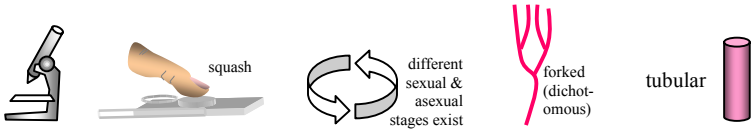
Scinaia acuta M J Wynne
(as *S australis* in the Marine Flora)

45.130

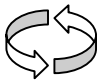
Techniques needed and plant shape



Classification

Phylum: Rhodophyta; Order: Nemaliales; Family: Scinaiaceae,
(as Family: Galaxauraceae in the Flora).
Huisman (Algae of Australia: Nemaliales, 2006) placed members of Galaxauraceae lacking lime into the new Family: Scinaiaceae)

Life cycles

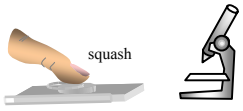


only plants belonging to the mature sexual phase (gametophytes), upright and relatively large, are described below.
The asexual spore phase (sporophyte) known only for several other species may consist of microscopic, tufted threads but is unknown for this species.

Features

plants soft, 100-200 mm tall, red to red-brown, branches 1.0-1.5 mm wide, forked every 4-35 mm apart *not* pinched at the forks into segments, tips pointed

Special requirements



view microscopically:

- in surface view, find small colourless cells arranged in rings (rosettes) about larger, protruding, balloon-shaped colourless cells (utricles). (Figs 1, 2)
- in a tissue squash, find a narrow, central concentration of fine, twisted threads and fine, loose threads ***radiating*** outwards to end in bunches of small ***coloured,*** egg-shaped cells beneath the mix of small and large colourless cells forming the rosettes of the surface layer

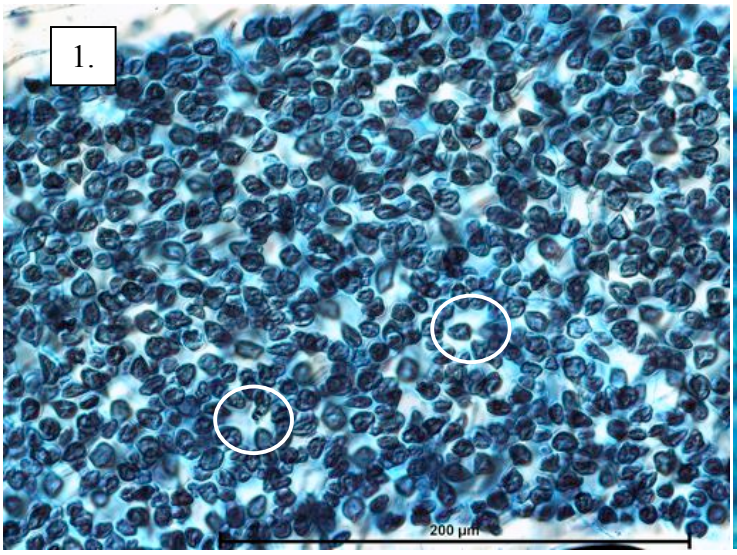
Occurrences
S Gulf St Vincent SA to N NSW and around Tasmania

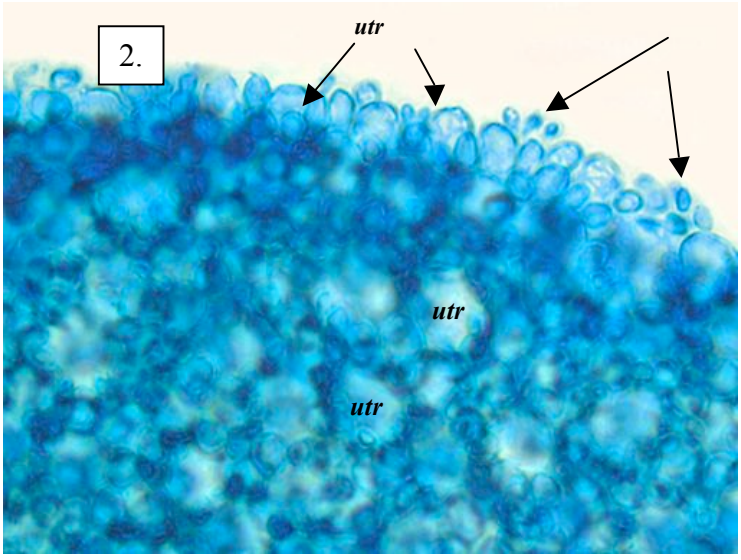
Usual Habitat
known only from drift plants

