**Hapalospondidion capitatum** Womersley

### Techniques needed and plant shape

**Classification**

Phylum: Phaeophyta; Order: Chordariales; Family: Ralfsiaceae

*Descriptive name*

rock scale

**Features**

plants consist of tiny patches with emerging hairs, encrusting rocks

**Special requirements**

view dissected pieces of the thin crusts microscopically to find:

- erect *unbranched* threads with brown plastids
- irregular shaped spore sacs (sporangia) with one to several rows of compartments (loculi) that develop below the tip of filaments, but may become terminal through loss of the filament cells above

**Occurrences**

only known from Frenchmen Bay, King George Sound, W. Australia, but probably more widespread because of its cryptic nature

**Usual Habitat**

on granite, in the mid intertidal

**Similar Species**

may be initially confused with other encrusting brown algae such as *Myrionema* species, but these are very small and grow on other algae (epiphytic); *Ralfsia* but erect filaments adhere together in this genus; and *Pseudolithoderma* but these have large sporangia with single compartments, or *terminal* ones with many compartments

### Description in the Benthic Flora Part II, pages 55, 57-58

**Details of Anatomy**

1. whole tuft with basal encrusting pad (*bas*) and spore sacs (*spor*) amongst the photosynthetic filaments (*fil*)
2. detail of the swollen tips of the filaments, characteristic of the species
3. a mass of filaments and irregularly shaped sporangia

Microscope views of dissected plants stained blue (A51653, slide 6430):

1. whole tuft with basal encrusting pad (*bas*) and spore sacs (*spor*) amongst the photosynthetic filaments (*fil*)
2. detail of the swollen tips of the filaments, characteristic of the species
3. a mass of filaments and irregularly shaped sporangia

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

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4-5. Microscope views of dissected plants (A51653) stained blue:
4. portion of a basal encrusting pad (bas) with erect photosynthetic (assimilatory) filaments (fil) splayed sideways (slide 6430)
5. highly magnified fragment showing the box-shape of the basal layer cells and rows of cells of erect filaments (slide 6431)
6. Plants attached to granite rock (red arrowed)

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