

Techniques needed and plant shape



MACRO PLANT



Classification

Phylum: Rhodophyta; Order: Rhodymeniales; Family: Rhodymeniaceae  
sausage weed

\*Descriptive name

Features

1. plants red-brown, fading to grey-red, of clumps of jelly-filled club- or finger-shaped sacs of variable length, 40-100 (300) mm long, narrowing suddenly to a very short stalk, occasionally with small balloon-shaped side branches
2. sporangia if present, in scattered raised patches



Occurrences

Spencer Gulf, S Australia to N and SE Tasmania; S New Zealand  
shallow to deep water on rock, seagrasses and algae

Usual Habitat

Special requirements



1. focus through the surface of segment walls microscopically to find branched threads of the inner (medulla) layers with secretory cells
2. cut cross sections and examine segment walls to find



decussate



cruciate

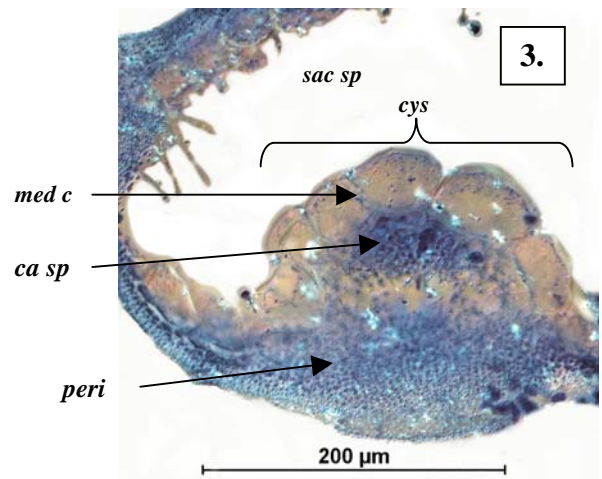
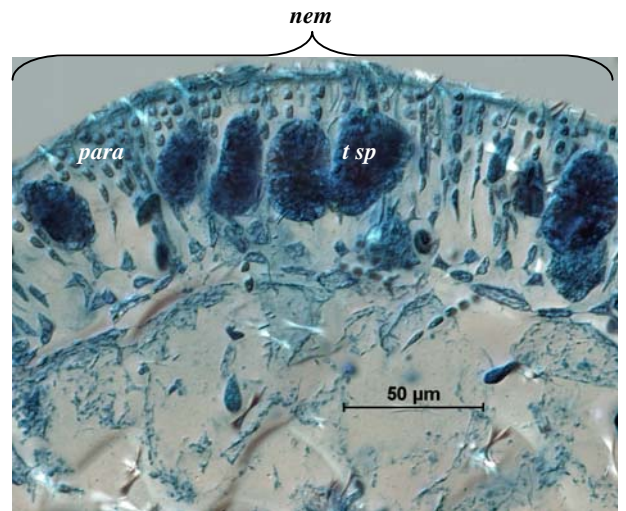
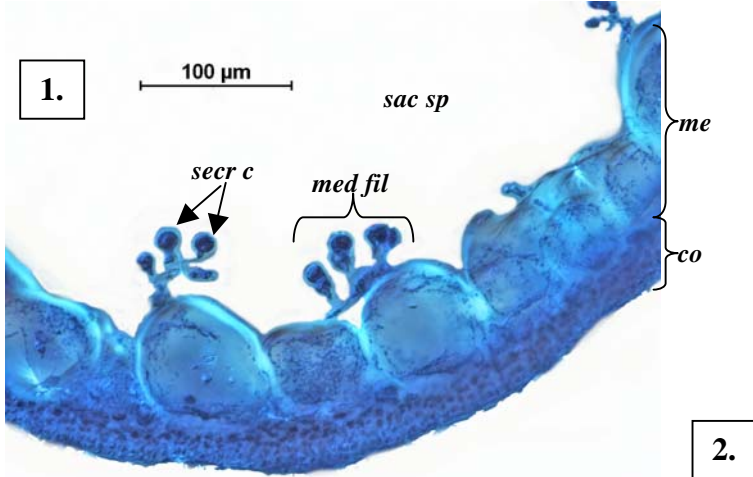
- outer (cortical) cells small, branched 2-3 times, facing outwards
- larger inner (medulla) cells in a single row, some producing in-growing branched threads with secretory cells
- raised patches of tetrasporangia, sporangia divided decussately or in a cross pattern, mixed with hairlike outer (cortical) cells (paraphyses) or in a cross pattern, mixed with hairlike outer (cortical) cells (paraphyses)
- mature female structures (cystocarps) mainly protruding into the segment space, a prominent row of large medulla cells at the base, rows of small cells forming a wall (pericarp), single external opening (ostiole), mass of carposporangia with basal pyramid of small nutritive cells and threads

