

Techniques needed and plant shape



Classification

\*Descriptive name

Features

Special requirements



Division: Rhodophyta; Family: Rhodomelaceae; Tribe: Polysiphonieae  
red micro-tufts

plants found as numerous, tiny red tufts about 1mm on the red alga *Haplodasya urceolata* itself attached to the brown alga *Cystophora intermedia*

tease out tufts and view microscopically to find

- attachment to the host by **disc cells** intermingling with those of the host, **not** by thread-like rhizoids as in other *Polysiphonia* species, branched, colourless “hairs” (**trichoblasts**) that may occur densely, each central cell of a thread flanked by **4** box-shaped pericentral cells producing distinct **segments** along the length of each thread
- cystocarps, the products of fertilisation, on **short** stalks (pedicel), **ball-shaped** with or without an opening (ostiole) at the tip
- male structures (spermatangial heads) in **clusters** at plant tips, on the **basal** cell of a trichoblast (although this may be obscure), **with** or **without** a thread extending beyond the tip
- tetrasporangia spiral in short forked branches ending in trichoblasts

Occurrences

Usual Habitat

Similar Species

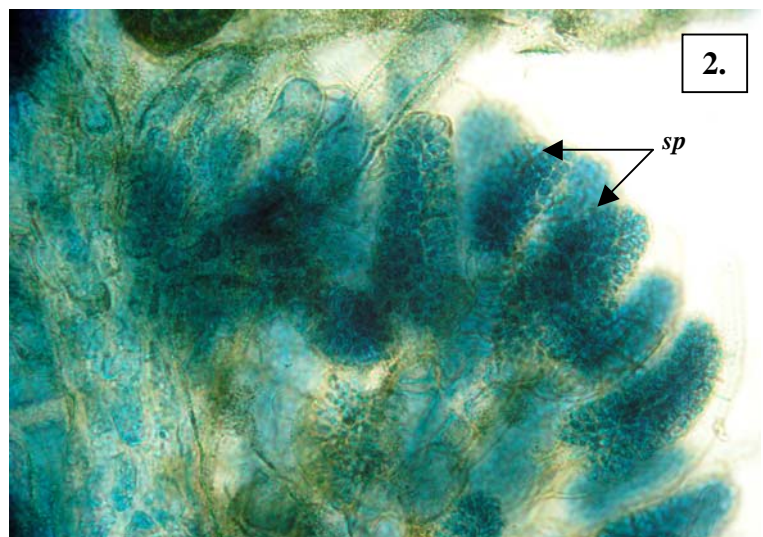
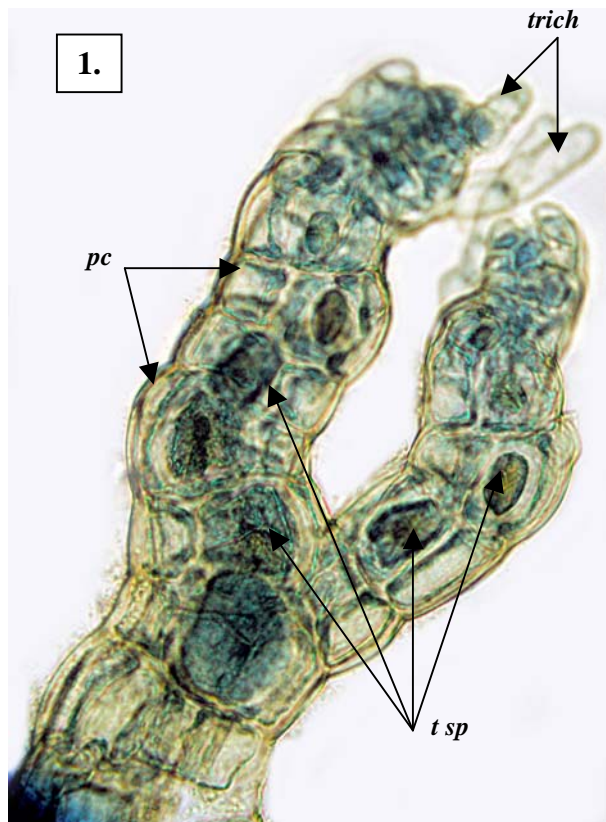
only from the S coast of Kangaroo I., S. Australia

on *Haplodasya urceolata* itself on *Cystophora intermedia* in the region of wave wash at edges of reefs

unique in its diminutive height and host(s)

Description in the Benthic Flora Part IIID, pages 173-175

Details of anatomy



*Polysiphonia haplodasyae* (A31892 slide 4457) stained blue and viewed microscopically

1. colourless trichoblast (*trich*) at the tip of a branch, with flanking (pericentral) cells (*pc*) and tetrasporangia (*t sp*) extending in a spiral pattern beyond a fork in the branch
2. elongate male clusters of spermatangia (*sp*) (lacking an apical thread in this specimen)

3.



3. *Polysiphonia haplodasyae* Womersley A31892, (obscure, tiny tufts, arrowed) on *Haplodasya urceolata* (attached to *Cystophora intermedia*) in the region of wave wash at the edge of reefs at Pennington Bay, Kangaroo I., S. Australia

4. whole, detached plant of *Polysiphonia haplodasyae*, (A31892, slide 4457) partially stained blue and viewed microscopically, showing colourless trichoblasts at the tips (*trich*), cystocarps (*cyst*) on short stalks, naked pericentral cells (*pc*) and basal attachment disc (*disc*) with cells intermingled with host cells

