Placophora binderi (J Agardh) J Agardh

A SPECIES WITH FEW RECORDS

45.940.49

Techniques needed and plant shape


Classification Division: Rhodophyta; Family: Rhodomelaceae; *Placophora* group

***Descriptive name** Red *Codium*-blades

Features the plant is found as tiny flat red blades up to 6mm broad, on the green siphonaceous algal genus, *Codium* spp

Special requirements view the small blades microscopically to find

- margins consist of numerous ***flat-topped*** apical cells forming lines of cells that ***join*** together into a flat blade attached flat to host *Codium* plants by small ***rhizoids***
- cystocarps the products of fertilisation, in ***clusters*** on the edge of blades, on short, many-celled ***stalks***, ***egg-shaped*** with an opening (ostiole) at the tip
- tetrasporangia in a ***single*** row in clustered elongate structures (***stichidia***)

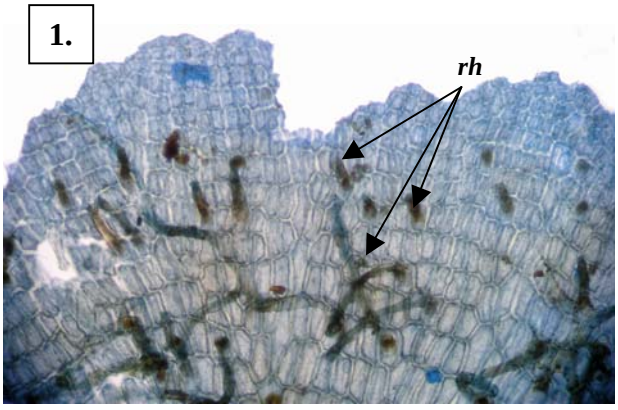
Occurrences Africa and possibly Timor; in Australia, known only from Elliston, S. A.

Usual Habitat on the surface of on the green siphonaceous algal genus, *Codium* spp although reported on other algae with firm surfaces in S Africa

Similar Species similar to members of the Pterosiphonieae (e.g.*Pollexfenia*) but special branched "hairs" (***trichoblasts***) ***absent*** and cell lines remain ***distinct***

Description in the Benthic Flora Part IIID, pages 360, 361

1.



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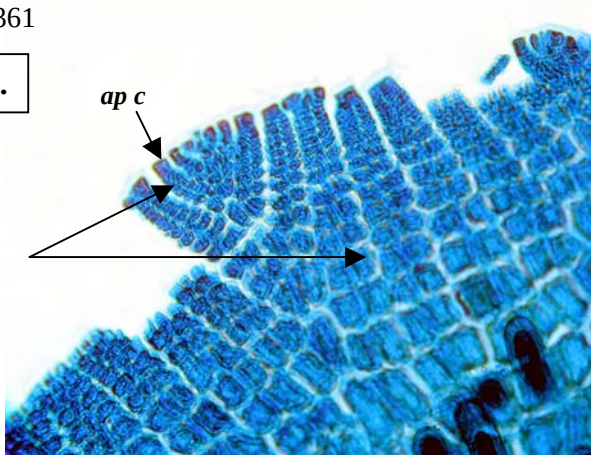

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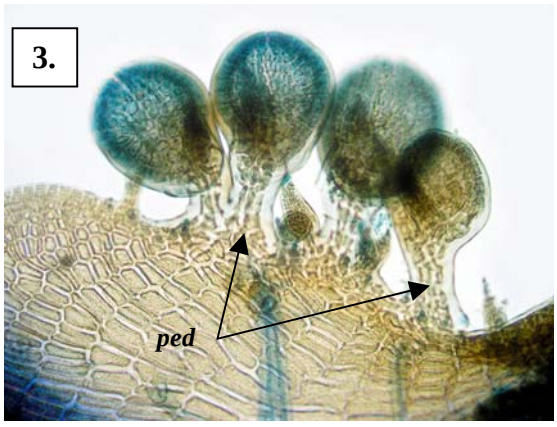

