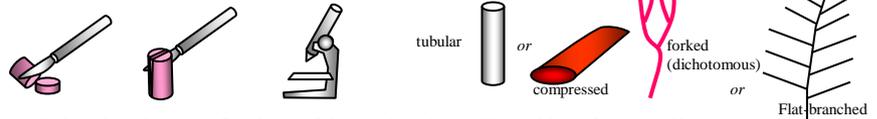


Trematocarpus concinnus
(R Brown *ex* Turner) De Toni

45.400

Techniques needed and shape



Classification

Phylum: Rhodophyta; Order: Gigartinales; Family: Sarcodiaceae

***Descriptive name**

thin red spaghetti-weed

Features

plants red-brown, 40-150mm tall, forked tending to be flat-branched; branches thin, about ½ mm broad, linear, cylindrical to slightly compressed

Occurrences

SE of S Australia to Victoria and E coast Tasmania

Usual Habitat

in shallow water or in intertidal pools on rough coasts

Special requirements

cut sections and view microscopically to find



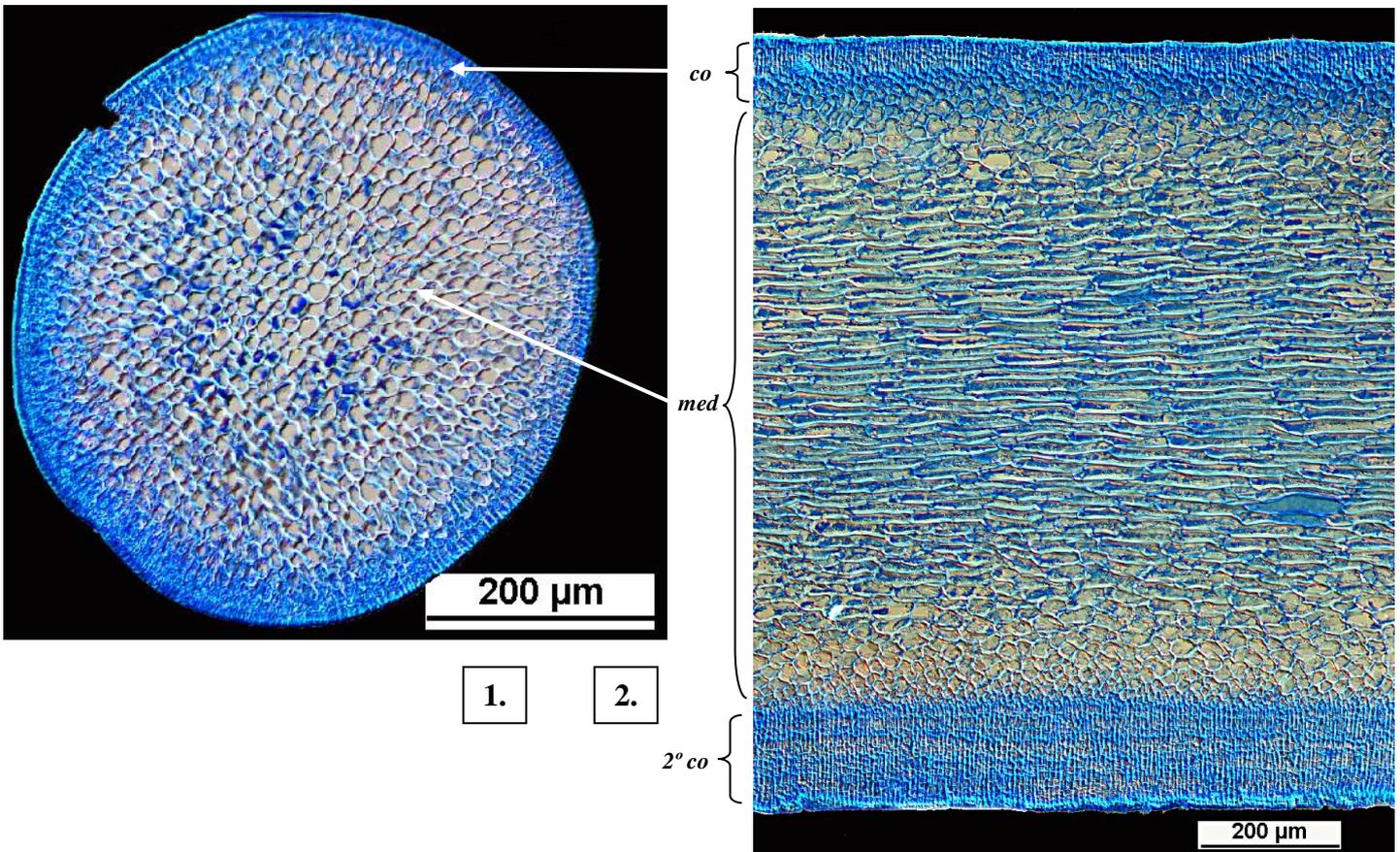
- in a cross section: **wide** central cores (medulla) of **large compact** cells, narrow outer-most layers (cortex) of small, egg-shaped cells
- in **lengthwise** sections of older branches: characteristic **elongate** cells in cores, bands of small cells forming a **secondary cortex**
- in cross sections through swollen, **protruding** mature female structures (cystocarps): basal network of threads with radiating threads (gonimoblast) ending in club-shaped to pear-shaped carposporangia; thick wall (pericarp) with an opening (ostiole)
- in cross sections through patches of sporangia near branch ends: cigar-shaped tetrasporangia divided across (zonate) mixed with outward facing short hairs (paraphyses)

