**Techniques needed and plant shape**

**Classification**

Phylum: Phaeophyta; Family: Dictyotaceae; Tribe: Zonarieae

*Descriptive name*  
*Delicate fan-tips,* **§** Southern peacock weed

**Features**

1. Plants brown, iridescent underwater, 30-60 mm tall, **fan-shaped**, consisting of flat, **thin** blades, spreading horizontally when young, becoming **split** into narrow spreading lobes with age.

2. Growth by a **line** of dark cells at the edge of blades, hairs and sporangia in **concentric bands**

**Special requirements**

1. View the line of dark dividing cells (meristem) at the blade edge.
2. Slice a blade across. Only **2 rows** of cells present.
3. Find the transparent covering (**indusium**) on young sporangia

**Occurrences**

From S W Australia to Victoria and Bass Strait

**Usual Habitat**

On rock, 1-36m deep

**Similar Species**

*Lobophora variegata*, *Padina* species and *Exallosorus olsenii*. Blades are thicker in those species

**Description in the Benthic Flora**

Part II, pages 230-232, 234

**Details of Anatomy**

1. Dark line of dividing cells (**mer**) fringing a blade (**slide 9816**)
2. Cross section at blade edge with a single dark cell from the line of dividing cells (**meristem, mer**) and the 2 rows of cells in the remainder of the blade
3. Surface view of blade edge with meristem (**me**), and the first of a series of concentric bands of hairs (**h**)
4. Cross section through a patch (**sorus**) of spores (**sp**) with a transparent covering (**indusium, in**) and 2 cell layers making up the blade (**slide 689**)

Specimens of *Distromium flabellatum* stained blue and viewed microscopically

1. Dark line of dividing cells (**mer**) fringing a blade
2. Cross section at blade edge with a single dark cell from the line of dividing cells (**meristem, mer**) and the 2 rows of cells in the remainder of the blade
3. Surface view of blade edge with meristem (**me**), and the first of a series of concentric bands of hairs (**h**)
4. Cross section through a patch (**sorus**) of spores (**sp**) with a transparent covering (**indusium, in**) and 2 cell layers making up the blade

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

**§ name used in Edgar, G. Australian Marine Life, 2nd Ed. (2008)**

"Algae Revealed" R N Baldock, S Australian State, July 2003
Young and old specimens of *Distromium flabellatum* Womersley from S Australia

4. a mature drift plant (A30711) from Aldinga with spreading blades split into narrow lobes

5, 6. two magnifications of a young plant from Point Lowly (A59329), 14m deep on an artificial tyre reef showing the filmy, fan-shaped blades and arcs of sporangia

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

*name used in Edgar, G. Australian Marine Life, 2nd Ed. (2008)*

“Algae Revealed” R N Baldock, S Australian State, July 2003