

Rhodoglossum gigartinoides
(Sonder) Edyvane & Womersley

45.380

Techniques needed and shape



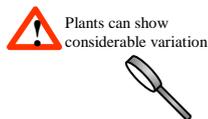
Classification

Phylum: Rhodophyta; Order: Gigartinales; Family: Gigartinaceae

***Descriptive name**

§Variable red alga. Red parchment weed. Lustrous red blades

Features



plants dark-red or red-purple, bleaching to yellow, 150-400mm tall, thin, parchment-like, drying with a **lustrous sheen**, consisting of single, lance-shaped blades, attached to rocks by **minute** stalks, or of several strap-like blades and small outgrowths from blade edges. Fertile blades may have numerous minute spots (sporangial masses), or small, pimple-like lumps (female cystocarps)

Occurrences

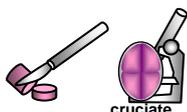
SW W Australia, S Yorke Peninsula, S Australia to Victoria and around Tasmania

Usual Habitat

in the lower intertidal to shallow water, on cold-water coasts of moderate water movement

Special requirements

cut cross sections and view microscopically to find



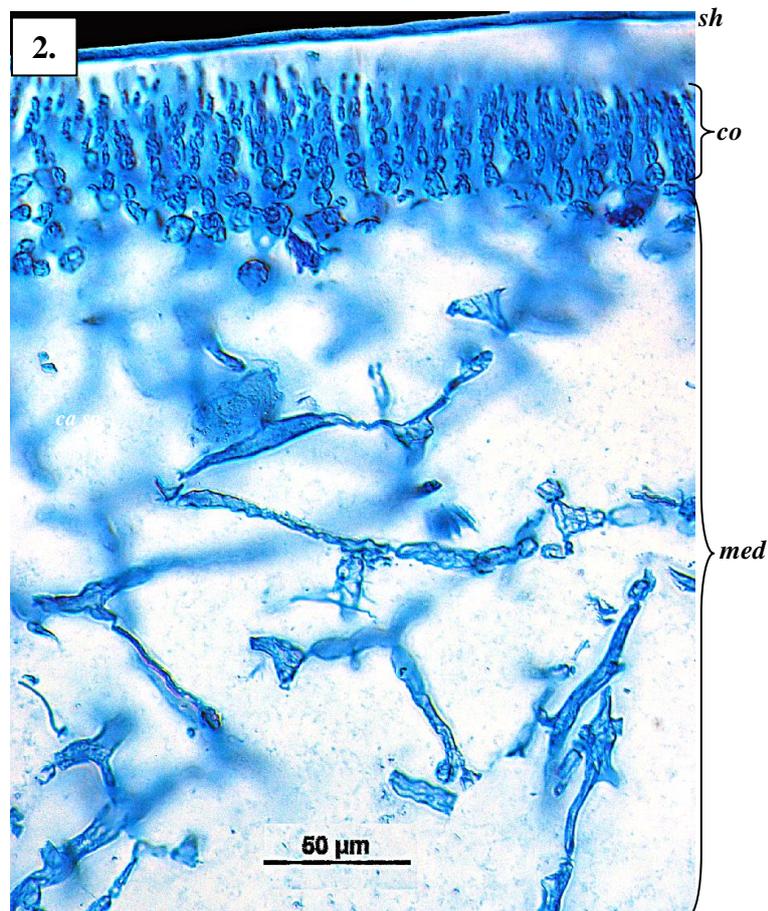
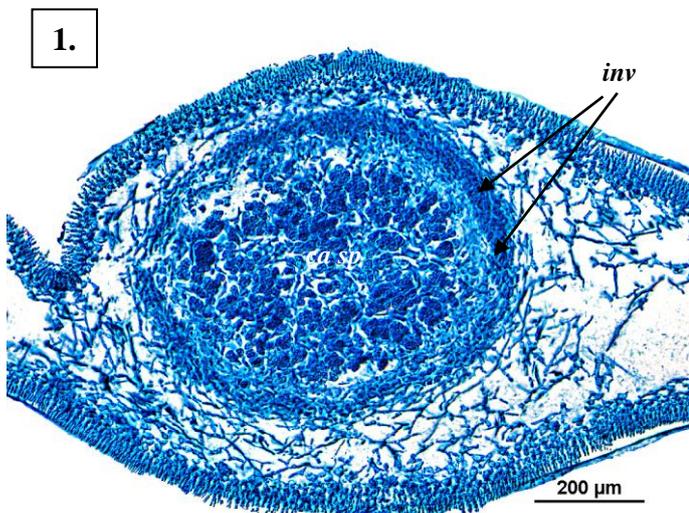
- a wide core (medulla) of **inter-connecting**, branched threads, outer layers (cortex) of **chains** of **small** cells facing outwards
- in female plants: small, spherical, pimple-like **mature** female structures (cystocarps) slightly **protruding** from the blade with prominent envelope of threads (involucre), and **clumps** of carposporangia
- in sporangial plants: tetrasporangia in **patches** (sori) just beneath the **surface** with **chains** of sporangia growing **inwards** from the surface; sporangia divided in a cross (**cruciate**) pattern when mature

