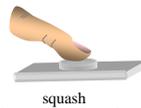


Techniques needed and shape



Classification

Phylum: Rhodophyta; Order: Gigartinales; Family: Nemastomataceae

*Descriptive name

slippery red leafy-weed

Features

plants red-red brown, slightly mottled, 150-500mm tall, of thin, slippery, forked, leafy blades, 20-70mm (-150mm) broad, edges ruffled and with occasional small side branches, arising from a narrow stalk

Occurrences

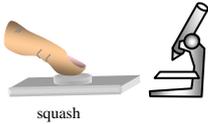
S New Zealand. SE S Australia to Victoria and SE Tasmania

Usual Habitat

on rock in relatively shallow water (to 7m deep)

Special requirements

gently squash tissue under a coverslip and view microscopically to find



- central (medulla) mass of intertwined threads; outer layers (cortex) of branched chains of egg- or box-shaped cells facing outwards, inner cells large grading to small, coloured outermost cells
- in sporangial plants: scattered tetrasporangia in outer layers, divided irregularly in a cross (cruciate) pattern
- in female plants: patches of large carposporangia in outer layers, attached to inner cortical cells with adjacent threads (connecting filaments). Patches of male spermatangia may also be present on the same plant (a monoecious condition)

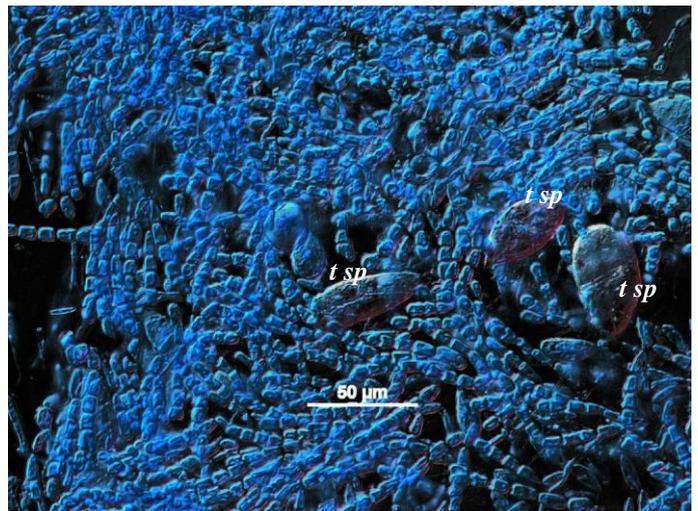
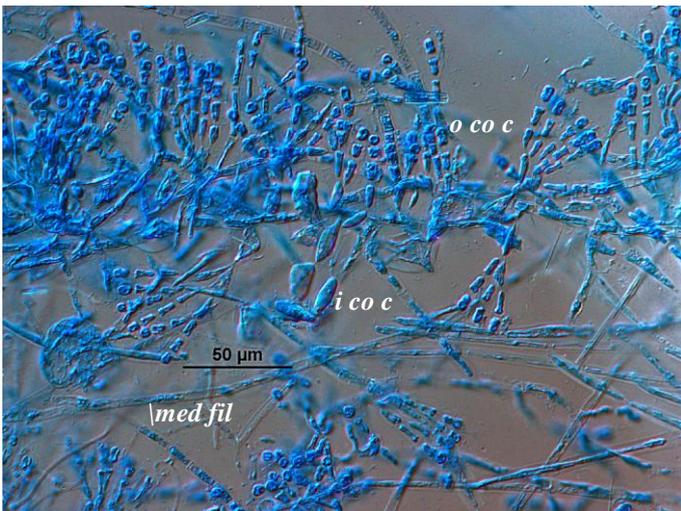
Similar Species

other leafy members of the Nemastomataceae (*Schizymenia*, *Platoma*)

Description in the Benthic Flora

Part IIIA, pages 275, 277, 279

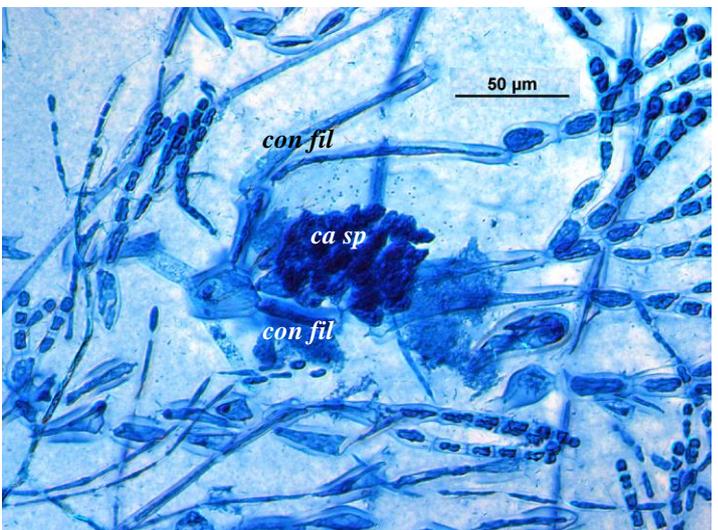
Details of Anatomy



1.

