Dicroglossum crispatulum
(Harvey) A.Millar & Huisman

45.880.00

MACRO PLANT

Techniques needed and shape

Classification Phylum: Rhodophyta; Family: Delesseriaceae; Tribe: Delesserioideae
Group: Dicroglossum

***Descriptive name** red film alga

Features plants red, fading to a brown colour, 20-40mm tall of ***thin***, forked, ***flat-branched***, narrow blades about 3mm wide with ruffled ***edges***; ***central*** mid-ribs present, smaller veins ***absent***, teeth ***absent***. Heart-shaped ***bladelets*** bearing reproductive structures arise from the ***mid rib***

Occurrences Fremantle, W Australia to Vivonne Bay Kangaroo I., S Australia

Usual Habitat usually epiphytic on the seagrass *Amphibolis* and other algae

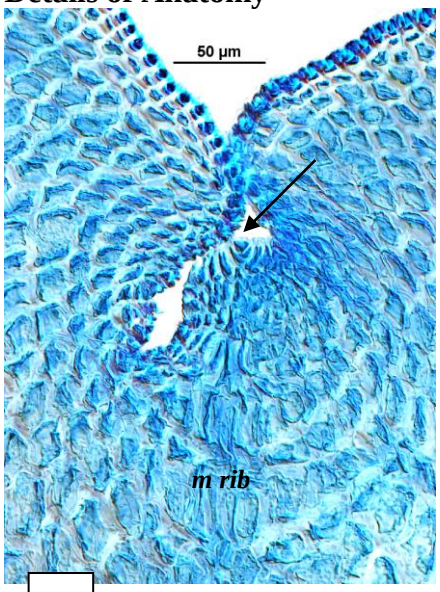
Similar Species *Hemineura protendens*, *Phytimophora* and *Apoglossum*, but these have either smaller veins, marginal teeth or differences in the origins of branches

Description in the Benthic Flora Part IIID, pages 30-32

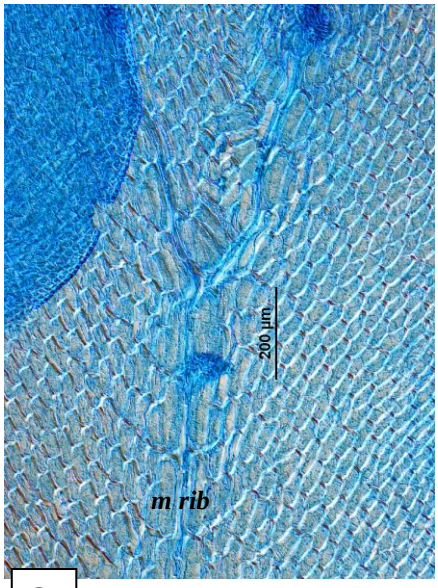
Special Requirements under the microscope find

- a ***single*** hemispherical apical cell continuing the growth of blades by producing a ***central thread*** and ***regular*** arching lines of cells
- branching from ***blade edges***, reflected in the ***forked branching*** of mid-ribs
- reproductive structures on blades and heart-shaped ***bladelets*** on mid-ribs
- female structures (cystocarps) ***sunken*** in blades, opening on one side
- male spermatangia in ***elongate clusters*** both sides of mid-ribs
- scattered tetrasporangia massed ***over*** mid-ribs mostly in bladelets

Details of Anatomy



1.



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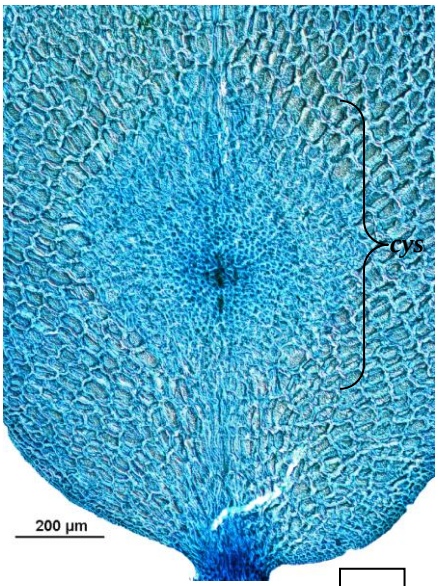

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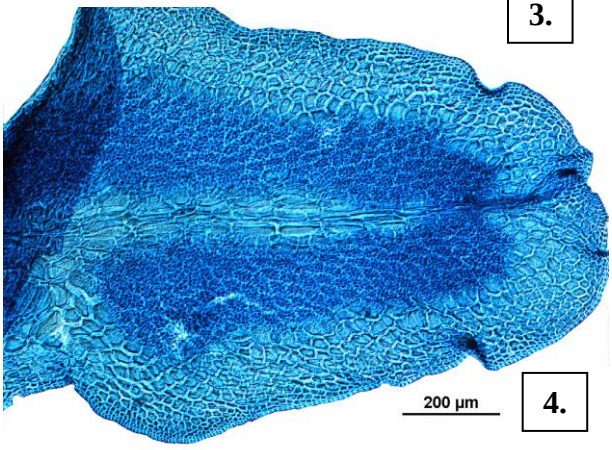


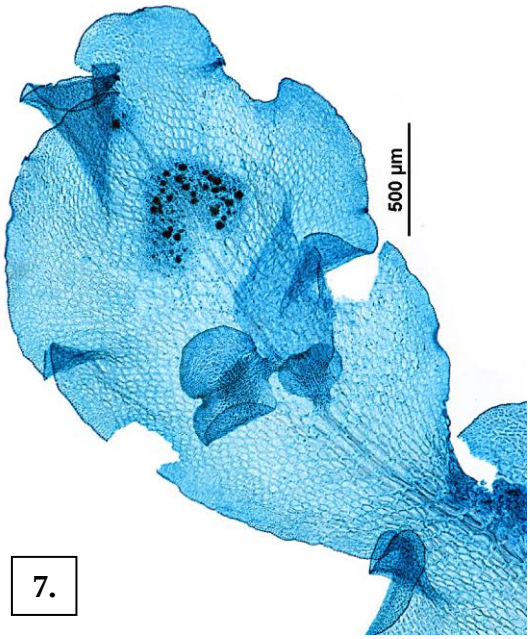
4.

Surface microscope views of *Dicroglossum crispatulum* stained blue

1. blade tip with apical cell (arrowed), mid-rib forming (***m rib***) and regular arching lines of cells (slide17191)
2. forked (dichotomous) mid-rib indicative of the origin of branching from the blade edges (exogenous)(slide 17191)
3. sunken cystocarp (***cys***) on the mid-rib of a bladelet (slide 17193)
4. spermatangial masses both sides of a mid-rib of a blade (slide 17193)

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

"Algae revealed", R N Baldock, State Herbarium S Australia, February 2009; edited May 2014



5, 6. two drift specimens of *Dicroglossum crispatulum* (Harvey) A. Millar & Huisman

5. from Vivonne Bay, Kangaroo I., S Australia (A10718)
6. from 10km E of Eucla, W Australia (A19285)

7, 8. surface microscope views at two magnifications of a tetrasporangial specimen stained blue:

7. clusters of mature sporangia on either side of the mid-rib of a main blade, ruffled edges, stalked bladelets bearing developing tetrasporangia arising from the mid-rib (slide 17191)
8. surface view of tetrasporangia adjacent to the leaflet mid-rib (slide 17191)

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