

Laurencia distichophylla J Agardh

A SPECIES WITH FEW RECORDS

45.940.84

Techniques needed and plant shape



MICRO PLANT



Classification

Division: Rhodophyta; Family: Rhodomelaceae; Tribe: Laurencieae
narrow, flat-branched *Laurencia*

*Descriptive name

Features



plants dark red, *gristly*, 20-50mm tall, main branches (axes) *flat-branched*, in two regular rows (*distichous*), *compressed*, less than 1mm wide, ending in a depression view microscopically to find

Special requirements



- tetrasporangia in *parallel lines* in short, *cylindrical* branches
- single, stalkless* cystocarps the products of fertilisation, in *side* branches

Occurrences

tropical Indian Ocean, the N island of New Zealand, NSW, and in southern Australia, only collected at Wine Glass Bay, Freycinet Peninsula, Tasmania in (intertidal) rock pools in southern Australian species

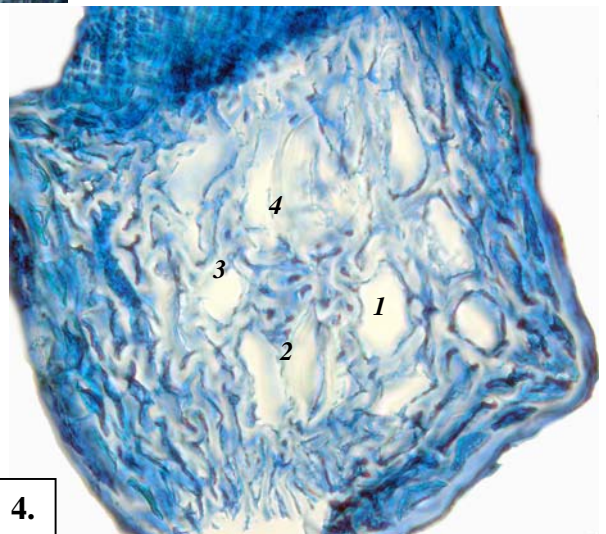
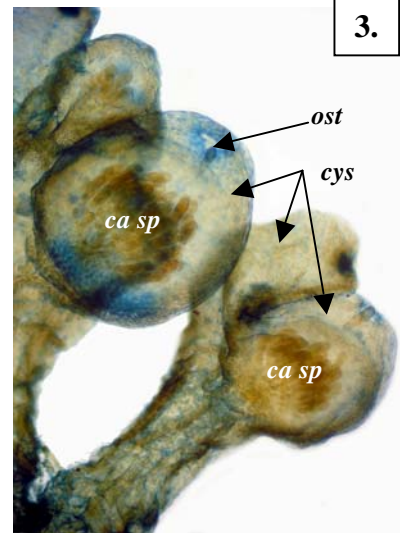
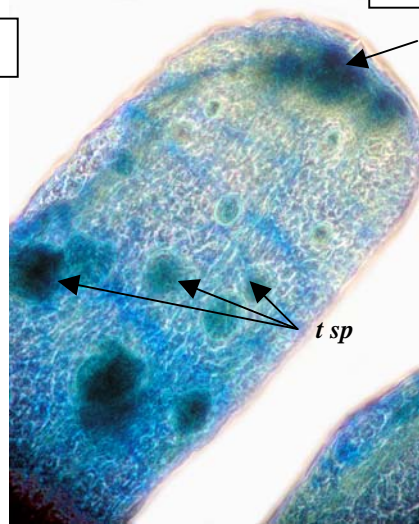
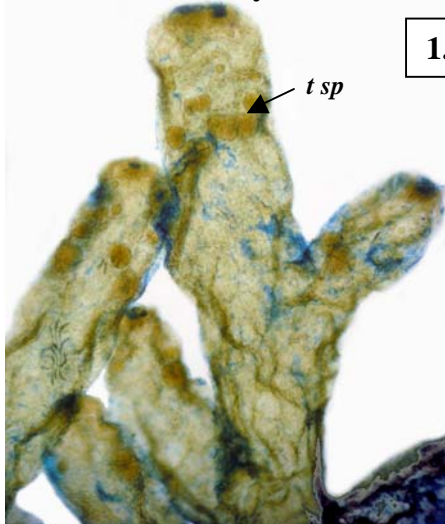
Usual Habitat

Similar Species

Laurencia brongniartii and *L. elata*, but in the first species the compressed branches are wider than 1mm and the latter is larger (120-300 mm tall) with less regular branching

