**Ahnfeltiopsis humilis**  
(Lindauer) Lewis & Womersley

### Techniques needed and shape

#### Classification

**Phylum:** Rhodophyta; **Order:** Gigartinales; **Family:** Phyllophoraceae

#### *Descriptive name*

gristy flat threads

#### Features

1. dark red-brown 10–40mm tall, gristly, forked, **flat-branched**
2. branches **compressed**, 1.0–1.5mm wide, tips rounded, edges smooth or with numerous outgrowths probably due to grazing
3. mature female structures (cystocarps) form minute swellings in the upper branches

### Occurrences

New Zealand. In Australia, from Robe S Australia to W Victoria

### Usual Habitat

on rock in the low intertidal or in shaded reef pools

### Special requirements

1. cut a cross section to find a core (medulla) of **large, egg-shaped** cells with numerous cross-connections and outer layers (cortex) of **chains** of 2-3 **small** outward-facing cells
2. if possible cut a cross section through a cystocarp to find numerous separated cells (gonimoblast) and clumps of carposporangia in the medulla; opening (ostiole) **absent**
3. anomalous warty outgrowths of long chains of cortex cells may also be found

### Similar Species

*Ahnfeltiopsis fastigiata* but that species has narrower, more cylindrical branches

### Description in the Benthic Flora

Part IIIA, pages 266, 267

### Details of Anatomy

1. Cross sections of *Ahnfeltiopsis humilis* stained blue and viewed microscopically, showing:

   1. edge of flattened branch: egg-shaped core cells (medulla, *med*) with several side connections and short chains of small outer cells (cortex, *co*) *(A61516 slide 12722)*
   2. a mature female structure (cystocarp, *cys*) in the core (medulla) opening absent *(A61516 slide 12721)*
   3. an anomalous warty outgrowth (*an gr*) of expanded cortical cells *(A61516 slide 12719)*

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

“Algae Revealed” R N Baldock, S Australian State Herbarium, January 2011
4, 5. Two magnifications of *Ahnfeltiopsis humilis* (Lindauer) Lewis & Womersley (A21294) from the lower intertidal at Robe S Australia, with proliferations (arrowed) due to grazing near the tips.

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