Similar Species
Gloiophloea scinaioides but tips are rounded and surfaces lack colourless cells (utricles) in rosettes in that species

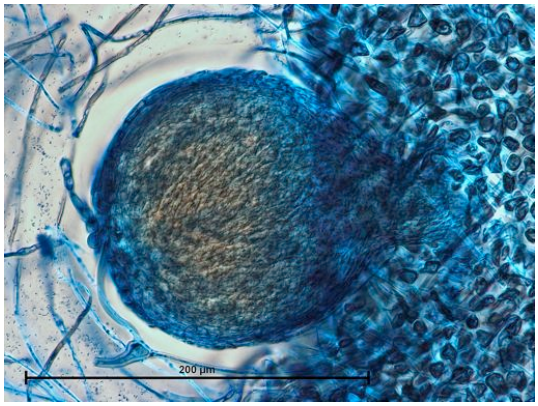
Description in the Benthic Flora
Part IIIA, pages 104, 105, 106

Details of Anatomy





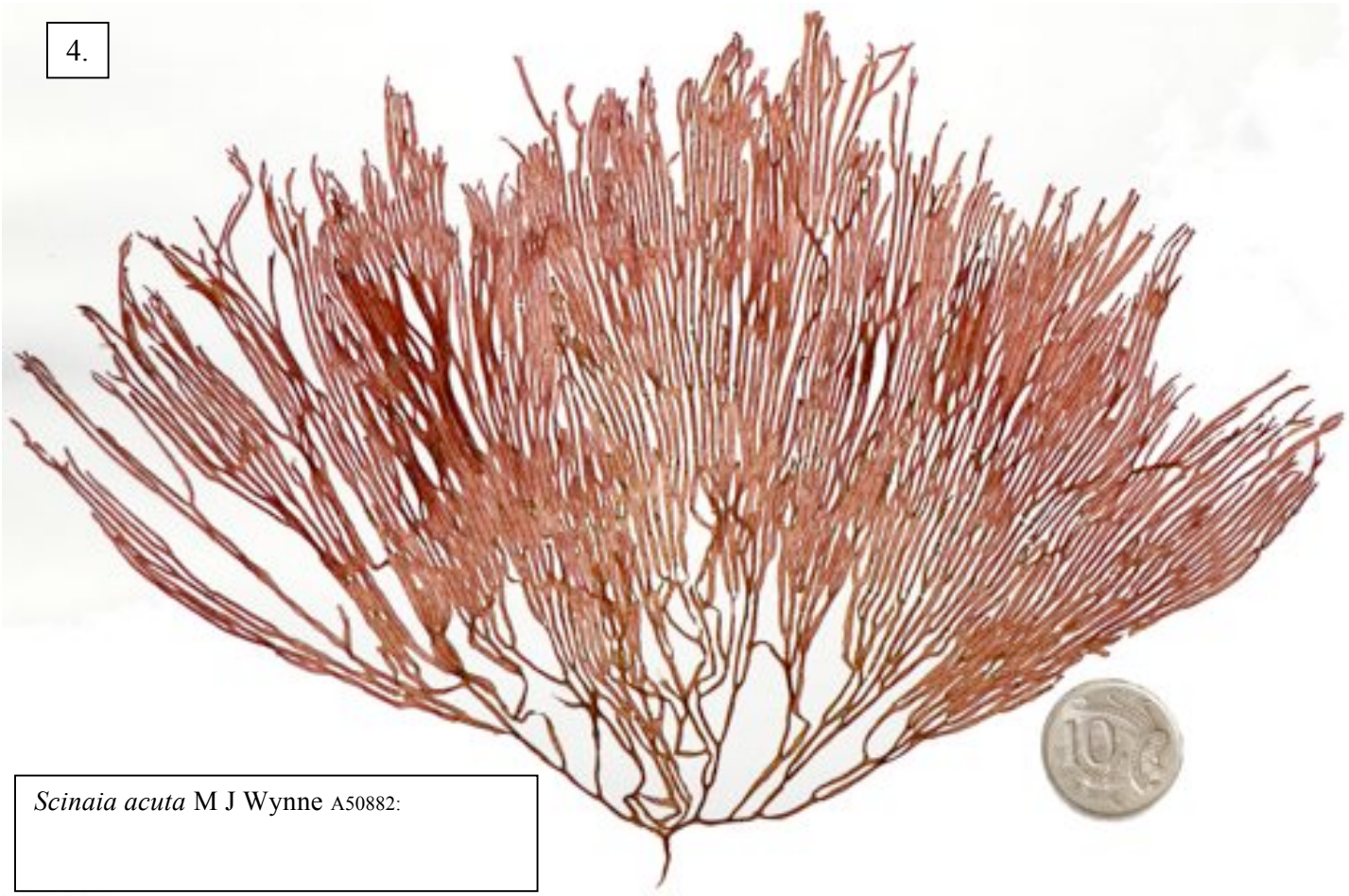
3.



