

**Techniques needed and shape**



**Classification**

Phylum: Rhodophyta; Order: Gigartinales; Family: Nizymeniaceae

**\*Descriptive name**

red Mini-straps

**Features**



plants red-brown, about 150mm tall, fairly upright, branches **compressed**, linear, mostly about 1mm wide. Short, spreading side branches, **narrower basally**, rounded at tips arise irregularly from the **edges** of main branches. Mature female structures (cystocarps) occur on branch surfaces and are small and ball-shaped

**Occurrences**

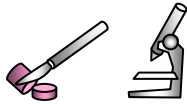
central W Australia to Victoria and around Tasmania

**Usual Habitat**

a deep species of rough water coasts

**Special requirements**

view microscopically to find



- in dissected branches: **single**, central, prominent, thick-walled threads, entangled with rhizoids, each cell of the central thread bearing a pair of opposite side threads at acute angles. Outer layers (cortex) consisting of equal-sided cells decreasing in size outwards
- mature female structures (cystocarps) occurring as surface swellings with a **smooth or warty** surface, **pinched** at the base, each with a depressed opening (ostiole), thick wall, central amoeba-like (fusion) cell and spores at ends of radiating threads (gonimoblast)
- in male plants: tufts of hairs on branch surfaces bearing spermatangia (not imaged below)



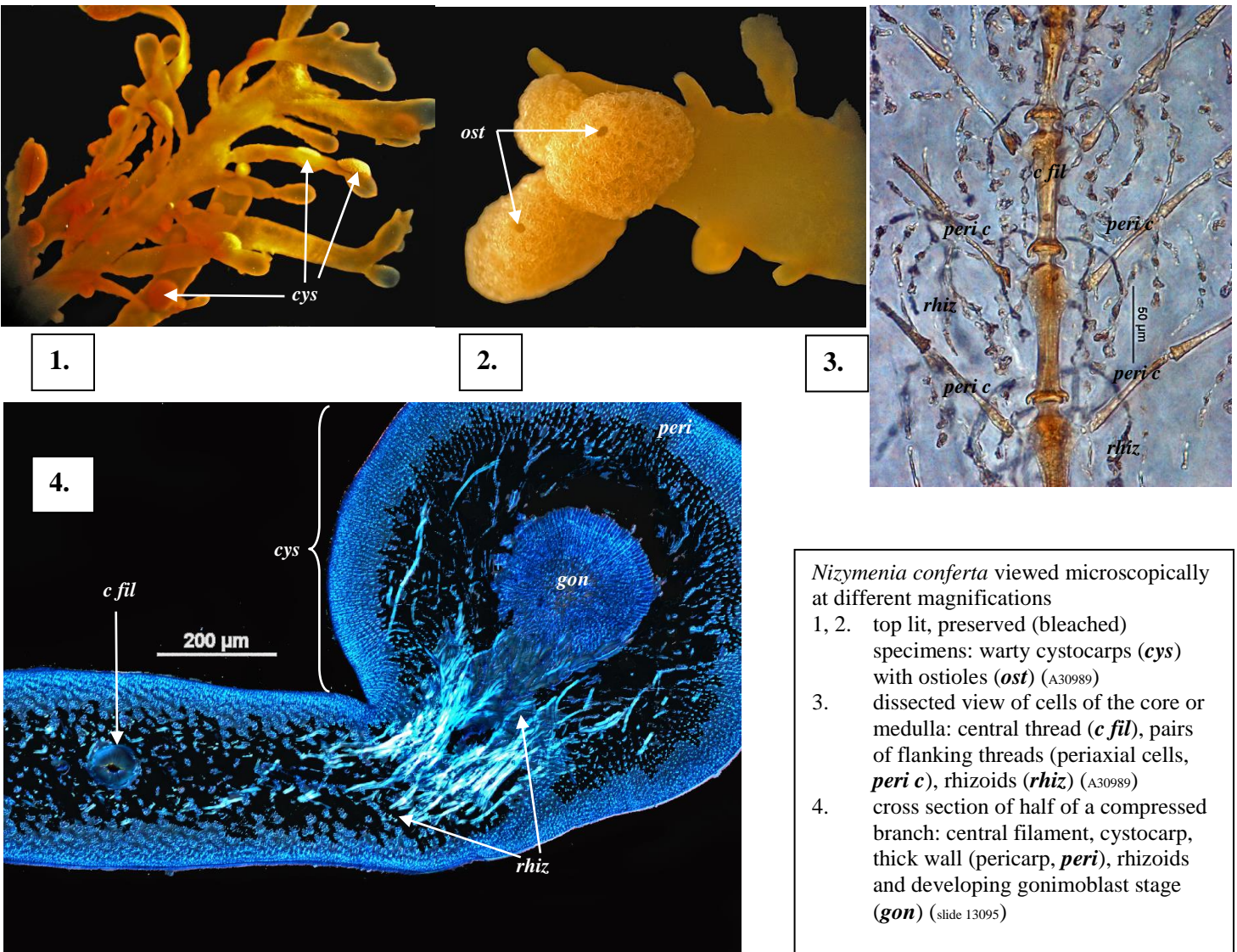
plants are rare

**Similar Species**

*Nizymenia australis*, but that species has broader spreading branches and **a core of many rhizoids** when viewed microscopically

**Description in the Benthic Flora** Part IIIA, pages 405-407

**Details of Anatomy**



*Nizymenia conferta* viewed microscopically at different magnifications

- 1, 2. top lit, preserved (bleached) specimens: warty cystocarps (**cys**) with ostioles (**ost**) (A30989)
3. dissected view of cells of the core or medulla: central thread (**c fil**), pairs of flanking threads (periaxial cells, **peri c**), rhizoids (**rhiz**) (A30989)
4. cross section of half of a compressed branch: central filament, cystocarp, thick wall (pericarp, **peri**), rhizoids and developing gonimoblast stage (**gon**) (slide 13095)

\* Descriptive names are inventions to aid identification, and are not commonly used  
 "Algae revealed" R N Baldock, State Herbarium S Australia, July 2009, revised August 2014

5.



6.



5, 6. Two magnifications of *Nizymenia conferta* (Harvey) G W Saunders & Kraft (A31484), 3-6m deep from Robe S Australia, showing particularly the short side branches, narrowed at the base and rounded at the tips, arising from edges of axes