

Bangia atropurpurea
subsp. *atropurpurea*
 (Roth) C Agardh

45.040

Techniques needed and plant shape



Classification

Phylum: Rhodophyta; Order: Bangiales; Family: Bangiaceae

***Descriptive name**



dark red threads

Features

plants consist of unbranched, *fine, red-brown threads* attached to hard surfaces

Occurrences

worldwide in temperate waters. In Australia, from Fremantle, W Australia to S Queensland

Usual Habitat

on mid intertidal rock or timber

Special requirements



view the threads microscopically to find:

1. threads are initially *unbranched* with single lines of cells *0.5- 1.5 times long as broad*. Cells divide longitudinally several times forming outward facing cell clusters
2. cells of threads have a common and *thick* sheath.
3. female plants have fertile cells (carpogonia) some of which show *beaked* protrusions (prototrichogynes) for capturing spermata.
4. the products of fertilisation (carposporangia) occur in packets of 8-16
5. male plants have spermata in *squarish* packets of 16-64.

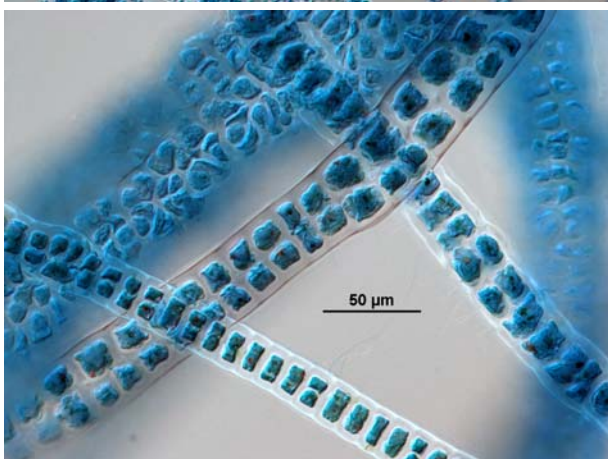
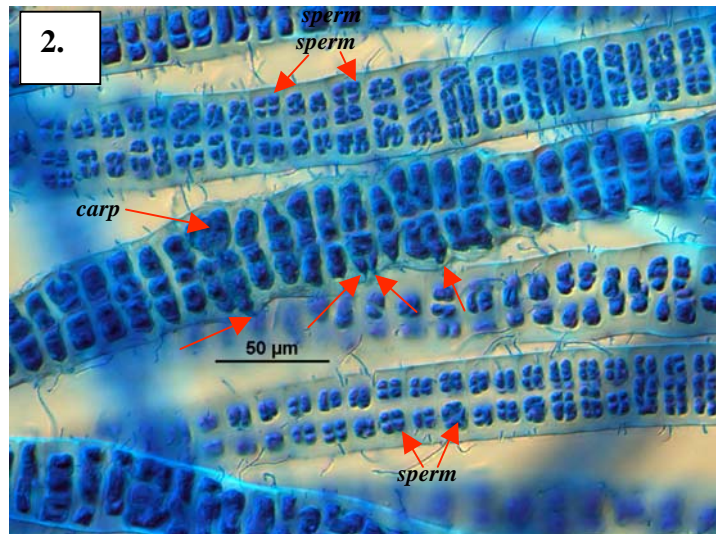
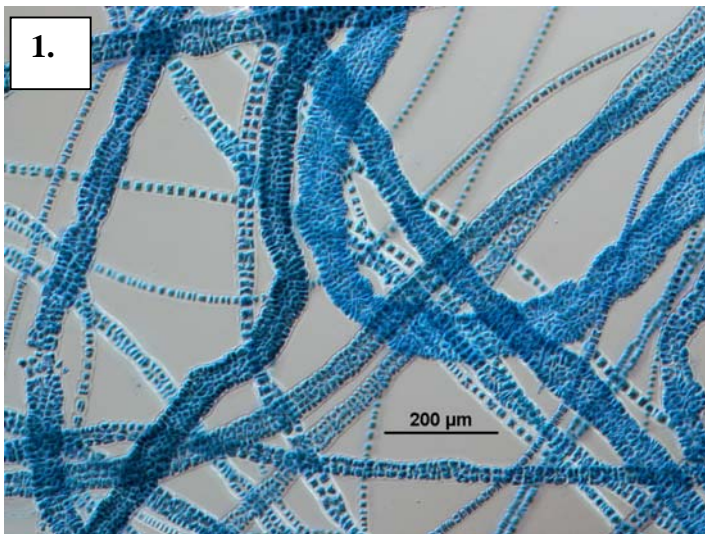
Similar Species