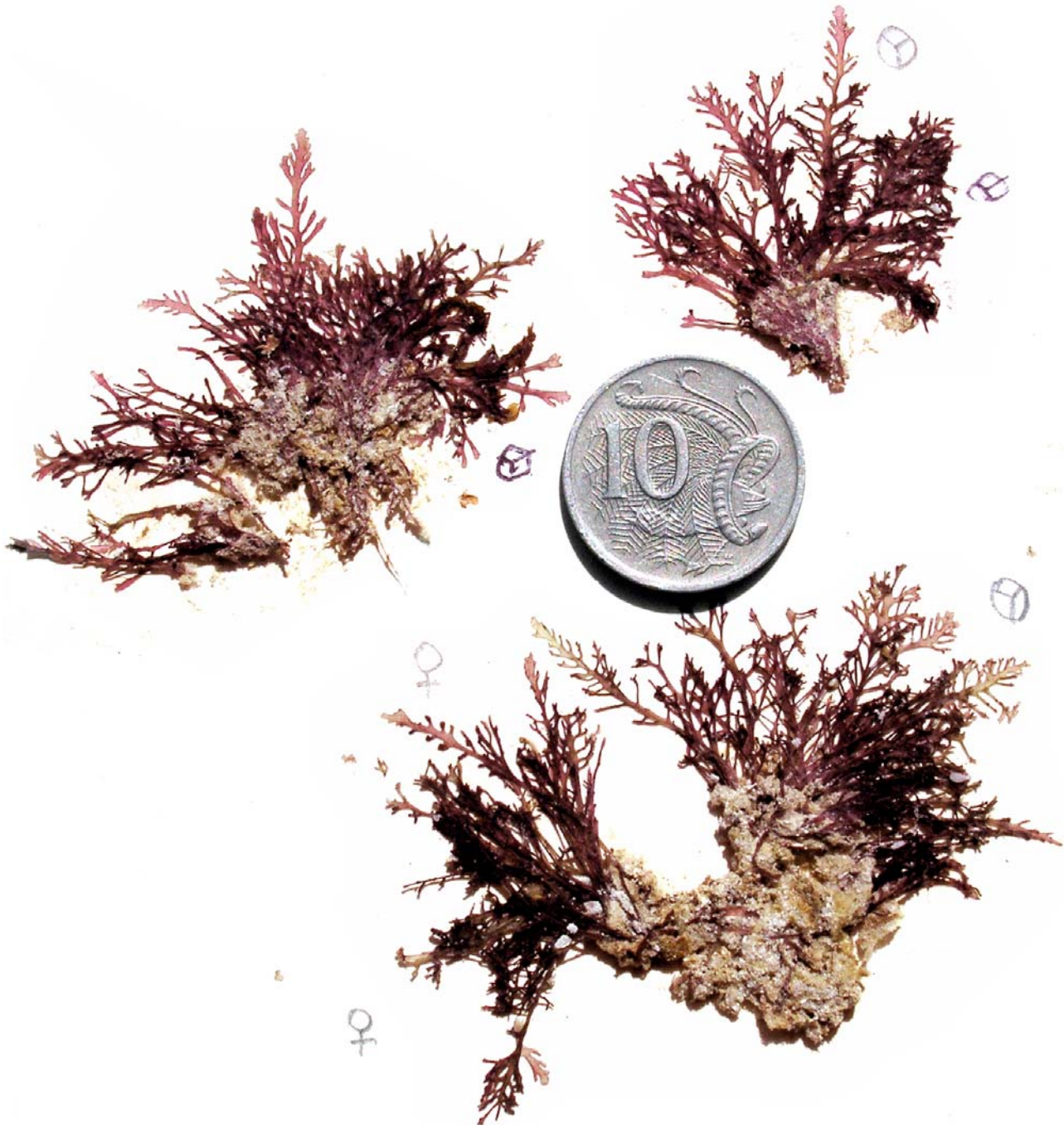
Description in the Benthic Flora Part IIID, pages 480, 481

Details of Anatomy



Laurencia distichophylla A27906 stained blue (some images partially) and viewed microscopically

- short tetrasporangial branches with sporangia (*t sp*) (slide 4533)
- sporangial branch showing the depression at the tip (arrowed), characteristic of all *Laurencia* species, and parallel rows of sporangia (*t sp*) (slide 20211)
- globose, stalkless cystocarps (*cys*), products of fertilisation, with carposporangia (*ca sp*) inside, and single openings (ostioles, *ost*) at the tips (slide 4533)
- cross section of a sporangial branch showing obscure central thread and 4 flanking cells (1,2,3,4) cells obscured by rhizoids, separating the genus *Laurencia* from *Chondrophyucus* which has 5 conspicuous pericentral cells



5. Two magnifications of *Laurencia distichophylla* J Agardh, A27906 from Wine Glass Bay, Freycinet Peninsula, Tasmania, showing the flat-branching pattern in 2 regular rows

* Descriptive names are inventions to aid identification, and are not commonly used
 "Algae Revealed" R N Baldock, S Australian State Herbarium, April 2007