

SOUTHERN AUSTRALIAN SPECIES OF CHAETOMORPHA AT A GLANCE



(see Womersley, Part I, pages 171-180 for full descriptions)

Correct identification of species requires microscope examination of plants to determine:

1. sizes of cells and cell **proportions**
2. for species attached to hard surfaces, the **shape of basal cells** and **rhizoids**
3. whether the threads **increase in diameter** from the base upwards



Ch. capillaris
Cells L/B = 1-2
slide 7444, stained
blue (note: this
specimen covered
with diatoms)



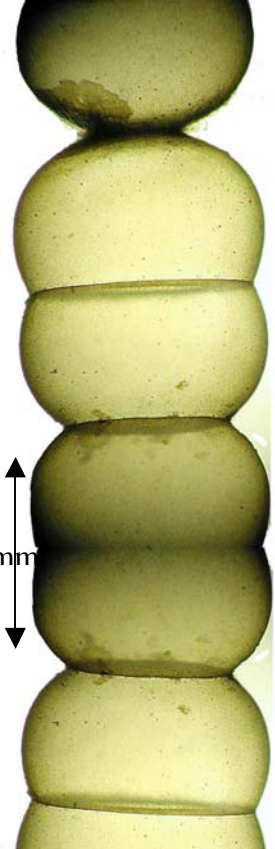
Ch. indica
Cells L/B = 1.5-2.5
slide 6798, stained blue



Ch. billardieri
Cells L/B=2-4
slide 7441, stained
blue



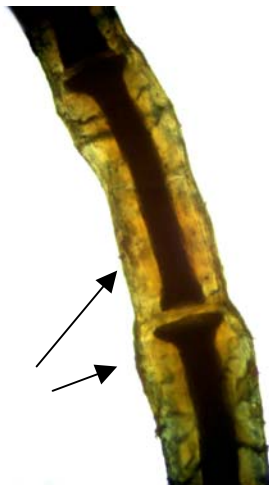
Ch. melagonium
Cells L/B =1.5-2.0
slide 7443, stained blue



Ch. coliformis
Cells L/B = 0.5-1.0
A52991



Ch. linum
L/B = 0.5-1
slide 20714,
preserved
specimen

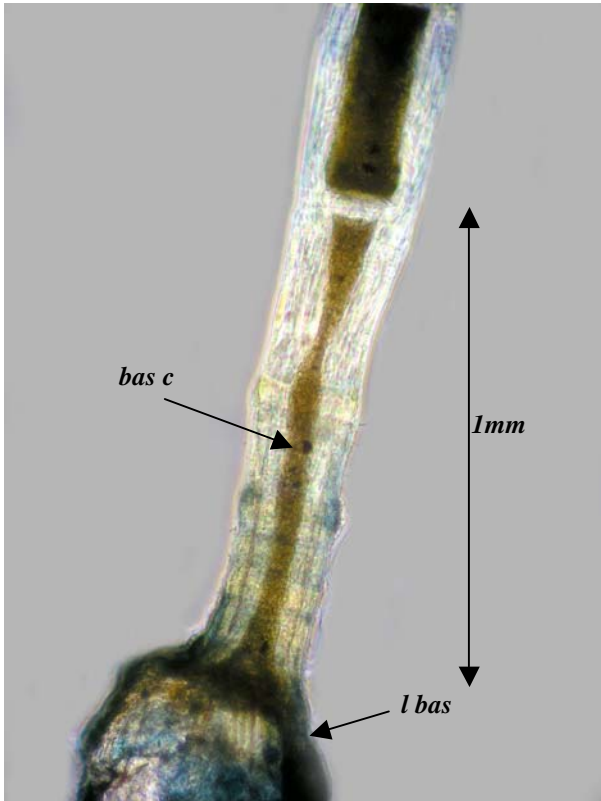


Ch. valida L/B = 2-3 (-5);
walls undulate (arrowed)
slide 20715, preserved specimen

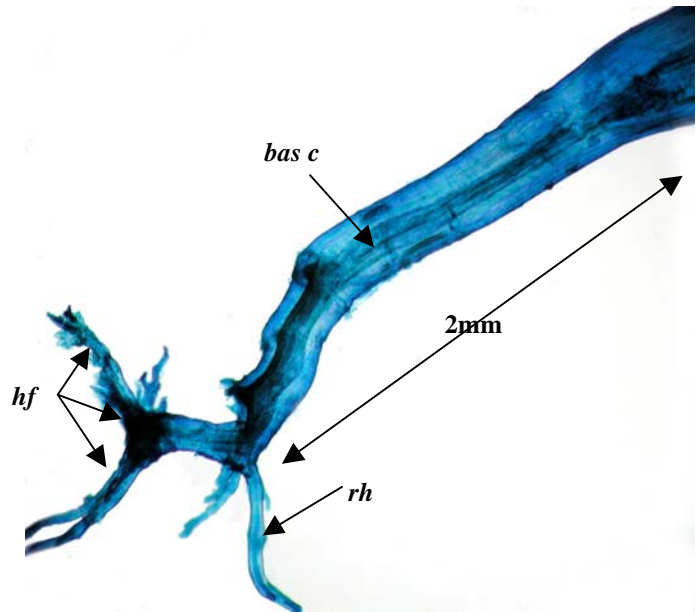


Ch. aerea L/B = 1-1.5
slide 207132, preserved
specimen, showing the variation
in cell sizes

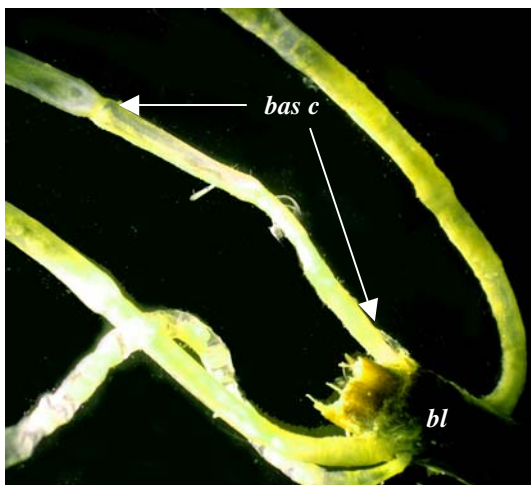
For threads attached to hard surfaces —



Chaetomorpha aerea showing the elongate basal cell (*bas c*) with a lobed base (*l bas*) attached to a sand grain, slide 20713 using phase contrast microscopy



Chaetomorpha melagonium, showing the elongate basal cell (*bas c*), expanding at the tip, bearing rhizoids (*rh*) and a developing lobed basal holdfast (*hf*) slide 7443 stained blue



Chaetomorpha coliformis showing the contrast in shape between a single basal cell (*bas c*, attached to a piece of seagrass blade, *bl*) and cells of the upper part of a thread shown at right

