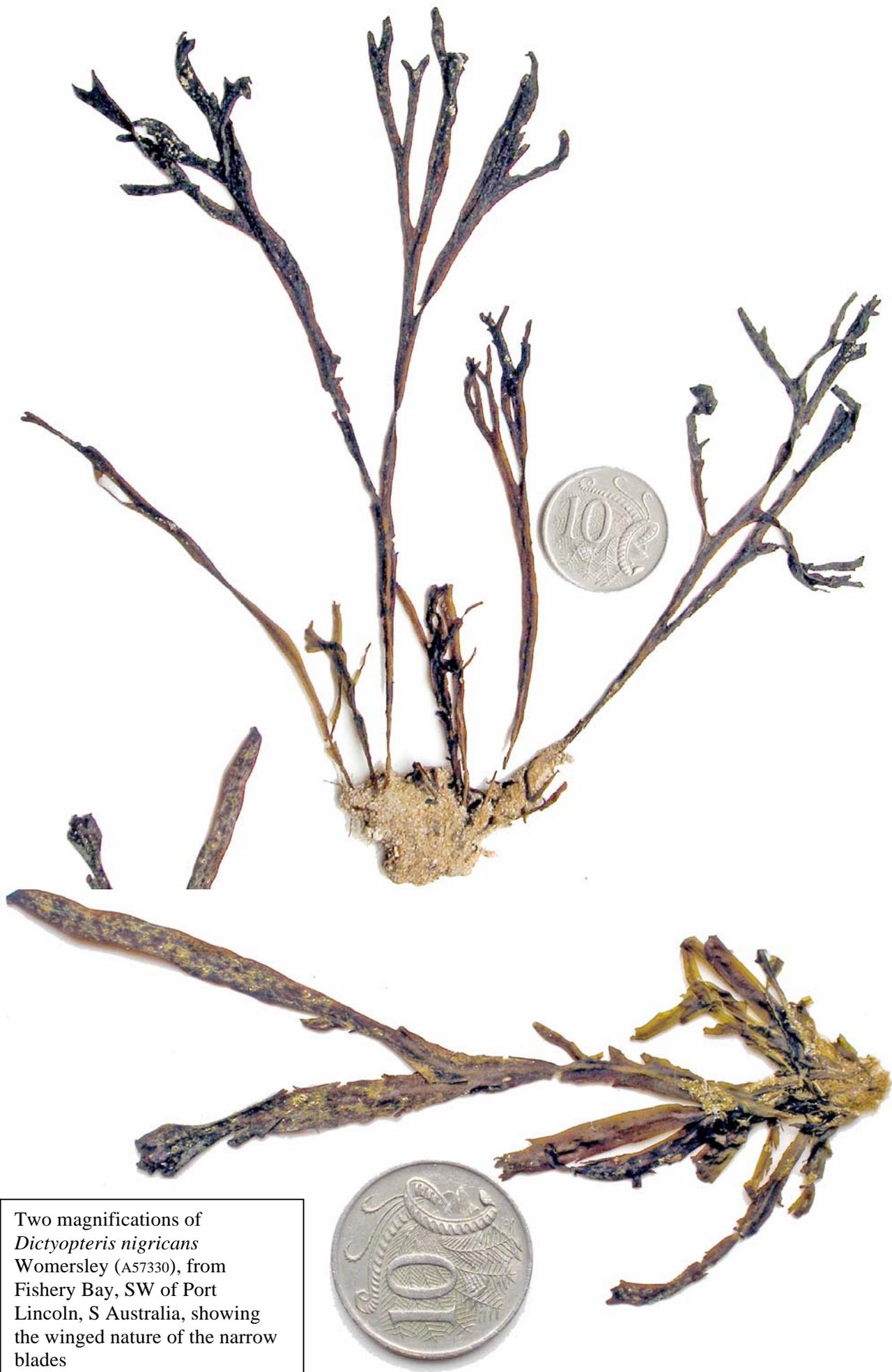
Details of Anatomy



Dictyopteris nigricans stained blue and viewed microscopically (slide 9808)

1. blade tip with a row of dividing cells (meristem, *mer*) in a slight depression
2. cross section through part of the midrib (*m r*) of a blade, showing dark coloured outer layers (cortex, *co*) middle layer (medulla, *med*) of colourless cells, up to 20 deep in the midrib region and a tuft of hairs (*h*)





Two magnifications of
Dictyopteris nigricans
Womersley (A57330), from
Fishery Bay, SW of Port
Lincoln, S Australia, showing
the winged nature of the narrow
blades

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