

Dilophus tener J Agardh



Some workers consider this genus should be sunk into *Dictyota*

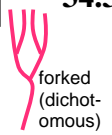
34.390



MACRO
PLANT



flat-bladed



forked (dichotomous)

Techniques needed and plant shape

Classification

Division: Phaeophyta; Family: Dictyotaceae; Tribe: Dictyoteae

*Descriptive name

deepwater delicate forked tips

Features



1. plants light brown, 80-200mm long and **delicate** in texture
2. main branches (axes) **2-3mm wide** and **forked** (dichotomous), upper branches 1-2mm wide and **alternate**, ending in a **point**

Special requirements

- 1 view the blades microscopically to find
 - **pointed** tips with **protruding** apical cells
 - if present, **sparse** tetrasporangia, **scattered** over the blade surface
 - if present, scattered female (ögonial) or male (antheridial) clusters (sori)
2. slice a blade across and view microscopically:
 - **young** blade **edges** with **1-2 rows**, blade **centres** with a **single** row of large cells (medulla) and an outer layer of small cells (cortex.), characteristic of the genus *Dilophus*
 - **older** parts with up to **5 rows** of large medulla cells in blade centres



Diagnosis can be difficult

Occurrences

Israelite Bay, W Australia to West I., Victor Harbor S. Australia

Usual Habitat

a deep water species of open coasts, to 41m deep

Similar Species

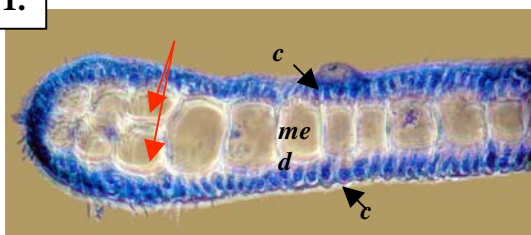


Phillips (1992) included *Dilophus tener* in *Dilophus gunnianus*

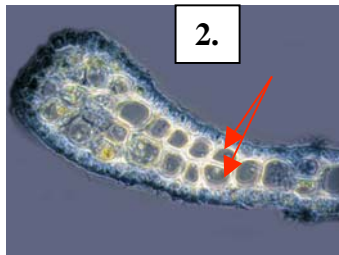
Description in the Benthic Flora Part II, pages 203-205

Details of Anatomy

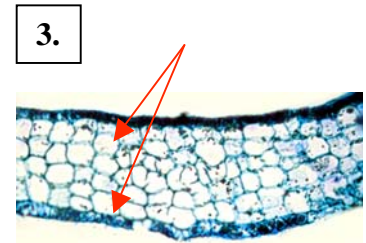
1.



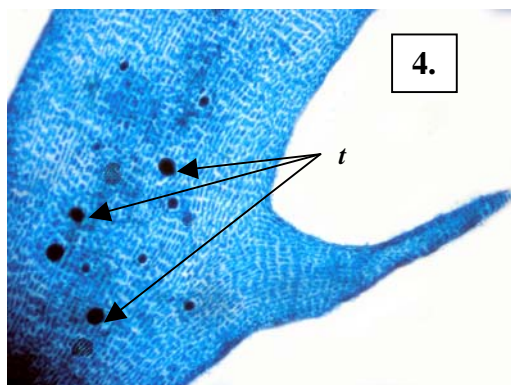
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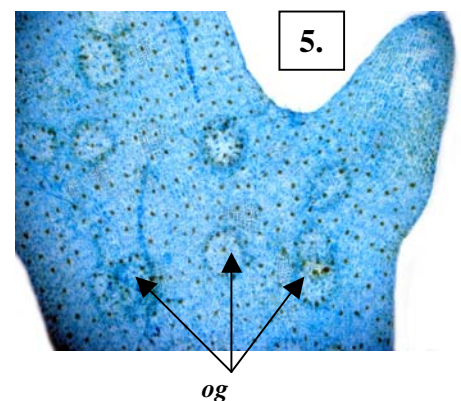
3.



4.



