



MACRO
PLANT



Techniques needed and shape

Classification

Phylum: Rhodophyta; Order: Nemiales; Family: Liagoraceae

*Descriptive name

§southern liagora; chalky weed

Features

1. brownish-red with a chalky white covering, sometimes slimy, 50 – 150mm tall
2. main branches (axes) 1-2mm wide, with short, **forked** side branches, denuded below near Perth, W Australia to Victoria.

Occurrences

Usual Habitat

on rock in shallow water and in reef pools

Similar Species

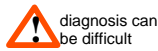
Liagora harveyana, but that is more regularly forked and short side branches are absent

Description in the Benthic Flora Part IIIA, pages 93, 97, 98-99

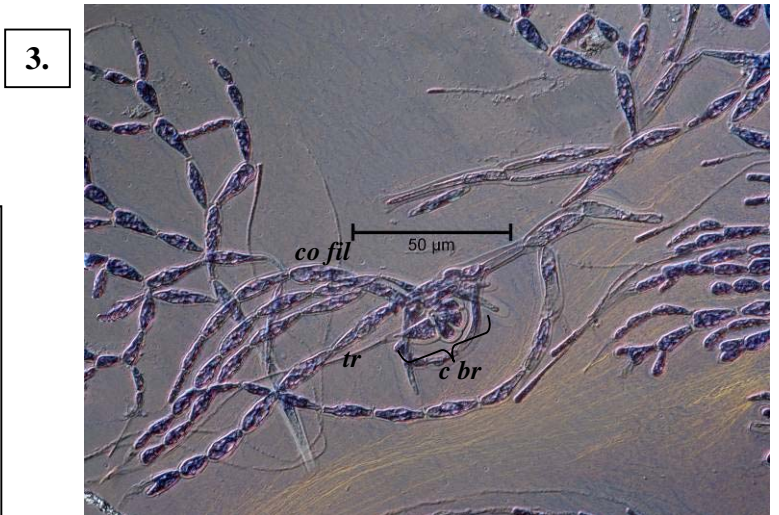
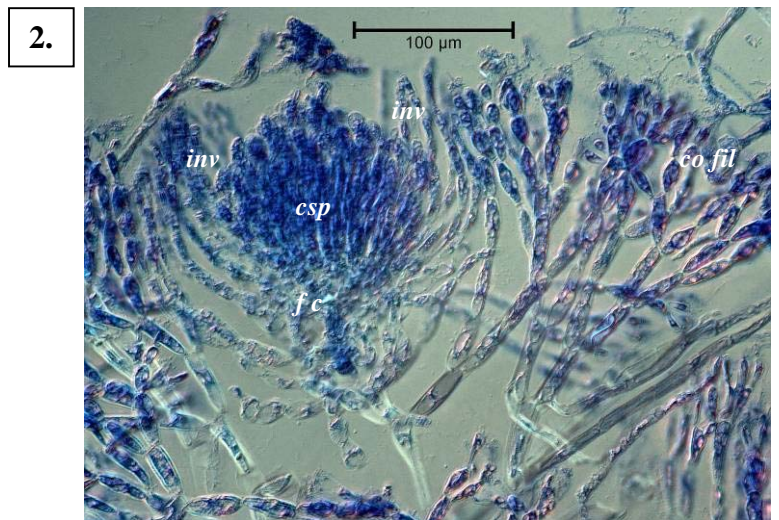
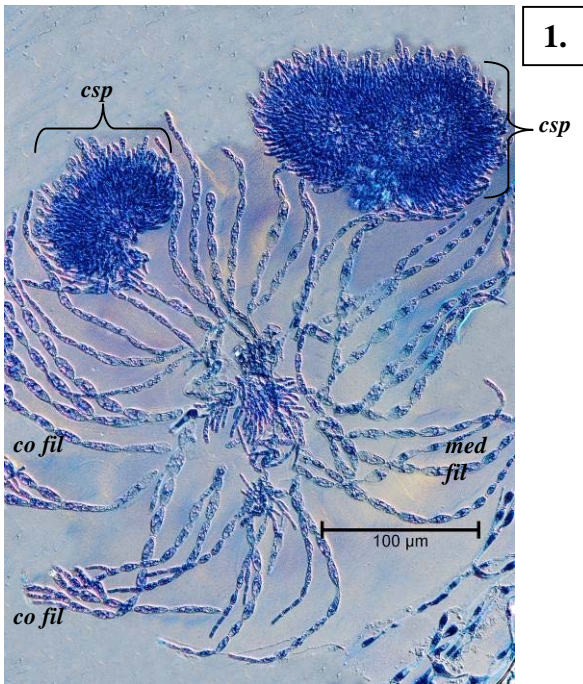
Special Requirements

dissolve the limey coating with dilute acid and view a tissue squash microscopically to find

1. core (medulla) of a twisted mass of branched threads, outer layers (cortex) of tufts of smaller, branched, egg-shaped cells
2. in the cortex of female plants, balls of dense threads, the products of fertilisation with
 - basal large (fusion) cell formed from merging of cells
 - dense, branched fertile cells ending in short chains of carposporangia
 - loose wrapping (involucre) of threads
3. early female stages with **curved**, 4-celled chain of cells (carpogonial branch) ending in a fine hair (trichogyne), attached to the lower parts of cortical branches



Details of Anatomy



Tissue squashes of *Liagora wilsoniana*, de-calcified, stained blue and viewed microscopically

1. core (medulla) threads (*med fil*), outer (cortex) threads (*co fil*) and products of fertilisation (carposporophytes, *csp*) (A19127 slide 0234)
2. details of female tissue squash including fusion cell (*fc*) and involucre (*inv*) (A4442 slide 0236)
3. early fertile branch (carpogonial branch, *c br*) with long trichogyne (*tr*) (A19127 slide 0234)

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 Herbarium, January 2012

4.



5.

Liagora wilsoniana from S Australia
 4. in shallow water on an outer part of the reef, Port MacDonnell, S Australia (A31670)
 5. detail of the short side branches along axes, characteristic of the species from a drift specimen, Seal Bay, Kangaroo I. (A31051)



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