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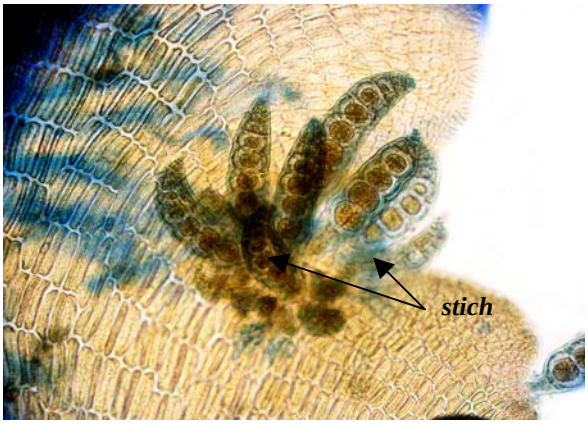
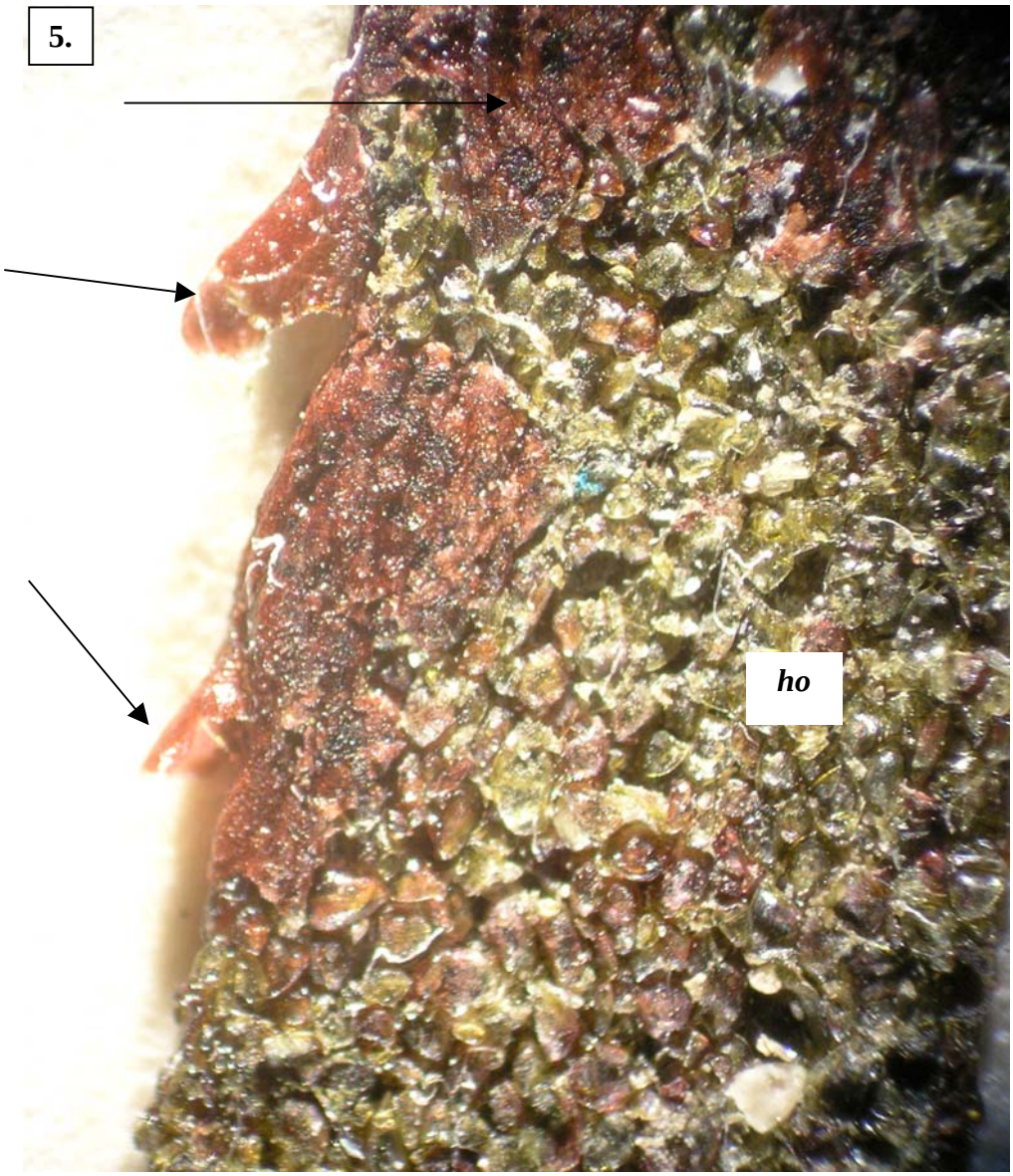


Placophora binderi stained blue and viewed microscopically

1. portion of a blade showing scattered rhizoids (*rh*) (A15017 slide 19358)
2. many lines of cells (arrowed) formed behind flat-topped apical cells (*ap c*) adhering into a flat blade (A15017 slide 20225)
3. group of cystocarps with stalks (pedicels *ped*) (A47998 slide 5670)
4. cluster of specialised tetrasporangial structures (stichidia, *stich*) with a single line of tetrasporangia inside (A47998 slide 5670)

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

"Algae Revealed" R N Baldock, S Australian State Herbarium, May 2007



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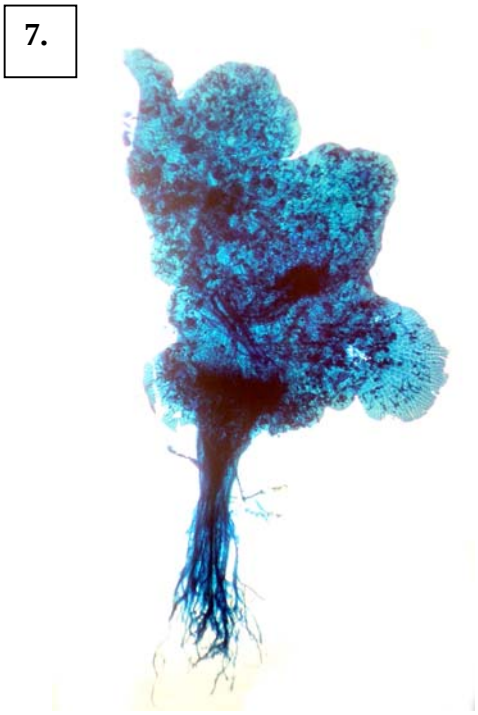
5. A40785 (arrowed) on *Codium duthieae*, (host, *ho*) from Tergniet, Mossel Bay, S Africa
6. plants detached from *Codium pomoides* from Elliston, S. Australia (A15017)
7. whole plant detached from *Codium pomoides*, stained blue and viewed microscopically (A15017 slide 20225)



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