

# *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

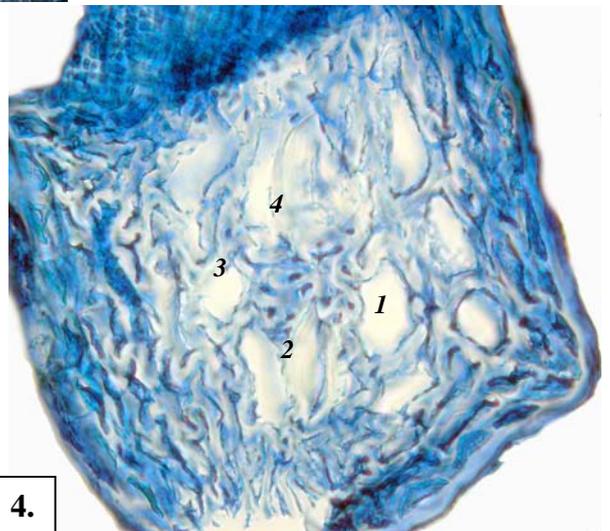
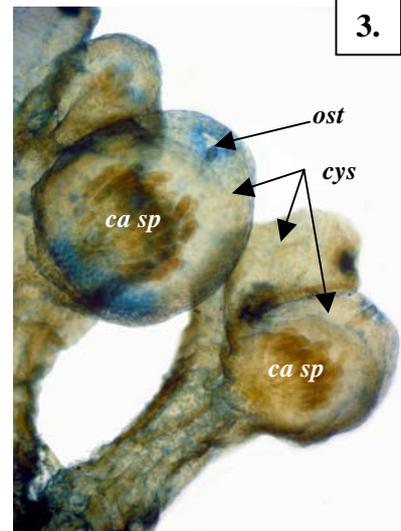
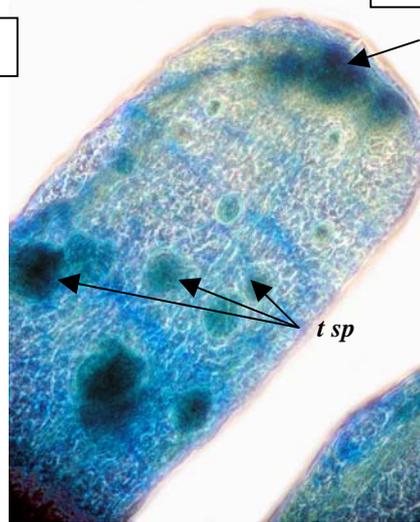
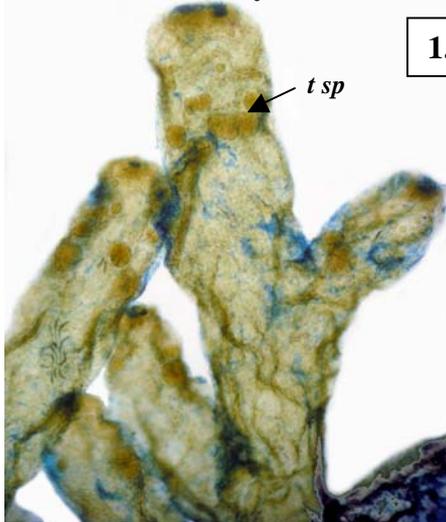
### Usual Habitat

### 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

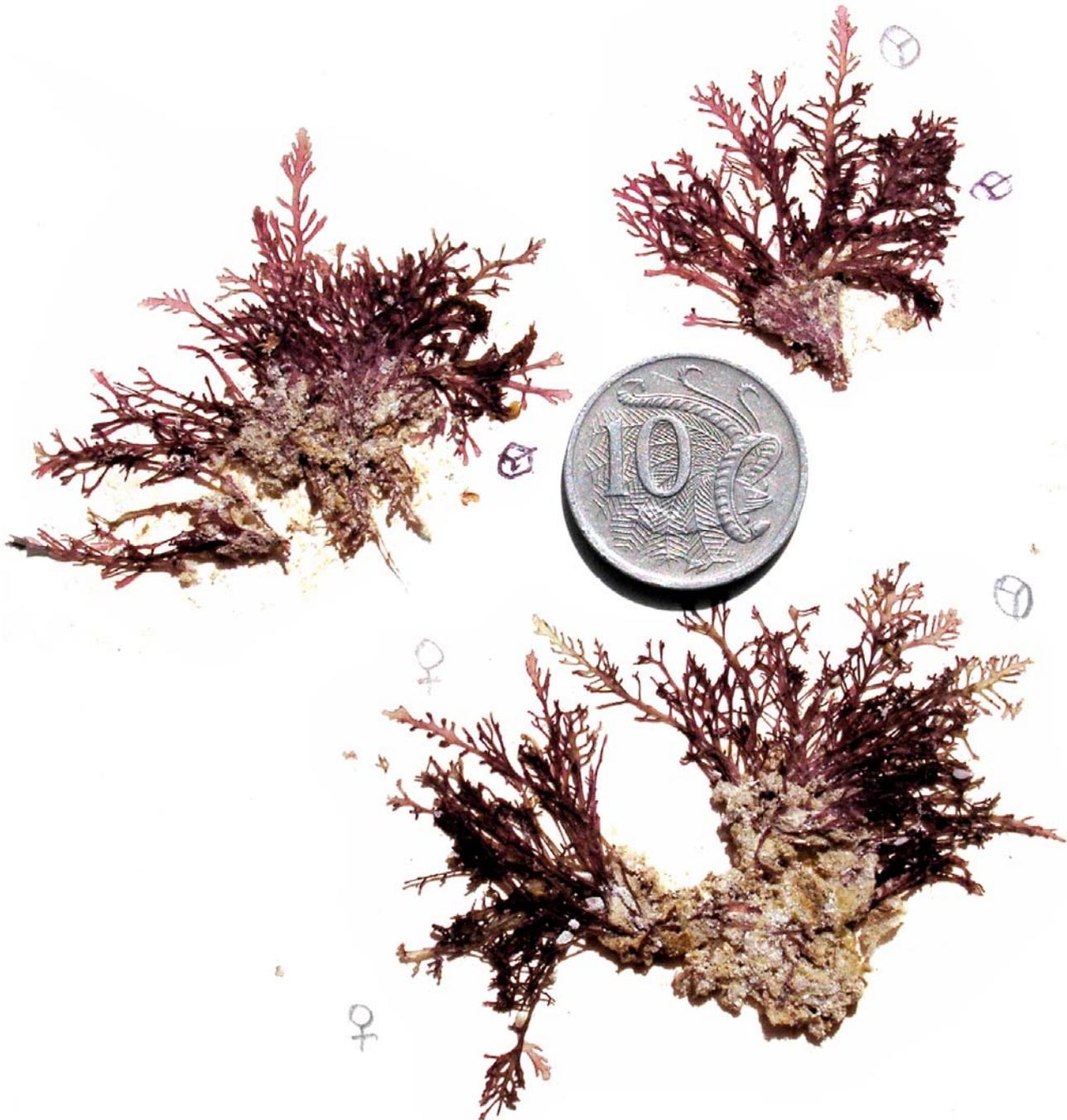
### Description in the Benthic Flora Part IIID, pages 480, 481

### 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