

**Techniques needed and shape**



**Classification**

\*Descriptive name

**Features**

**Occurrences**

**Usual Habitat**

**Similar Species**

**Description in the Benthic Flora**

**Special Requirements**

Phylum: Rhodophyta; Order: Bonnemaisoniales; Family: Naccariaceae  
slimy weed

1. sexual plants 40-140 mm tall, brown-red, slimy, much branched radially, branches cylindrical, about 1 mm wide, male and female structures found on the same plants.
2. spore plants unknown (minute and lying flat in other species)

Coffin Bay SA to Western Port Vic., around Tasmania and N to Coffs Harbour, NSW on rough-water coasts, in shallow water, in summer

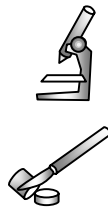
members of the Order: Nemaliales (e.g. *Helminthocladia*, *Helminthora*, *Gloiophloea*), but these do not have the parenchymatous cells near the base and are reproductively different

IIIB, pp 354-356

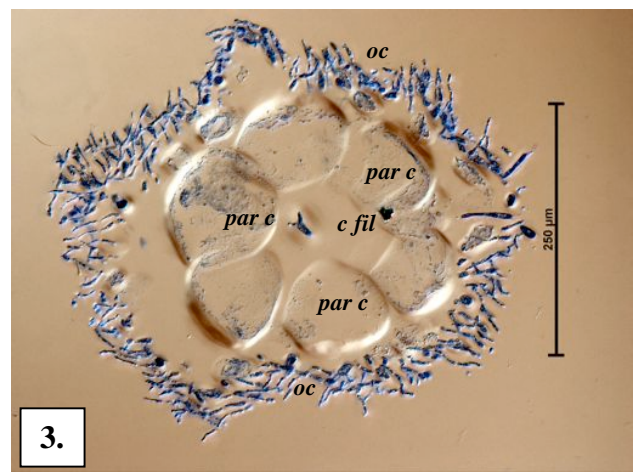
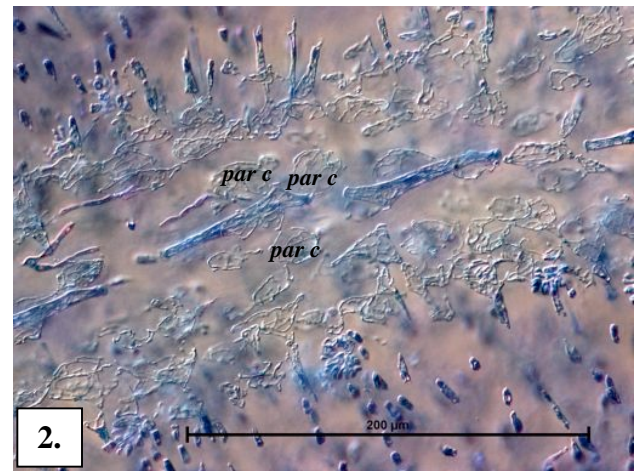
1. view tips microscopically to find:

- a central thread produced from a single tip cell dividing at an angle (obliquely)
- single bunches of branched threads arising from each thread cell, cells pointing outwards and slightly upwards, often ending in finger-like hairs
- occasional dense clusters of cells often found near developing sexual structures

2. cut a cross section near the plant base to view the central thread encircled by large, equal-sided (parenchyma) cells (formed from basal cells of side cell clusters)



**Details of Anatomy**



Microscope views of *Naccaria naccarioides*:

1. branch tip: single tip cell (*ap c*), central thread (*c fil*), side clusters of threads, some ending in hairs (*h*), bunch of additional cells (*st c*) (A60806 slide 12042)
2. side view further down a branch: parenchyma cells (*par c*) forming around the central thread
3. cross section near the plant base: central thread (*c fil*), parenchyma cells (*par c*) outermost cells (*oc*) (A29942, slide 0700)

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"Algae Revealed", Robert Baldock, State Herbarium S Australia, November, 2013



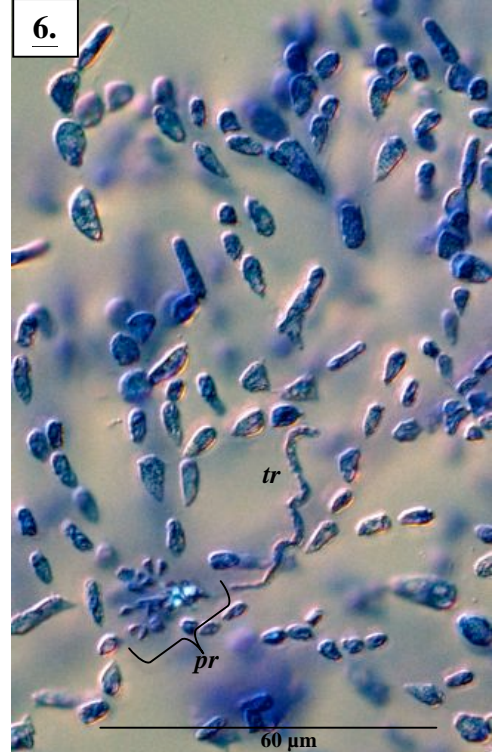
4.



5.



6.



4, 5. two magnifications of *Naccaria naccarioides* (J Agardh)  
Womersley & Abbott A60806 from Gunyah Beach, Coffin Bay Pen.  
6. highly magnified young female structure (procarp, *pr*) with a  
prominent spiral trichogyne (*tr*) (A60806 slide 12042)

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