Techniques needed and plant shape

Classification
Phylum: Rhodophyta; Order: Ceramiales; Family: Ceramiaceae; Tribe: Antithamnieae

*Descriptive name
tiny red threads

Features
plants of microscopic, naked (ecorticate) horizontal (prostrate) threads, producing upright branches about 7mm tall

Special requirements
1. view microscopically to find
   - main threads (axes) with side branches (whorl branchlets), of 8-10 elongate cells occurring singly near the plant tips, in opposite pairs from each axial cell
   - opposite pairs of single cells ending in long hairs arising from each whorl branchlet cell
   - bright glands lying along 2-celled branches on the whorl branchlets
2. tetrasporangia on a small stalk cell (pedicel) divided in a cross pattern (cruciate) or with 2 opposite pairs of spores (decussate pattern)

Occurrences
only known from a drift specimen, Arno Bay, S Australia.

Usual Habitat
unknown

Similar Species
Antithamnion cruciatum but that species is densely branched, cells are wider and shorter, and whorl branchlets are forked, paired single cells absent

Description in the Benthic Flora
Part IIIC, page 114, and fig. 50

Details of Anatomy

* Descriptive names are inventions to aid identification, and are not commonly used

“Algae Revealed” R N Baldock, S Australian State Herbarium, February 2007
Antithamnion uniramosum

Athanasiadis (A67213 slide 16615) stained blue and viewed microscopically

4. branching pattern and numerous hairs, opposite pairs of single cells (arrowed) just visible on the whorl branchlets

5. detail of a whorl branchlet. Opposite pairs, of single cells (pr₁, pr₂), ending in colourless hairs (ha) on each cell of the whorl branchlet, characteristic of this species, can be seen

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