**Techniques needed and shape**

**Classification**

Phylum: Phaeophyta; Order: Sporochnales; Family: Sporochnaceae

*Descriptive name*  
**brown tuft-tips**

**Features**  
Plants brown, 150-200mm long a mix of long and short branches arise radially around wiry main branches, tips ending in a tuft of tiny brown hairs

**Special requirements**  
View microscopically a lengthwise slice along the branches to display:

- outer (cortical) layer of globe-shaped terminal and squat basal cells
- stalkless, single-compartmented (unilocular) sporangia mixed amongst the globe-shaped cells
- middle (medulla) layer of elongate cells

**Occurrences**  
Only known from 1889 collections at Pt Phillip Heads, and possibly from near Coffs Harbour, NSW (Millar)

**Usual Habitat**  
On sand covered rocks

**Similar Species**  
* Nereia lophoclada may prove to be *N. filiformis* sensu J. Agardh from the Mediterranean, a chance introduced species

**Description in the Benthic Flora**  
Part II, pages 269-272

**Details of Anatomy**

1. Section through an apical tuft, with coloured hairs (assimilatory hairs, *as ha*), surface (cortical) layer (*co*), and middle layer (medulla, *med*)

2, 3. Highly magnified views of lengthwise sections showing the outer layer (cortex) with characteristic pairs of cells consisting of globe-shaped terminal cell (*ap c*) and squat basal cell (*bas c*), single-compartmented (unilocular) sporangia (*uni spor*) and elongate cells of the middle layer (medulla, *med*)
4. *Nereia lophoclada* J. Agardh A55711, from Muttonbird I., near Coffs Harbour, NSW
5. microscope view of a piece plant from Pt Phillip, Victoria, (A305247, slide 669) stained blue to show the terminal tufts of coloured (assimilatory) hairs

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

“Algae Revealed” R N Baldock, S Australian State Herbarium, September 2005