



Techniques needed and shape



MACRO
PLANT

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

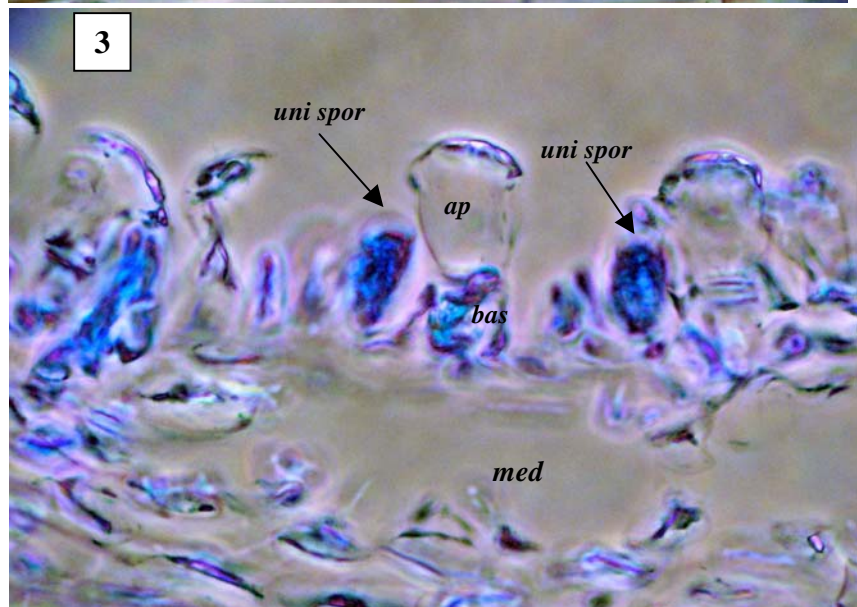
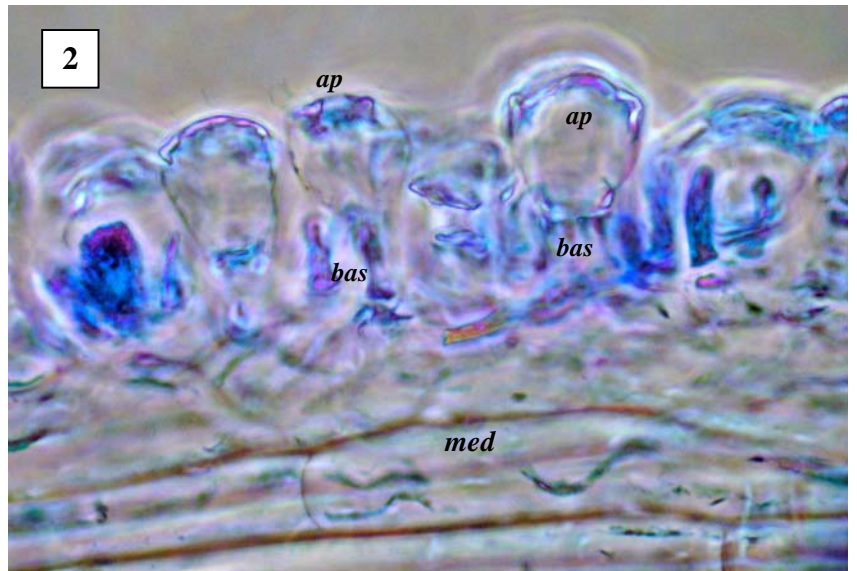
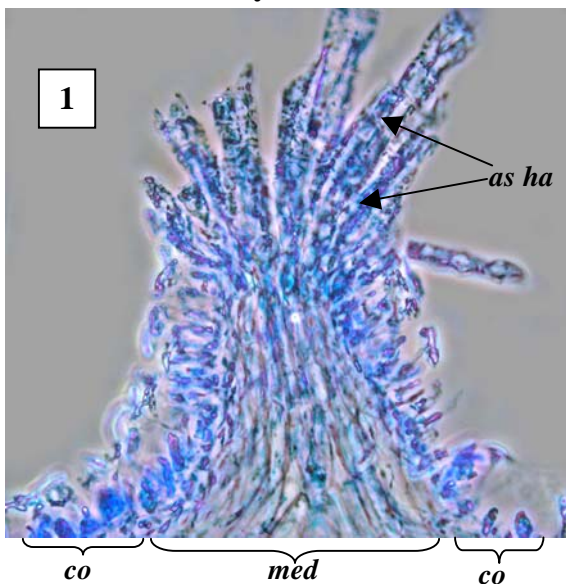
Similar Species



