

**Techniques needed and plant shape**



MACRO  
PLANT

**Classification**

Phylum: Phaeophyta; Order: Scytosiphonales; Family: Scytosiphonaceae

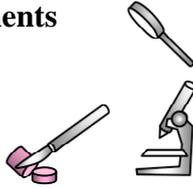
**\*Descriptive name**

bubble weed

**Features**

plants light brown, stalkless, ball-shaped, 50-250mm across hollow, easily torn. Extensive, irregular, fertile patches (sori) are just visible to the unaided eye on the surface

**Special requirements**



1. view a magnified surface view. Patches of sporangia (sori) form an irregular **network**. Tufts of colourless hairs lie **outside** these patches
2. in the sori, many-compartmented (plurilocular) sporangia are mixed with very short dark brown, photosynthetic (phaeophycean) hairs
3. cut a cross section of a fertile patch of the outer skin to view
  - large colourless cells of the middle (medulla) layer that decrease in size towards the surface (cortex) layer
  - groups of 2-celled, dark brown, photosynthetic (phaeophycean) hairs
  - 2-rowed, many-compartmented (plurilocular) sporangia

**Occurrences**

only known from the N. island of New Zealand, and washed up in quantity at Pt MacDonnell, S. Australia

**Usual Habitat**

growing mainly on other algae

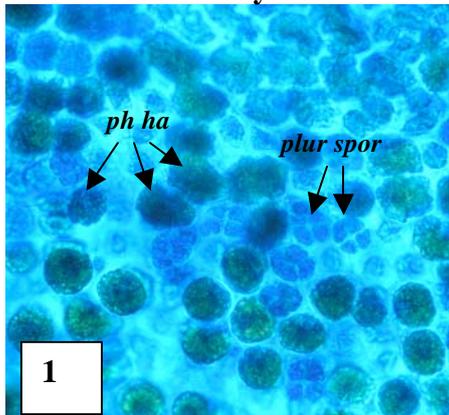
**Similar Species**

similar to other species of *Colpomenia*, requiring microscope examination for correct identification