Similar Species

*Gloiosaccion brownii* but that species is more common and has single secretory cells borne directly on medulla cells

Description in the Benthic Flora

Part IIIB, pages 64-66



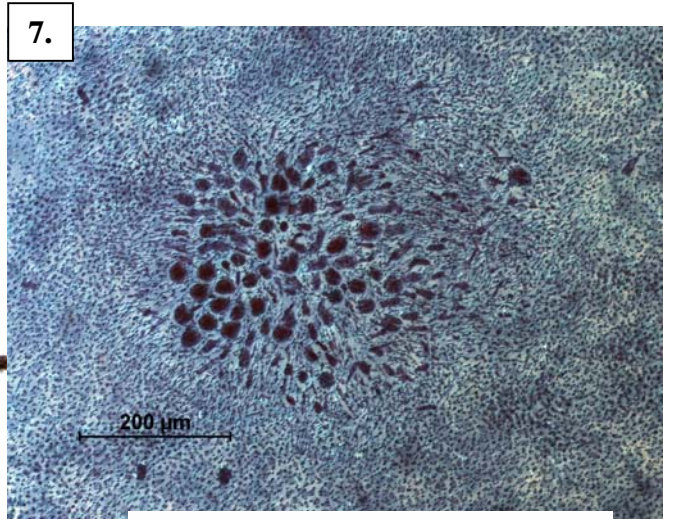
Cross sections of *Webervanbossea tasmanensis* stained blue and viewed microscopically

1. part of a sac wall with outer layer (cortex, *co*) of small branched cells, inner layer of large cells (medulla, *med*), branched threads (*med fil*) bearing secretory cells (*secre c*) protruding into the sac space (*sac sp*) (A68767 slide 19361)
2. part of a patch (nemathecium, *nema*) of tetrasporangia (*t sp*) amongst branched chains of small cells (paraphyses, *para*) (A68767 slide 19362)
3. mature female structure (cystocarp, *cys*) protruding into the sac space with basal large medulla cells (*med c*) mass of carposporangia, (*ca sp*) and rows of small cells forming an outer wall (pericarp, *peri*) (A68767 slide 19361)

\*Descriptive names are inventions to aid identification, and are not commonly used  
"Algae Revealed", R N Baldock, S Australian State Herbarium November 2010



4.



7.



5.



6.

*Webervanbossea Tasmanensis* Womersley

- 4. on *Amphibolis antarctica*, 5-7m deep, between Wright and Granite Is, Victor Harbor (A52826)
- 5. 4-8m deep, SE side of Hope I., Port Esperance, SW Tasmania (A64078), showing branching at the very base and scattered patches of sporangia
- 6. a drift plant from Ringa Ringa, Stewart I., New Zealand, showing small side branches (A29837)
- 7. specimen stained blue and viewed microscopically showing a raised patch of sporangia (nemathecium) (A68767 slide 19363)

\*Descriptive names are inventions to aid identification, and are not commonly used  
"Algae Revealed", R N Baldock, S Australian State Herbarium November 2010