Faucheopsis coronata (Harvey) Kylin

A SPECIES WITH FEW RECORDS

45.660

Techniques needed and plant shape

MACRO PLANT

Classification Phylum: Rhodophyta; Order: Rhodymeniales; Family: Rhodymeniaceae

***Descriptive name** red straps

Features

plants dark red, 200-500mm tall, slightly gelatinous when fresh, blades narrow, irregularly flat-branched, mature female plants with small, dark, round ball-shaped cystocarps ***protruding*** on the edges and surface of blades.

Special requirements

cut cross sections, including through a cystocarp and view microscopically to find:

- outer layer (cortex) of ***unbranched chains*** of small cells facing outwards, core (medulla) of large, ***thick-walled*** cells and 2-3layers of small threads (***rhizoidal filaments***) circling large medulla cells
- ball-shaped cystocarps each with basal nutritive tissue, masses of spores, inner layer of chains of cells and small opening (ostiole),

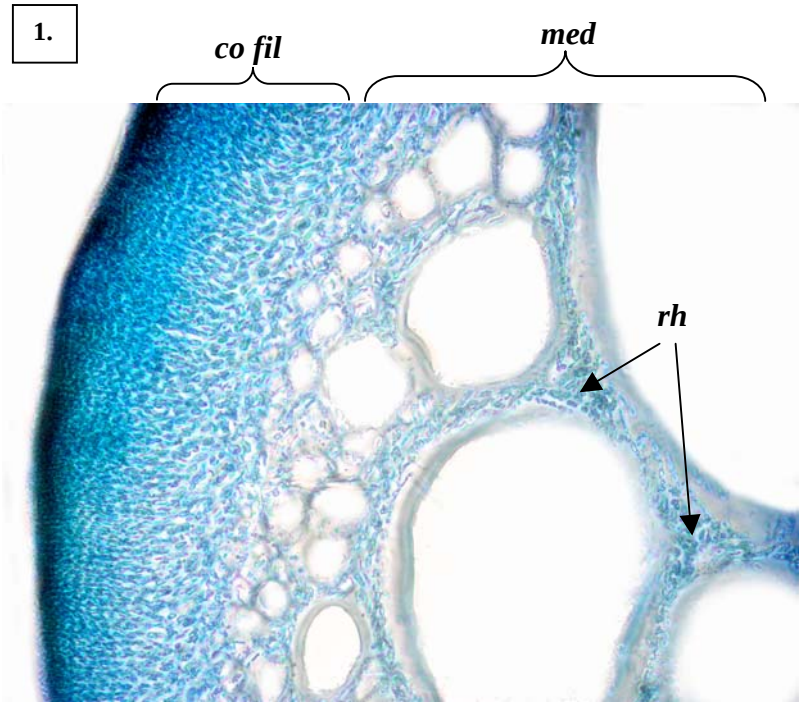
Occurrences only known from the original 1850's collection at Pt Phillip Heads, Victoria, and drift specimens from Pt MacDonnell, S. Australia

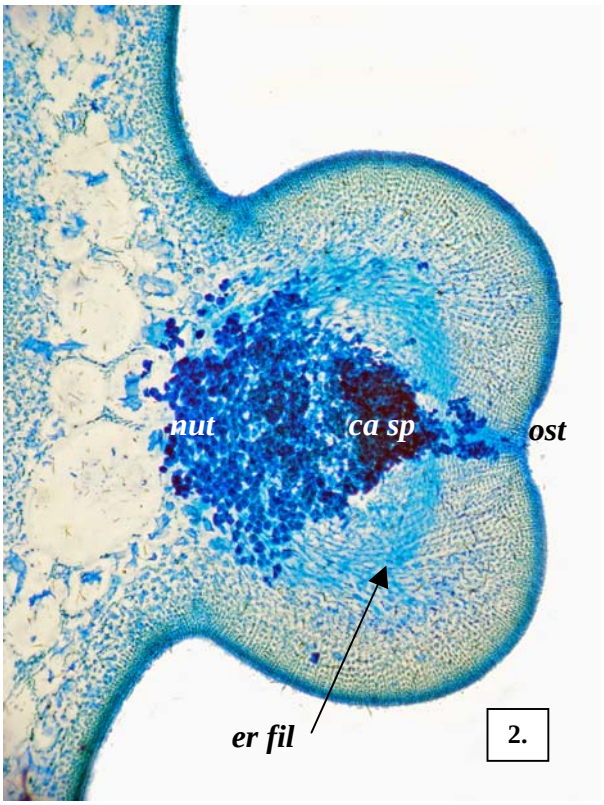
Usual Habitat possibly a deep water species

Similar Species flat-bladed *Rhodymenia* spp, but these are gristly in texture, and although their large medullary cells may be mixed with smaller ones they are ***not*** ringed with rhizoidal threads as in *Faucheopsis*.