**Description in the Benthic Flora**

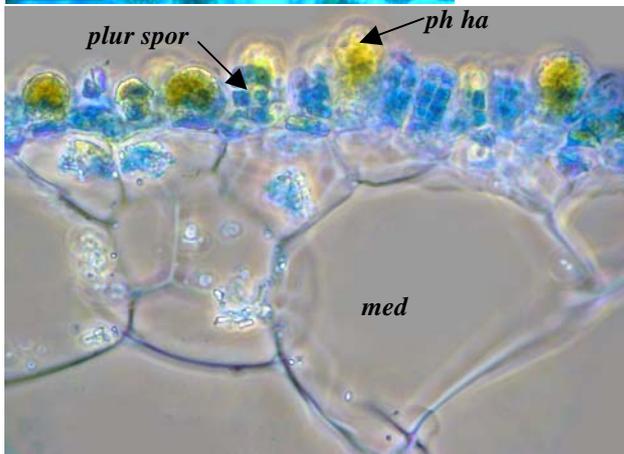
Part II, pages 296, 298-300

**Details of Anatomy**

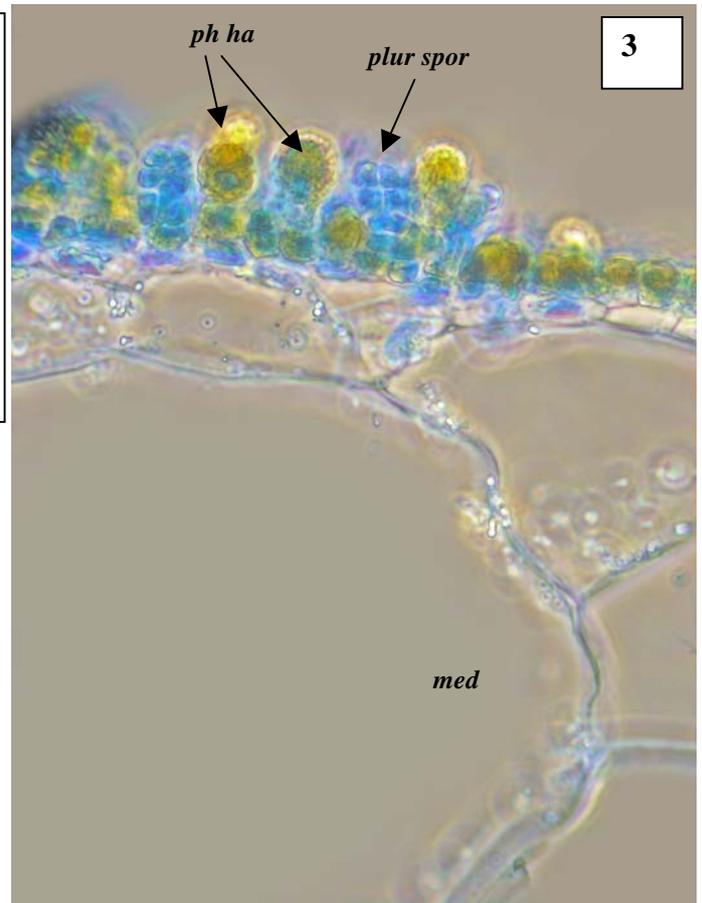


Microscope views of specimens (A54513, slide 7499) stained blue and viewed microscopically

1. surface view of tops of photosynthetic (phaeophycean) hairs (**ph ha**) with dense contents, and many-compartmented (plurilocular) sporangia (**plur spor**) each with 4-compartments visible