Similar Species

Melanthalia concinna but that species has more compressed branches ending in thickened caps, and, internally, cores of ovoid (not elongate) cells. Tetrasporangia are divided into cross-shaped (cruciate) patterns

Description in the Benthic Flora Part IIIA, pages 316-320

Details of Anatomy



Trematocarpus concinnus, stained blue and viewed microscopically

1. cross section: wide core of large cells (medulla, **med**), narrow outer layer (cortex, **co**) of small cells (slide 12545)
2. lengthwise section of a mature branch: core cells (**med**), **elongate** in this view; bands of smaller, secondary cortex cells (**2° co**) (slide 12840)

* Descriptive names are inventions to aid identification, and are not commonly used
“Algae revealed”, R N Baldock, State Herbarium S Australia, March 2009; revised August 2014

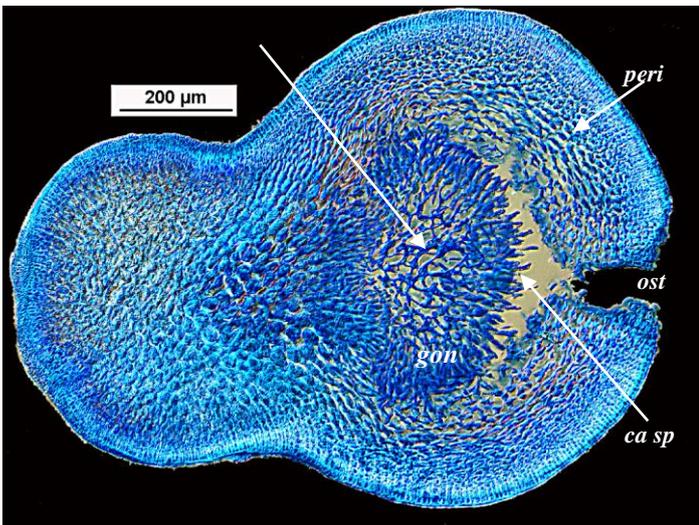
3.



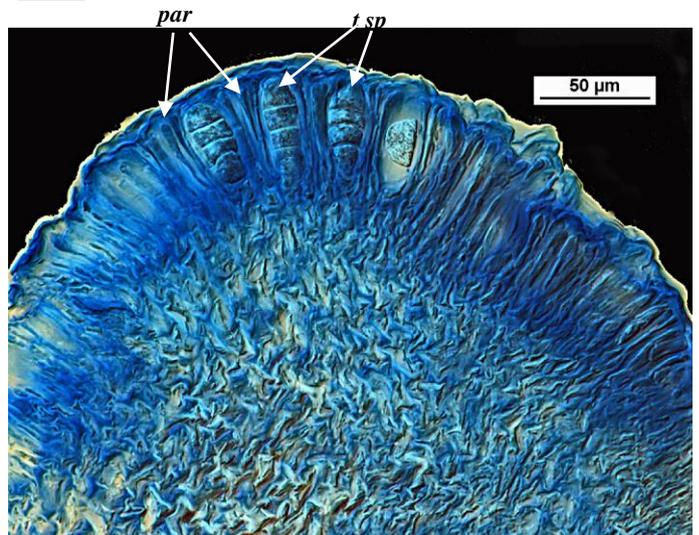
4.



5.



6.



Trematocarpus concinnus (R Brown ex Turner) De Toni:

3, 4 two specimens (A61617) in part shade and shallow water at the reef edge, Cape Northumberland, S Australia

5, 6. cross sections stained blue and viewed microscopically

5. mature female structure (cystocarp): net-like base (**arrowed**), radiating threads (gonimoblast, **gon**) ending in carposporangia (**ca sp**); thick cellular wall (pericarp, **peri**), opening (ostiole, **ost**) (slide 12842)

6. sporangial patch (sorus): tetrasporangia (**t sp**), hairs (paraphyses, **par**) (slide 12549)

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