Bangia atropurpurea subsp. *brevisegmenta*, but that species is found *lower* in the intertidal *on mussel shells*. Spermata are also in *elongate* packets.

Description in the Benthic Flora

Part IIIA, pages 32, 34, 36

Details of Anatomy



3.

Various magnifications of threads of *Bangia atropurpurea* subsp. *atropurpurea* stained blue

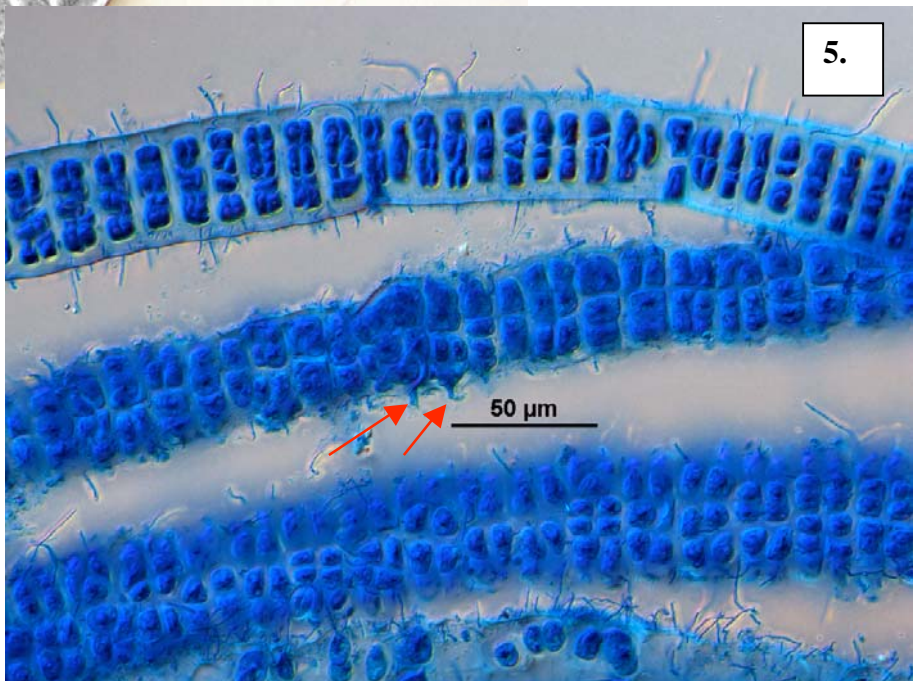
1. threads of different age (A28032 slide 0436)
2. male and female threads: *squarish* packets of male spermata (*sperm*); female carpogonia (*carp*) with *stubby* prototrichogynes (arrowed) (A29541 slide 10570)
3. young threads with box-shaped cells and some dividing longitudinally (A28032 slide 0436)

* Descriptive names are inventions to aid identification, and are not commonly used
 "Algae Revealed" R N Baldock, S Australian State Herbarium January 2010

4.



5.



4. *Bangia atropurpurea* subsp. *atropurpurea* (A53928) in the mid intertidal on jetty pylons, Port Stanvac, S Australia
5. female threads stained blue and viewed microscopically showing stubby prototrichogynes that capture male spermata (arrowed) (A29541 slide 10570)

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