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

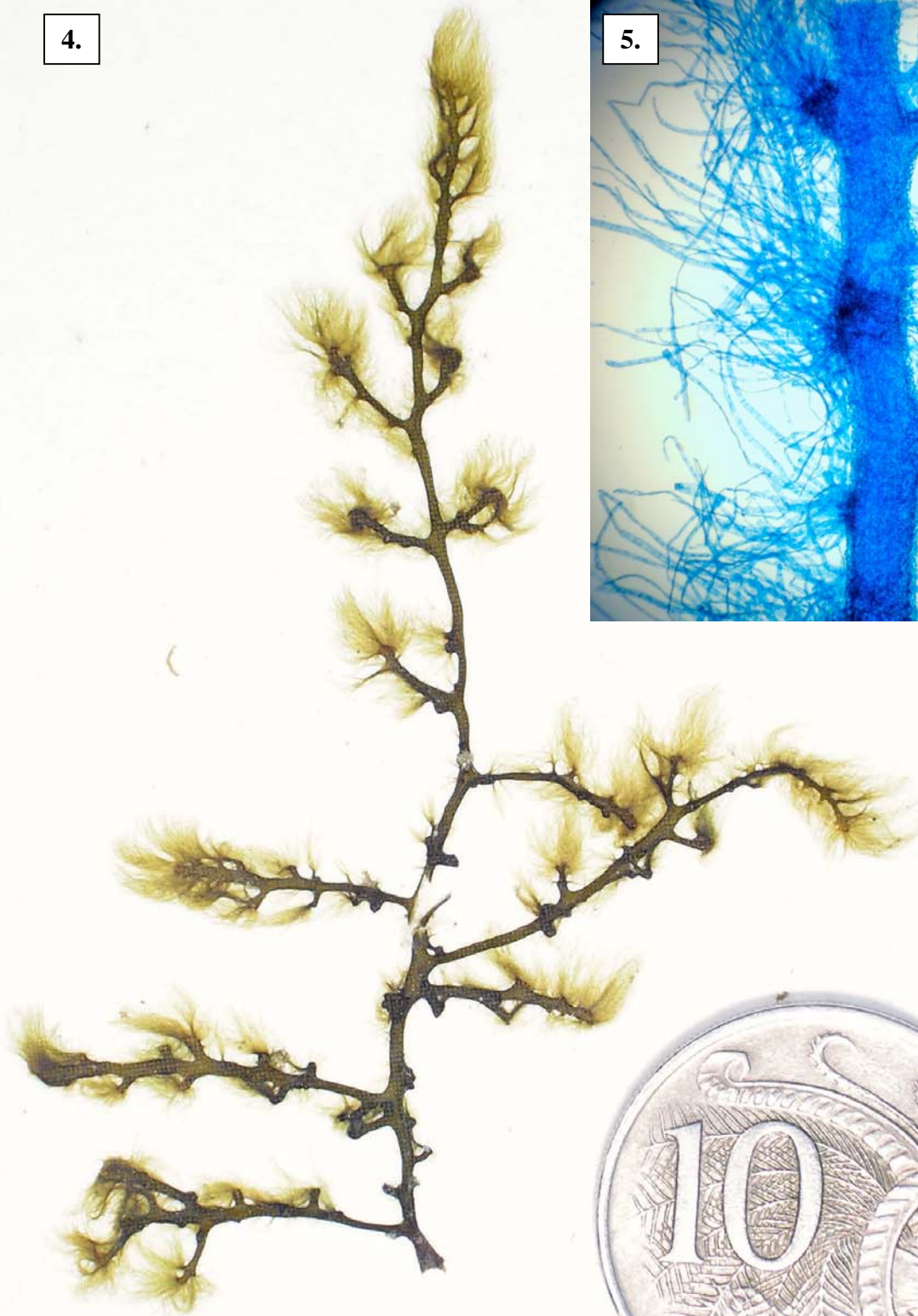


Magnified views of *Nereia lophoclada* (A30524, slide 9992) blue.

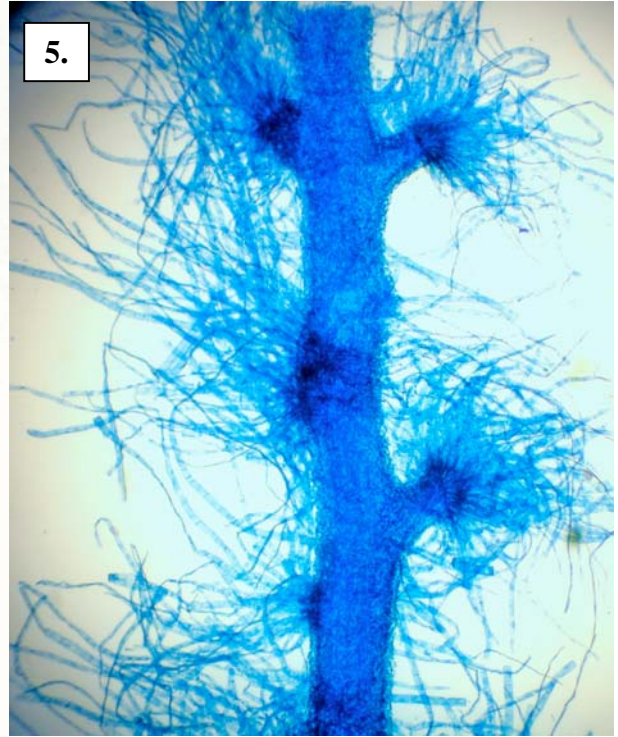
1. section through an apical tuft, with coloured hairs (assimilatory hairs, *as ha*), surface (cortical) layer (*co*), and middle layer (medulla, *med*)
- 2, 3. highly magnified views of lengthwise sections showing the outer layer (cortex) with characteristic pairs of cells consisting of globe-shaped 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*)

* Descriptive names are inventions to aid identification, and are not commonly used
"Algae Revealed" R N Baldock, S Australian State Herbarium, September 2005

4.



5.



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