

Techniques needed and plant shape



MICRO
PLANT



Classification

Phylum: Rhodophyta; Order: Gigartinales; Family: Hildenbrandiaceae
 red rock-scale

***Descriptive name**

Features

plants red, 3-12mm across but joining together on rocks into *very thin* continuous sheets that are *hard to remove*

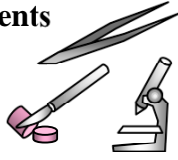
Occurrences

worldwide on temperate coasts. In Australia, from West Coast to Kangaroo I., S Australia but probably more widespread and overlooked

Usual Habitat

on rock, usually in shaded parts of the intertidal

Special requirements



1. scrape off a piece of plant and view microscopically to find *rounded* surface cells and circular cavities (*conceptacles*) containing tetrasporangia. Sexual stages are unknown.
2. a section through a conceptacle containing sporangia shows:
 - an egg-shaped cavity with an opening (ostiole) at the top
 - cigar-shaped tetrasporangia within, each with 4 *slanting* (oblique) divisions when mature
 - surrounding tissues consisting of *rows* and *columns* of *box-shaped* cells

Similar Species



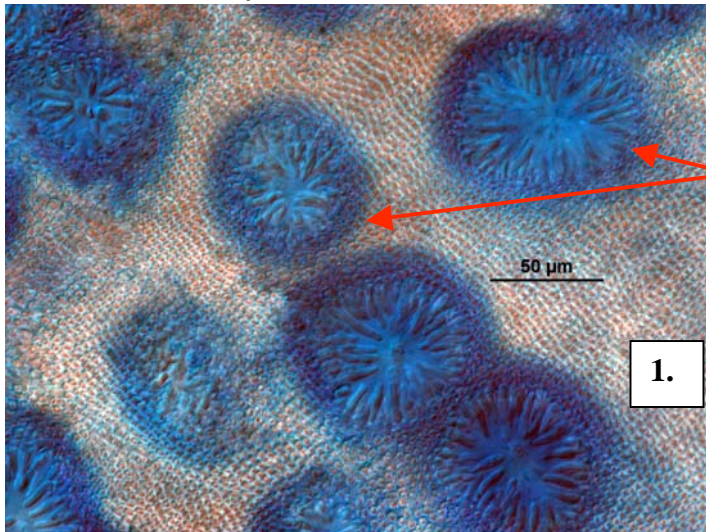
Diagnosis can be difficult

Hildenbrandia rubra, separated because the tetrasporangia are irregularly and not obliquely divided

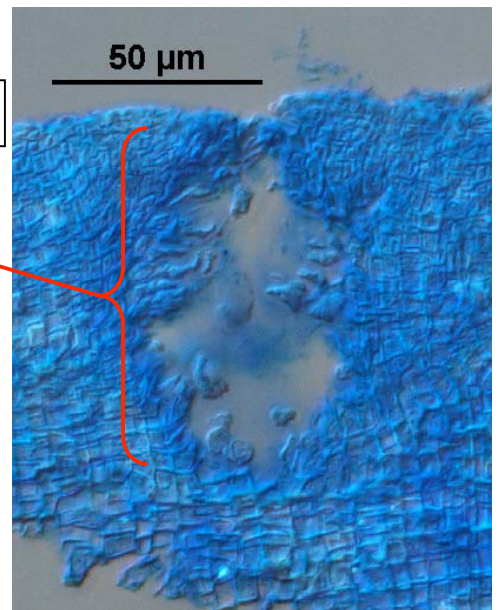
Description in the Benthic Flora

Part IIIA, pages 143-145

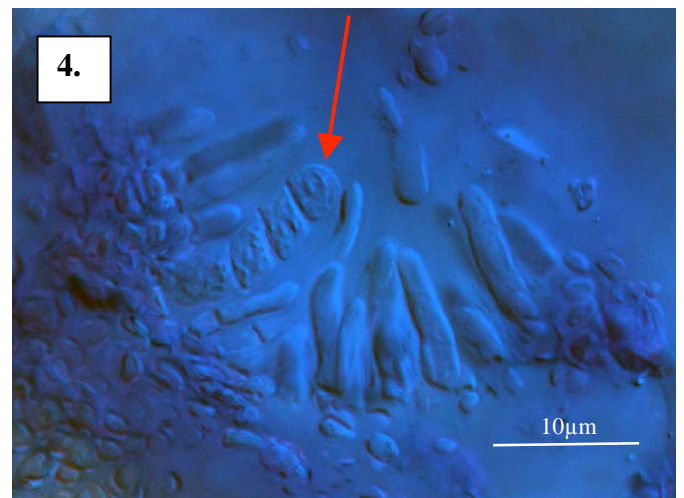
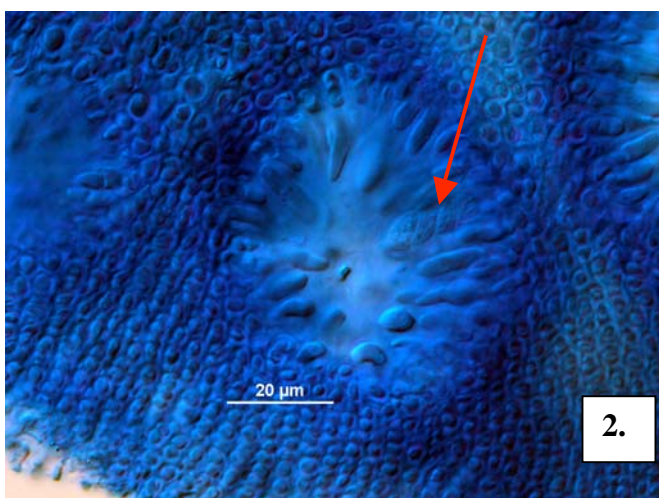
Details of Anatomy



3.



conc



Hildenbrandia crouaniorum stained blue and viewed microscopically

1. a surface view of rounded cells and circular cavities (conceptacles, *conc*) with young, undivided tetrasporangia (*t sp*) (A12966 slide 11494)
2. contents of a conceptacle seen through its opening (ostiole) with a mature tetrasporangium (arrowed) showing slanting (*oblique*) divisions (A12966 slide 11494)
3. section through a conceptacle, with box-shaped surrounding cells in rows and columns (A12966 slide 11494)
4. highly magnified conceptacle contents with one mature tetrasporangium (arrowed) showing oblique divisions ((A12973 slide 11493)

5.



6.



Specimens of *Hildenbrandia crouaniorum* J Agardh on rocks from the mid intertidal, S Australia

5. at Cape Willoughby, Kangaroo I. (A12966)

6. at Point Drummond on the West Coast (A15068)