**Pityophycos tasmanica** (Sonder) Papenfuss

**A SPECIES WITH FEW RECORDS**

**Techniques needed and plant shape**

**Classification**

*Descriptive name*

**Features**

Division: Rhodophyta; Family: Rhodomelaceae; Tribe: Polysiphonieae

Jagged threads

Plant is dark red-brown, 100-400mm tall, of several main branches (axes), edged with tiny short side tufts giving it a jagged appearance

**Special requirements**

View microscopically to find

- Single apical cells, often topped by a colourless branched hair or trichoblast, forming a thread rapidly flanked with 4 pericentral cells, then clothed (corticated) with smaller thick walled cells
- Side tufts arranged **radially** around axes, of **paired branches**: the upper flat-branched with 3-5 alternating, short, pointed branches (pinnules); the lower unbranched or **sparingly** branched
- Ball-shaped cystocarps, the products of fertilisation, near the ends of short pinnate branches
- Tetrasporangia in side (determinate) branches (not figured)

**Occurrences**

Georgetown and Low Head, Tasmania and Port Phillip, Victoria

**Usual Habitat**

Not recorded

**Similar Species**

Chiracanthia but that genus has only pinnate side branches, often ending in a long thread

**Description in the Benthic Flora**

Part IIID, pages 231-233

**Details of Anatomy**

1. **Pityophycos tasmanica** viewed microscopically

   1. main branch (axis, ax) and side tufts of branch pairs the upper, flat-branched (u br) the lower (l br) unbranched or partly branched (A68559 slide 19238)
   2. detached side tuft with upper branched and lower partly branched parts (A49949 slide 18906)
   3. young products of fertilisation-cystocarps (cys) (A68573 slide 19252)

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

4. A drift plant of *Pityophycos tasmanica* (Sonder) Papenfuss, A71539 on stone from San Remo, Victoria.

5. Cross section of a side branch showing thick-walled cells (the central filament and 4 flanking pericentral cells are obscured).

6. Mature cystocarp with a wall one cell thick.

7. Specimen from San Remo, Victoria (A71539) showing the jagged appearance of a magnified portion.

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