

Techniques needed and shape



Classification

Division: Rhodophyta; Family: Delesseriaceae; Tribe: Delesserioideae
Group: Hemineura

*Descriptive name

Untidy or Fringed Red Cellophane Plant (referring to the variable shape of numerous, curly edge-proliferations of the main fronds)

Features



plants 50-400 mm tall, red to red-brown consisting of *flat* main blades (axes) 5-20 mm wide, with midline veins and at their *edges*, numerous smaller, curly, ragged spindle-shaped side-blades, 2-4mm wide

Variations

width of main (axial) blades and degree of branching are variable; minute spines may occur at blade edges; fuzzy blue-green algae threads may coat blades

Special requirements



view blades microscopically to find

- single apical cells that each initially produce 4 surrounding cells (pericentral cells) and continue the growth of the blade
- microscopic veins of side-blades are *unconnected* to midline veins of axes

Occurrences

widespread in southern Australia, from W. Australia to Tasmania

Usual Habitat

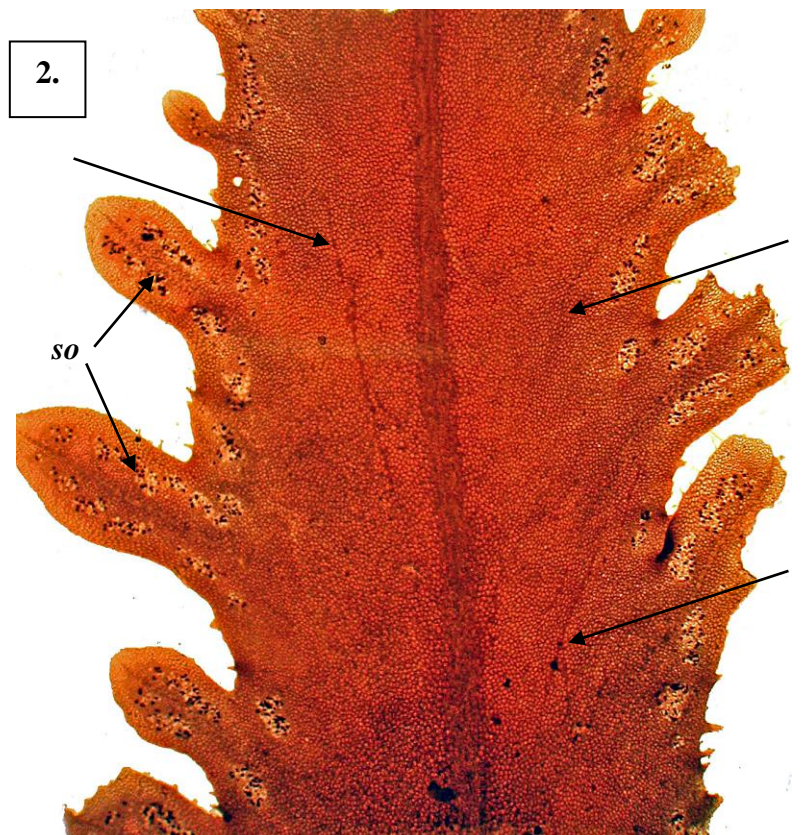
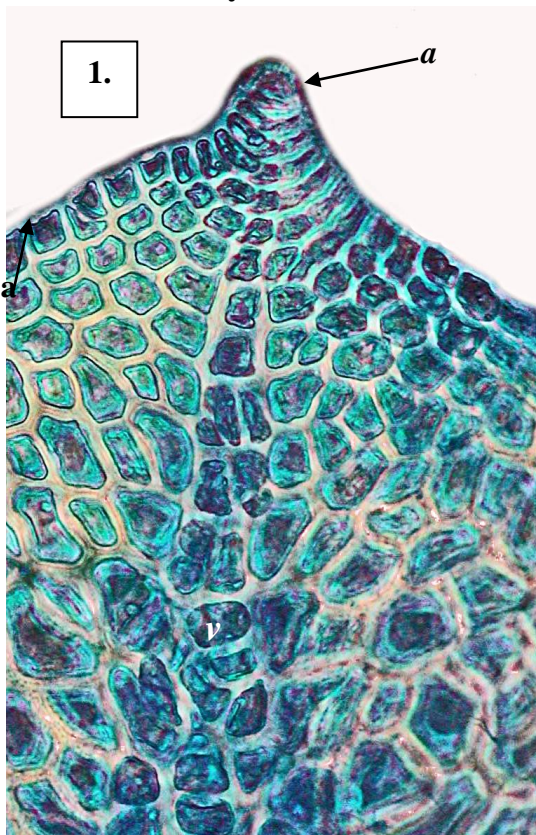
on rock, often in deep water

