**Techniques needed and plant shape**

**Classification**
Phylum: Phaeophyta; Family: Dictyotaceae; Tribe: Zonarieae

*Descriptive name*

**Features**
1. plants dark brown, paler at the base, 30-80mm tall, flat-branched
2. branches narrow, 2-4mm wide, *forked* (dichotomous), flat or curled, with *chisel* or *spatula-shaped* tips
3. a *dark* line of dividing cells (meristems) appears as a fringe to the blade

**Variations**
plant bases may have a felty covering of light-coloured *rhizoids*

**Special requirements**
1. view the dark line of dividing cells at the tip edge of blades
2. sporangial patches (sori) are *covered* with a transparent sheet (indusium)
3. cut a slice across a mature blade to view the 2 cell layers

**Occurrences**
from W Australia to Bass Strait

**Usual Habitat**
on rock, 2-28m deep

**Similar Species**
*Chlanidophora* species, but the spores are scattered, not in patches in that genus

**Description in the Benthic Flora**
Part II, pages 232-235

**Details of Anatomy**

1. tip of a blade stained blue, with the meristem (*mer*) at the edge and rows of cells on the blade surface (*slide* 9820)
2. two blade tips, partly stained, showing brown coloured meristems, patches (sori, *sor*) of spores, with a faint outline of their transparent cover (the indusium, *in*). (*slide* 9819)
3. 4. cross sections (*slide* 689) through different sori (which may occur on the same plant) showing 2 cell layers (*1, 2*) of the blade and transparent coverings (indusia, *in*) 3. developing sporangia (*sp*). 4. male structures

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* Descriptive names are inventions to aid identification, and are not commonly used

"Algae Revealed" R N Baldock, S Australian State, July 2003
Distromium multifidum Womersley from S Australia
5. (A26521) a drift plant from Aldinga S Australia
6. (A72060) from Fleurieu Peninsula

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