Description in the Benthic Flora Part IIIB, pages 118-119

Details of Anatomy



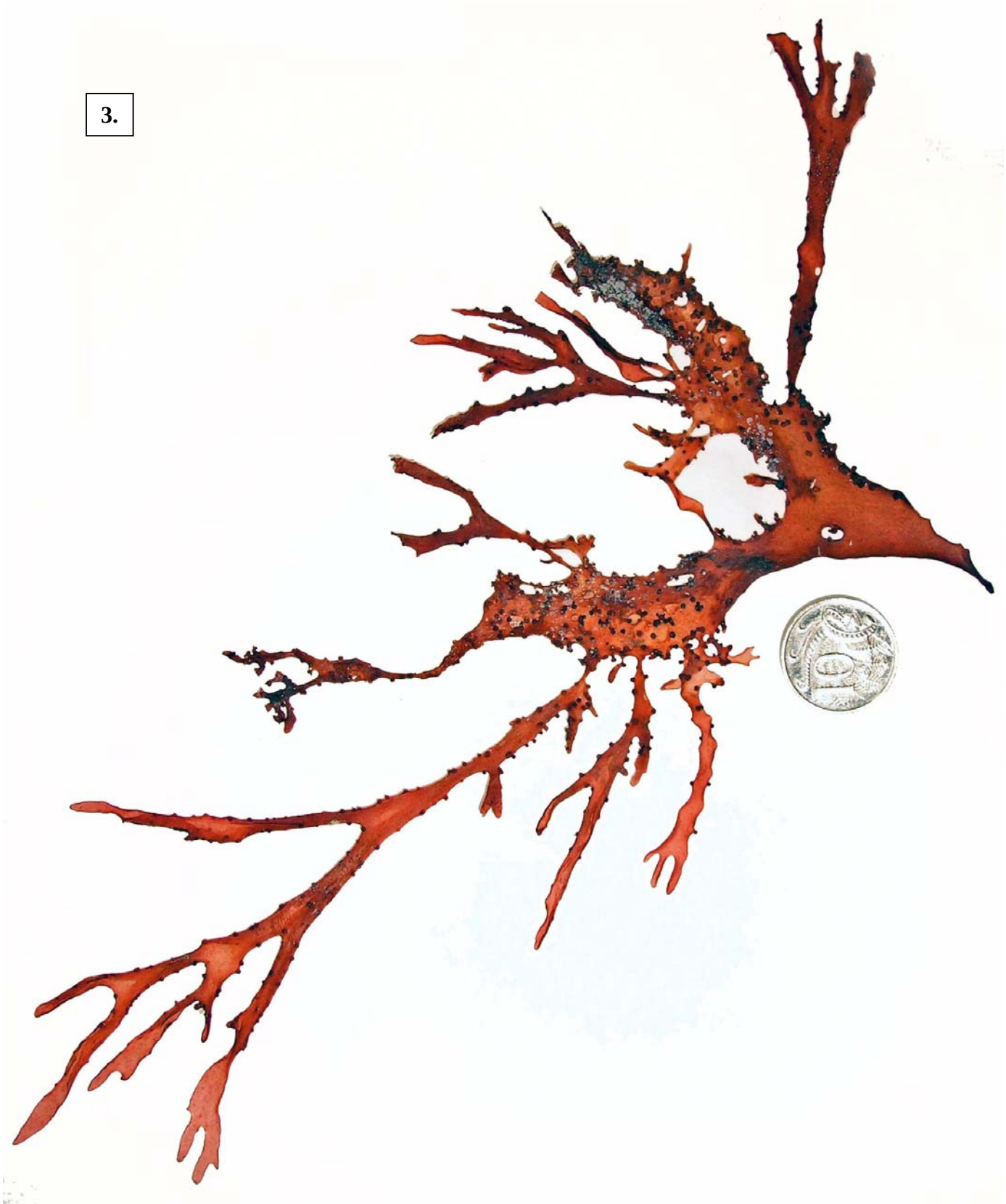


Cross sections of *Faucheopsis coronata* A61466 stained blue and viewed microscopically at different magnifications:

1. outer layer of unbranched chains of small cells (cortical filaments, *co fil*), core of large, thick-walled cells (medulla, *med*) ringed with 2-3 layers of fine threads (rhizoids, *rh* (slide 14145)
2. cystocarp showing basal nutritive tissue (*nut*), masses of spores (carposporangia, *ca sp*), inner chains of cells (erect filaments, *er fil*) and single opening (ostiole, *ost*) (slide 14144)

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

"Algae Revealed" R N Baldock, S Australian State Herbarium, January 2006



3. *Faucheopsis coronata* (Harvey) Kylin, A61466, cast up at Pt MacDonnell, S. Australia, with dark red cystocarps on the surface and edges of fronds