Similar Species

superficially looks like some *Gigartina* species

Description in the Benthic Flora Part IIID , page 33-34

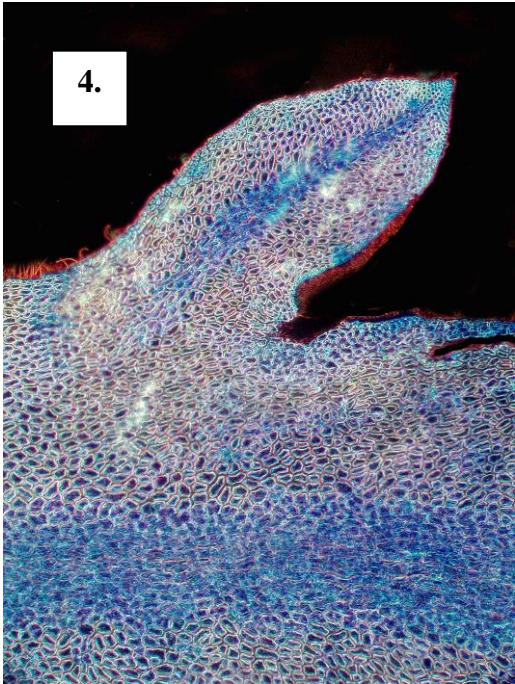
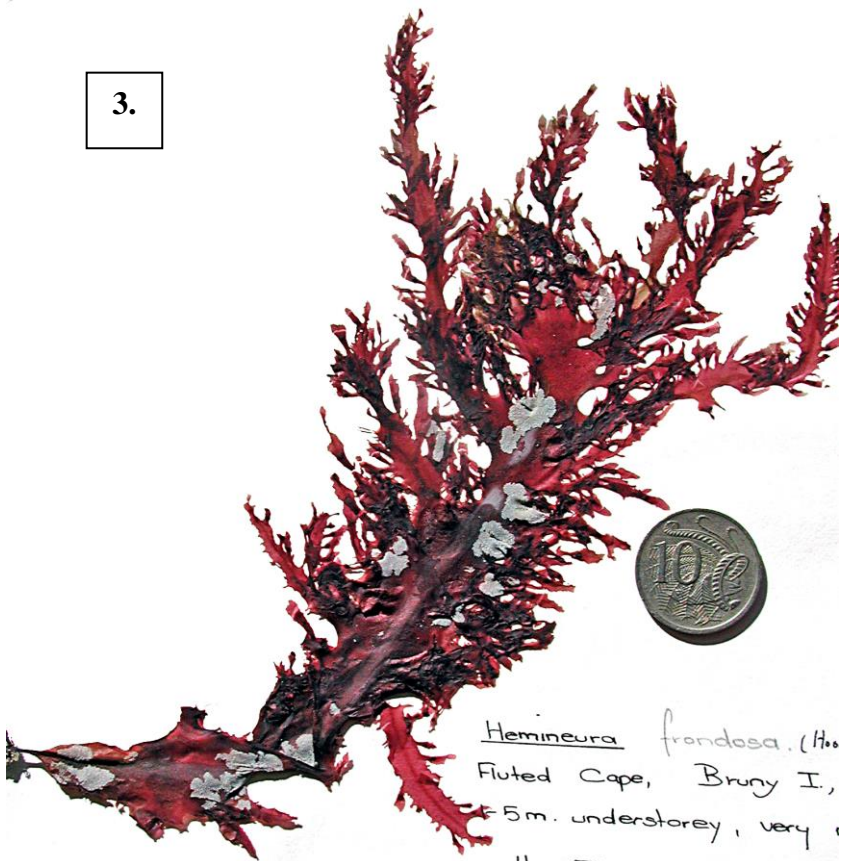
Details of Anatomy



Hemineura frondosa viewed microscopically

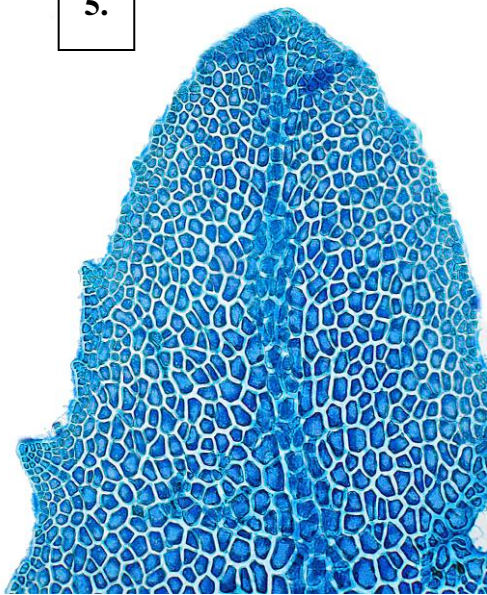
1. blade apex stained blue: single apical cell (*a*), developing midline vein (*v*) (slide 11594)
2. main (axis) and side blades: faint side veins (arrowed) *unconnected* to axis midline vein; patches of tetrasporangia (sori, *so*); minute marginal spines (A70506)

3.



4.

5.



6.



Hemineura frondosa (Hooker & Harvey) Harvey
 3, 6. understory plants from 5m deep, Fluted Cape, Bruny I., Tasmania A41755
 4. interference microscopy of part of an axis and side blade: veins (stained blue) are unconnected (slide 11594)
 5. blade tip stained blue and viewed microscopically: blade edge spines, midline vein prominent (slide 11594)

* Descriptive names are inventions to aid identification, and are not commonly used
 "Algae revealed", R N Baldock, State Herbarium S Australia, March 2003; additions August 2007, edited April 2014