Techniques needed and plant shape

**Classification**
- Division: Rhodophyta; Family: Rhodomelaceae; Tribe: Polysiphonieae

***Descriptive name***
- red tendril threads

**Features**
- plants, red-brown, 60-220mm tall, of much branched threads, with rhizoids and tendrils

**Special requirements**
- view microscopically to find
  - threads often ending in colourless branched “hairs” (trichoblasts), central line of cells obscured by **4 box-shaped** flanking (pericentral) cells giving threads a **striped** or segmented appearance, lower branches developing into coiled **tendrils** often with rhizoids on the inside of the coil
  - many-celled, elongate -egg-shaped, stalked structures (**propagules**) probably for vegetative reproduction (no other reproductive organs have been found)

**Occurrences**
- only from Troubridge I., Investigator Strait and Penneshaw, Kangaroo I. S. A.

**Usual Habitat**
- found in water 11-33m deep

**Similar Species**
- Unique because of the propagules. Specimens also bearing propagules have been collected from D’Entrecasteaux Channel, Tasmania and Lakes Entrance, Victoria. They may be a second species as the propagules are half the size of those of the S. Australian specimens, the threads are narrower and pericentral cells more elongate.

**Description in the Benthic Flora** Part IIID, pages 187, 190

**Details of anatomy**

1. forked branches with bands of pericentral cells (arrowed), terminal trichoblasts (**trich**) and stalked propagules (**prop**)
2. cross section of a branch showing the central filament (**c fil**) and 4 flanking cells (pericentral cells, 1-4)
3. stalked propagule and box-like shaped pericentral cells (arrowed)

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

Polysiphonia propagulifera
Womersley, A33804
4. specimen from Troubridge I., S. Australia, 23m deep with tendrils arrowed
5. slide 5787 stained blue and viewed microscopically, showing detail of a tendril with smaller pericentral cells and rhizoids (rh) arising on the inside of the coil
6. a specimen, (A41684, slide 4292), from Satellite I., D’Entrecasteaux Tasmania, showing smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrower propagule, smaller propagule, narrow...