Predaea huismanii Kraft

A SPECIES WITH FEW RECORDS

45.360

Techniques needed and shape

Classification Phylum: Rhodophyta; Order: Gigartinales; Family: Nemastomataceae

***Descriptive name** red Jelly-straps

Features plants consist of flat, red, ***gelatinous*** blades, 10-20mm tall, split into lobes, about 5mm thick and 10mm wide

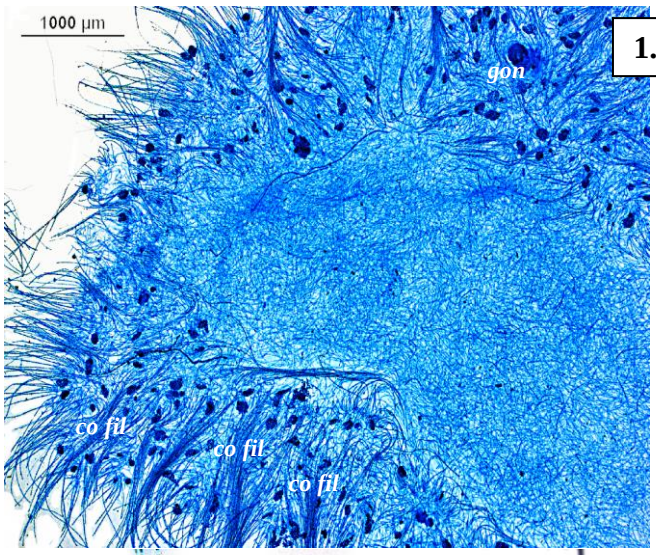
Special requirements make a tissue squash of a branch tip and view microscopically to find

- a central core of ***loosely*** twined threads (medullary filaments), outer layer of tufted threads (cortex filaments) ending in fine threads ***protruding*** from the surface of the blade
- when fertile, male (spermatangia) and female structures are found on the ***same*** plants. Young female structures have additional filaments associated with the events at fertilisation, mature stages consist of numerous, scattered, minute balls of spores growing ***outwards*** in the cortex

Occurrences and Usual Habitat only known from Rottnest I., W. Australia and Pearson I., S. Australia, both 12m deep

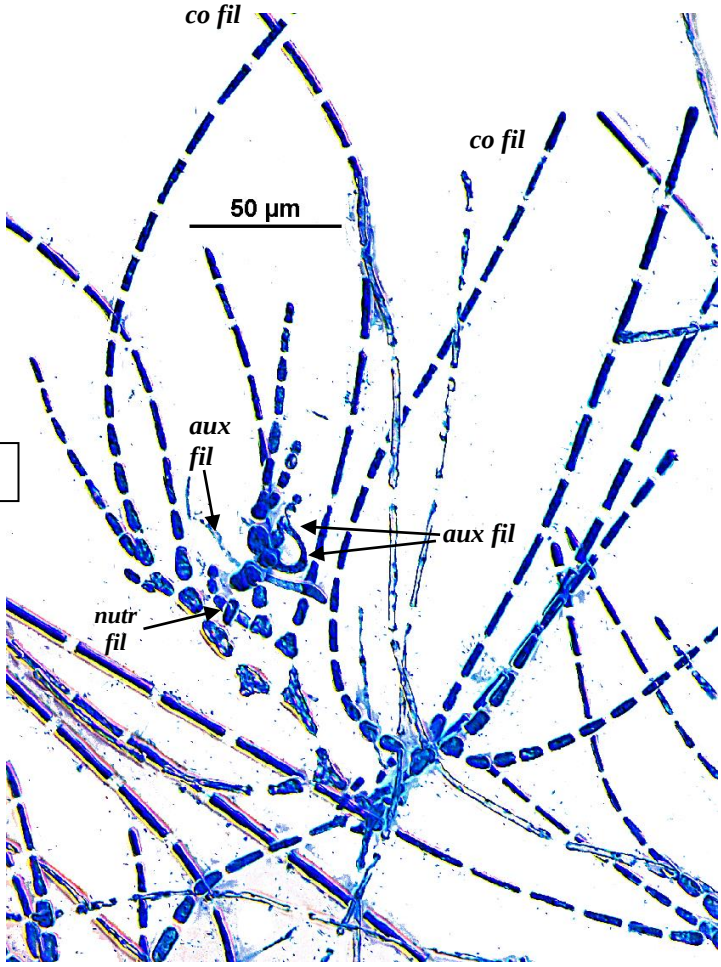
Description in the Benthic Flora Part IIIA, pages 273-274