2

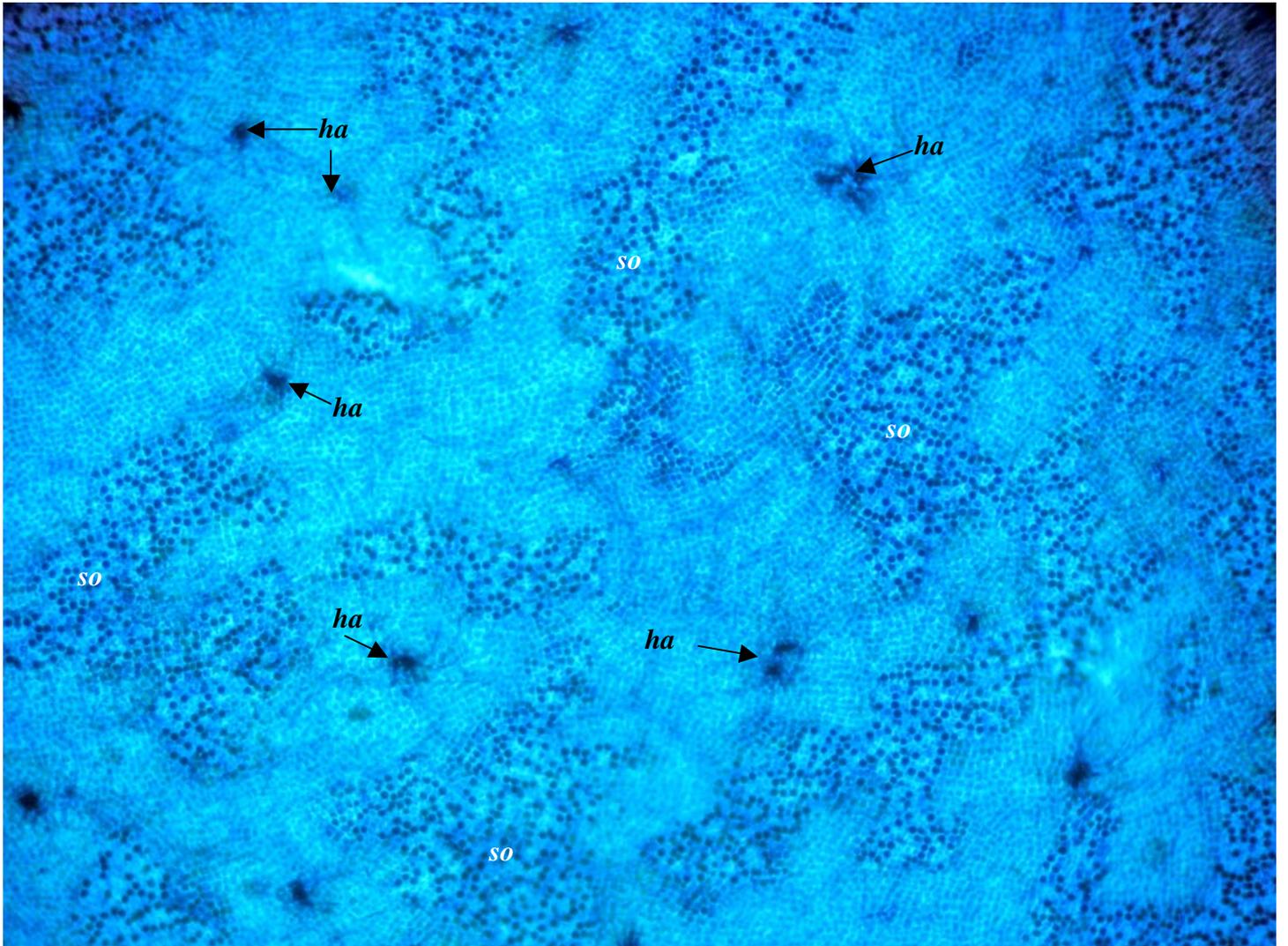
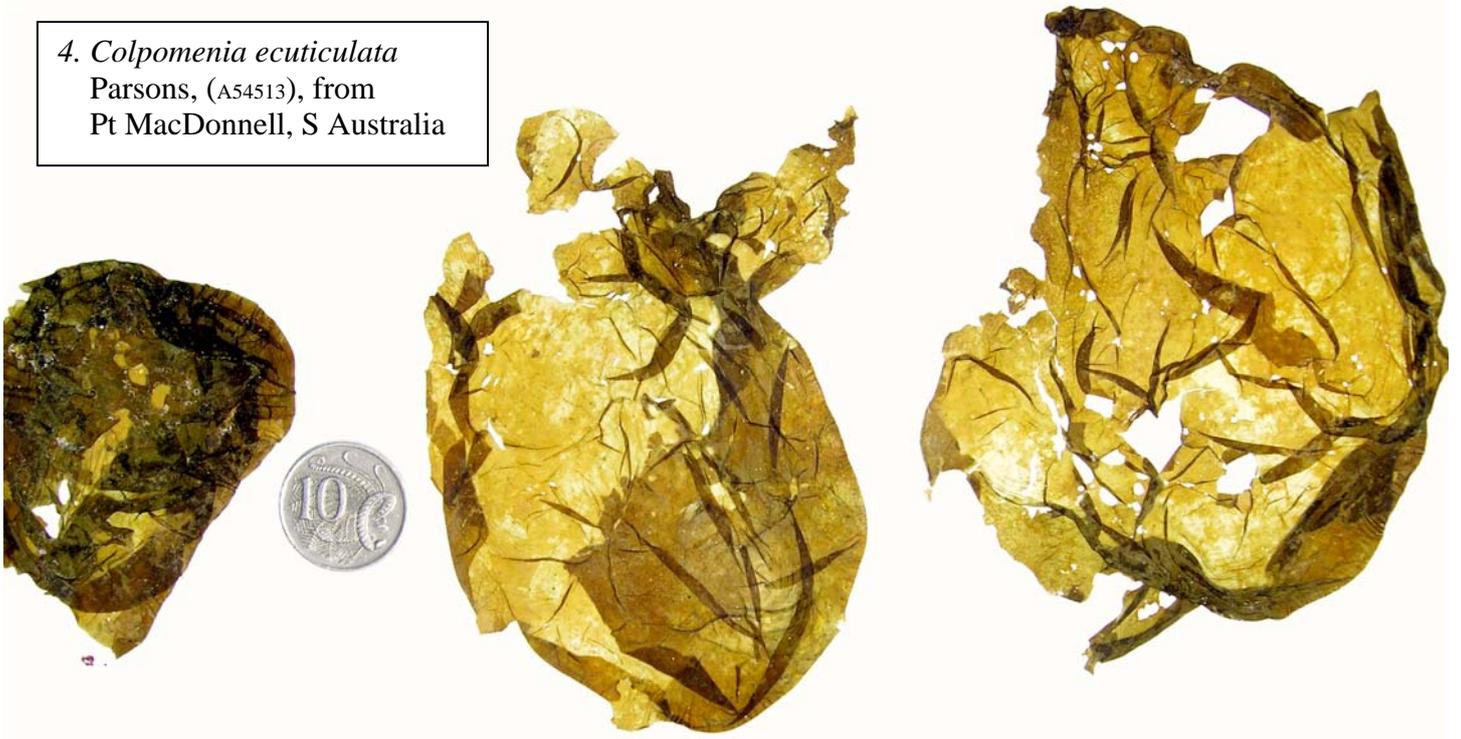


3

- 2, 3. sections through the skin showing the middle layer (medulla, **med**) of large, colourless cells becoming smaller towards the surface, 2-celled photosynthetic hairs (**ph ha**) and 2-rowed sporangia (**plur spor**)

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

4. *Colpomenia ecuticulata*  
Parsons, (A54513), from  
Pt MacDonnell, S Australia



5. Magnified surface view stained blue, (A54513, slide 7499), showing the irregular network of patches (sori, *so*) of sporangia and *separate* tufts of colourless hairs (*ha*) characteristic of the species

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