



**Techniques needed and plant shape**

**Classification**

Phylum: Phaeophyta; Family: Dictyotaceae; Tribe: Zonarieae

**\*Descriptive name**

black flanged blades

**Features**

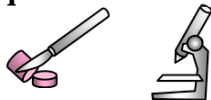


1. plants dark brown, drying **black** consisting of flat (complanate) forked, long, narrow blades and generally scattered hair tufts
2. blades have a **prominent** midrib and **narrow** “flanges” (wings)

**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**

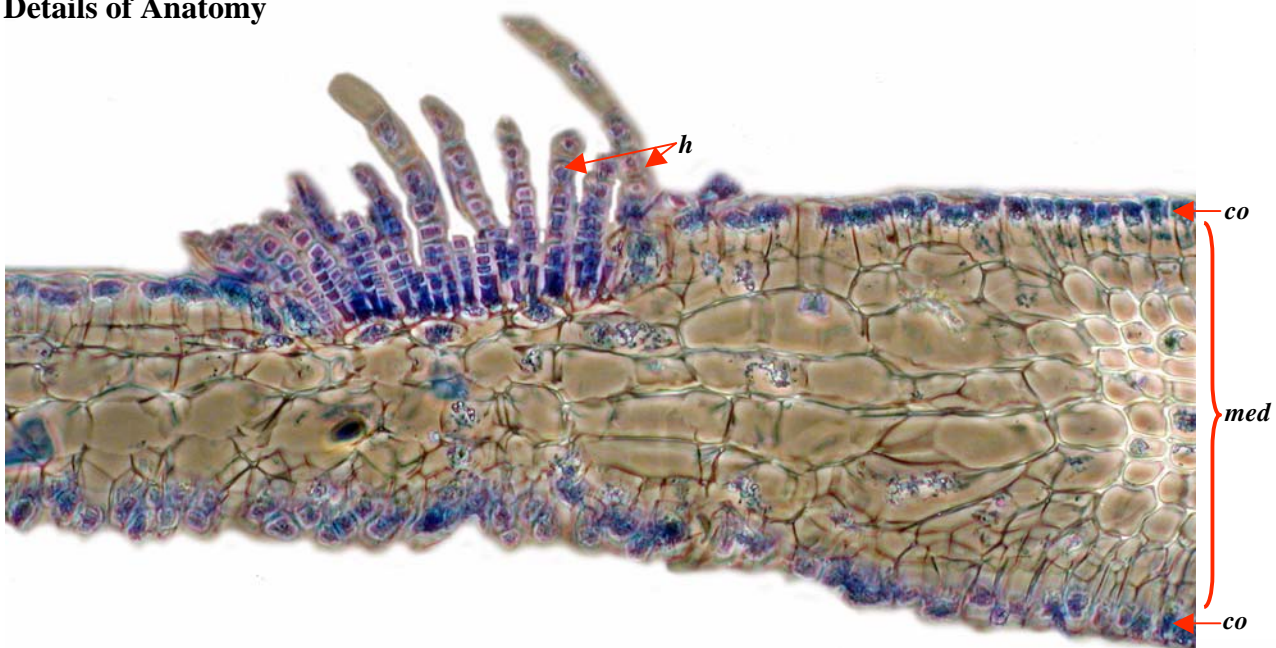
from Eyre Peninsula to Victoria and N Tasmania  
on rock, sometimes in large patches, in reef pools or shallow water of rough coasts

**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

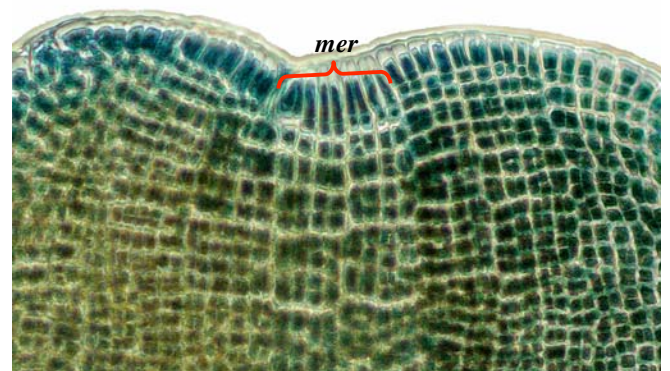
Description in the Benthic Flora Part II, pages 227-229

**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