Details of Anatomy

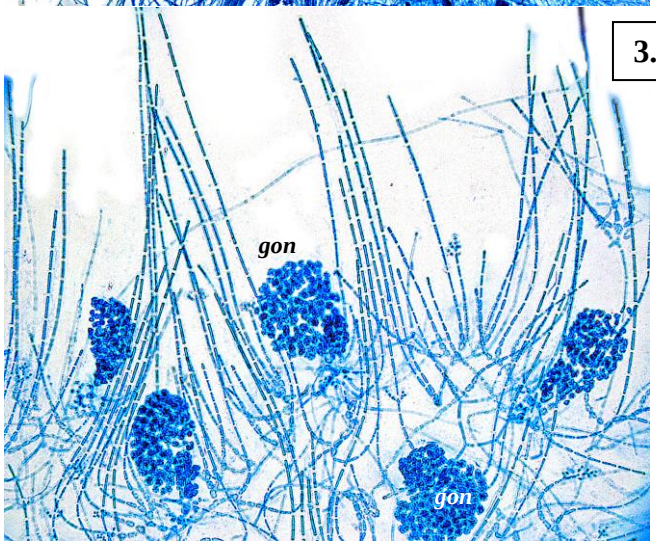


1.

2.



3.



Predaea huismanii (slide 7479): tissue squashes stained blue and viewed microscopically

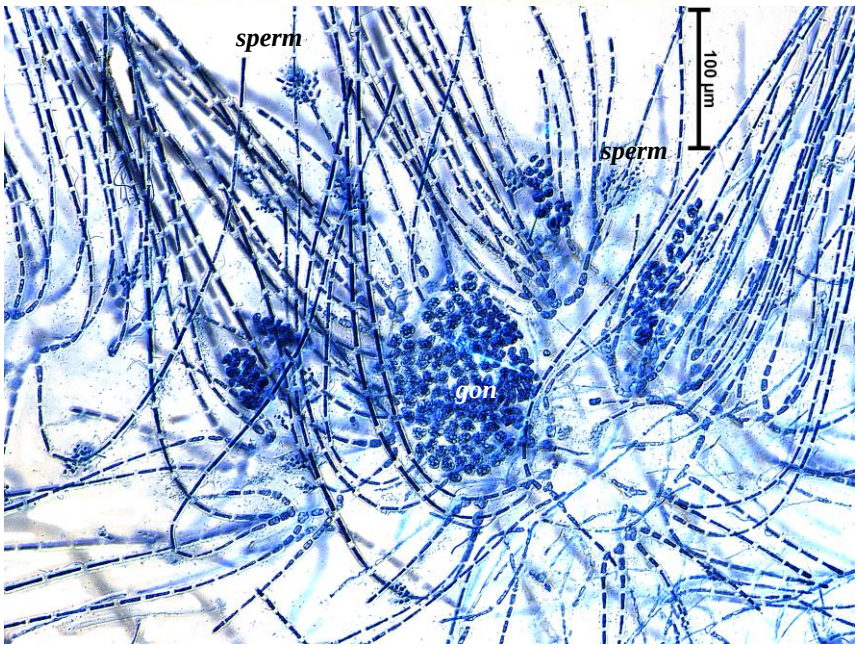
1. core (medulla, ***med***) of fine, intertwined threads, outer layers of tufted threads (cortex filaments, ***co fil***), dark patches of developing spores (gonimoblast, ***gon***)
2. female structure just after fertilization: auxiliary cell threads (***aux fil***) that produce the next stage (gonimoblast), adjacent small-celled nutritive threads (***nutr fil***)
3. developing gonimoblast (***gon***)

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

"Algae revealed", R N Baldock State Herbarium S Australia, September 2009; revised August 2014

4.

5.



Predaea huismanii Kraft

4. from Pearson I., S. Australia, 12m deep, A53054
5. specimen stained blue and viewed microscopically: dense balls of cells (gonomoblast, ***gon***) developing, after fertilisation of female structures in the cortex; male spermatia (***sperm***)

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