Scinaia acuta A66757 slide 16155:

1. surface view of small cells forming vague rings (rosettes, 2 ringed in white) around larger colourless cells
2. slanted view of surface cells: rings of smaller cells, some (arrowed) protruding between the larger colourless cells (utricles, *utr*)
3. mature female structure (cystocarp) lying beneath the surface, attached to a radiating thread from the branch core

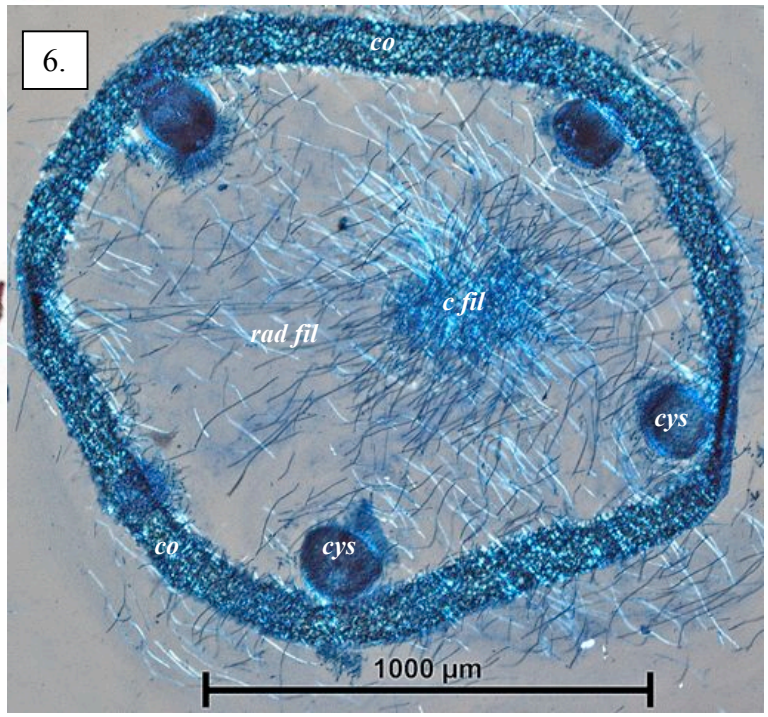
4.



Scinaia acuta M J Wynne A50882:

5.

6.



Scinaia acuta M J Wynne:
4, 5. two magnifications of a drift plant (A50882) from Port Stanvac, SA
6. cross section (A66757 slide 16155) showing central concentrated mass of threads (*c fil*), radiating threads (*rad fil*) ending in compact surface layers (cortex, *co*) and mature female structures (cystocarps, *cys*)