Similar Species

Sarcothalia radula has a similar shape but is thicker, without a surface sheen

Description in the Benthic Flora Part IIIA, pages 286-289

Details of Anatomy



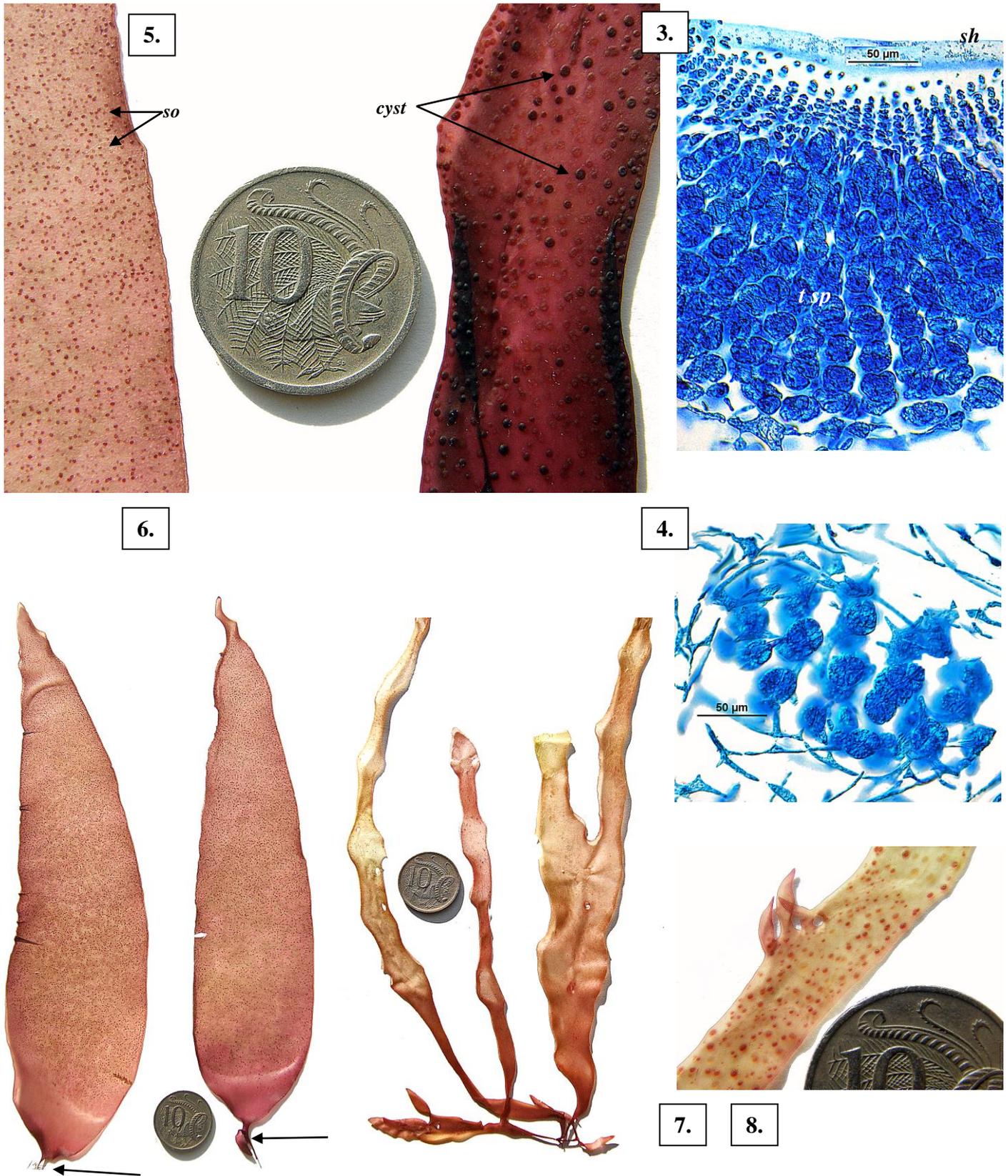
Rhodoglossum gigartinoides: cross sections stained blue and viewed microscopically

1. mature female structure, (cystocarp) protruding from a blade, well-defined envelope of threads (involucre, **inv**), bunches of carposporangia (**ca sp**) (slide 12385)
2. outer part of a blade: core of inter-connected threads (medulla, **med**), outer layer (cortex, **co**) of branched chains of small cells facing outwards, “rind” (sheath, **sh**) of gelatinous material (slide 12385)

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

§ name used in Edgar, G. *Australian Marine Life, 2nd Ed.* (2008)

“Algae revealed” R N Baldock, State Herbarium S Australia, May 2009, revised August 2014



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3. sporangial patch (sorus): chains of tetrasporangia (*t sp*) growing *inwards* from the surface, sheath (*sh*) (slide 12386)
4. tetrasporangia in various stages of dividing into a cross-shaped (cruciate) pattern (slide 12389)
- 5, 6. plants from reef pools, Back Beach, Little Dip Conservation Park (A63219): surface sheen on dried specimens, sporangial spots (sori, *so*), small, pimple-like female reproductive structures (cystocarps, *cys*), tiny holdfast and stalk (*arrowed*)
- 7, 8. specimens from a partly shaded, rear reef pool, Long Gully, S of Robe (A61517): lustrous, narrow, branched blades, small proliferations growing from the edge

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