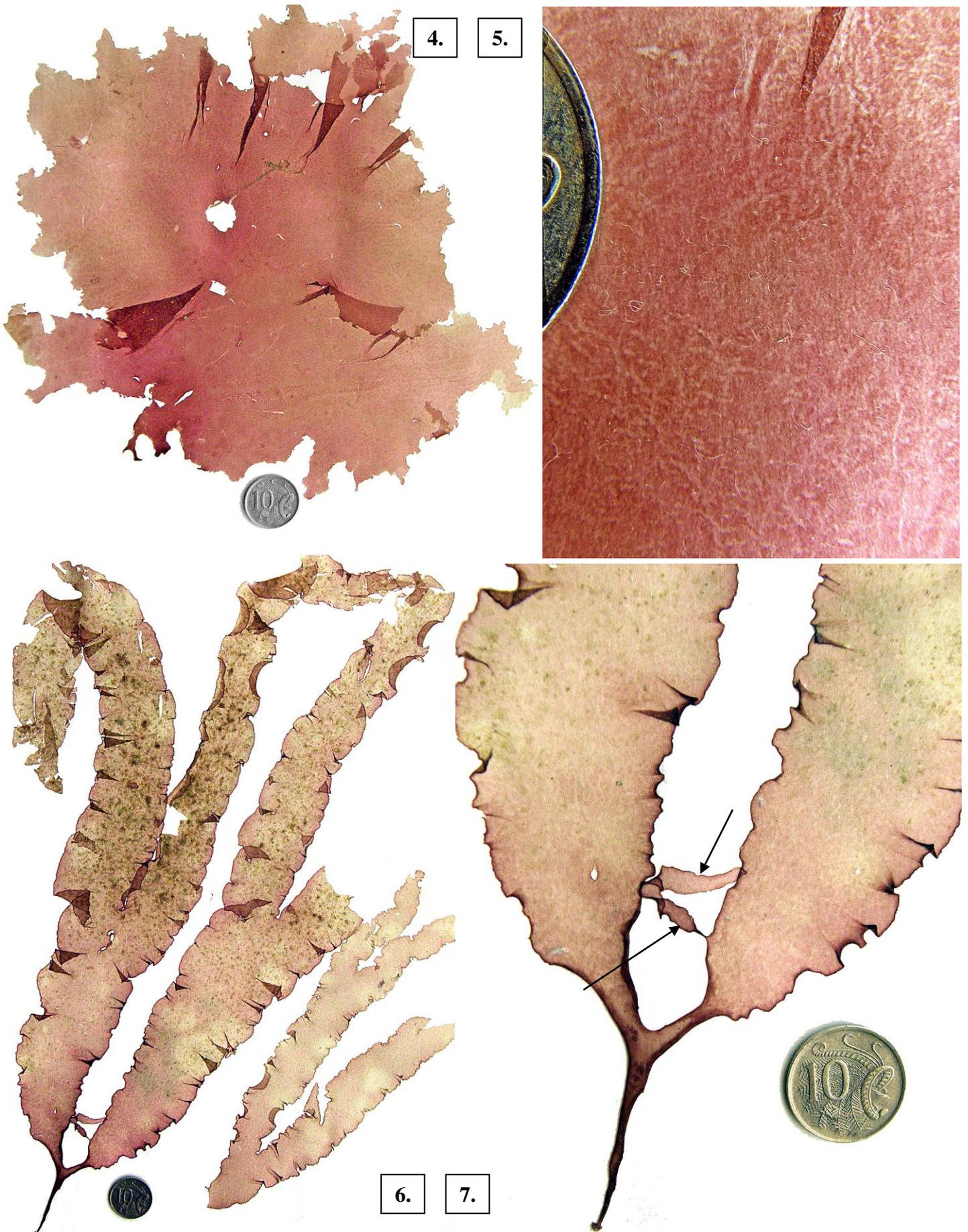
2.

3.



Tissue squashes of *Tsengia laingii* (slide 12261) stained blue and viewed microscopically

1. mix of tissue types: branched chains of the outer layer (cortex), small cells outermost (*o c o c*) and larger inner cells (*i c o c*), intertwined threads of the core (medulla, *med fil*)
2. cortical cells with tetrasporangia (*t sp*)
3. patch of carposporangia (*ca sp*) on an inner cortical cell bearing connecting threads (*con fil*)



Tsengia laingii (Kylin) Womersley & Kraft at different magnifications

4, 5. a drift plant (A61779) from Port MacDonnell S Australia, with broad blade and mottled surface

6, 7. from Taroona Tasmania, 4-6, deep (A35160): fronds of more usual width, edges ruffled, stalk prominent, two short side branches (arrowed)