5.



og

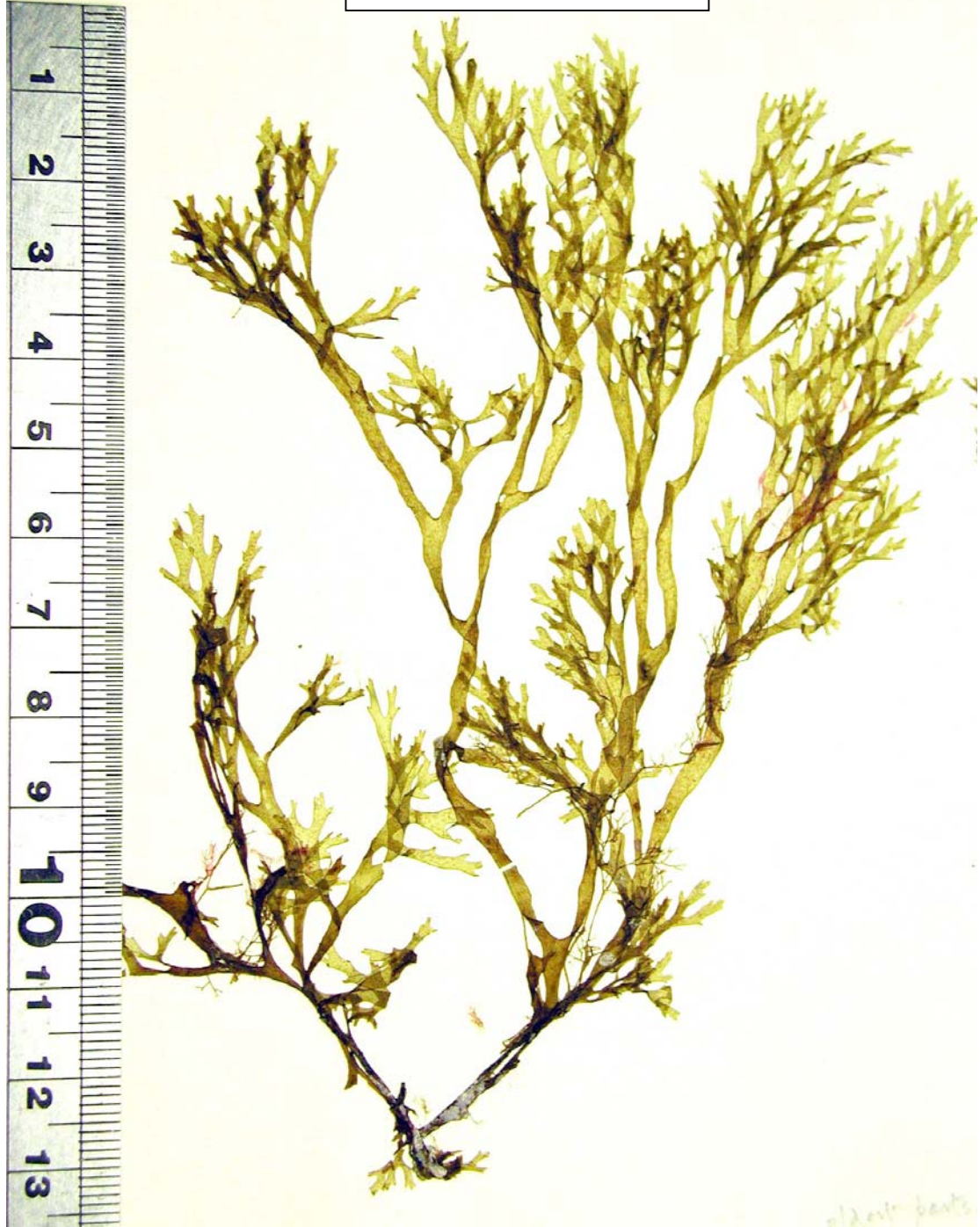
1-3. cross sections of *Dilophus tener* stained blue and viewed microscopically at different magnifications:

1. young blade showing a **single** row of large middle (medulla, *me*) cells in the blade centre, **2 rows** of medulla cells at the blade edge (arrowed) and an outer layer of small cells (cortex, *co*) (A30323 slide 9381)
2. further down the plant: the blade centre now has **2 rows** of large medulla cells (arrowed) (A38154 slide 9533)
3. lower part of the plant: up to **5 rows** of large medulla cells are present (arrowed) (A34095 slide 9527)

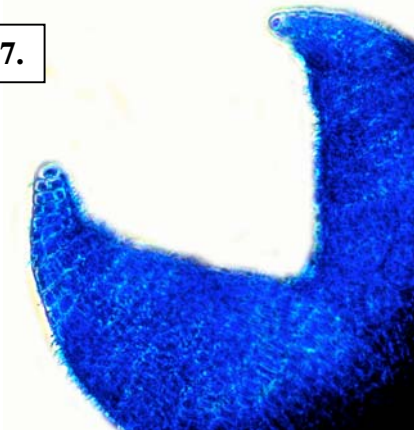
4-5. surface views of stained samples

4. showing sparse, scattered tetrasporangia (*t sp*) and a pointed side branch (A30323 slide 9381)
5. patches of female structures (ögonial sori, *og s*) (A38154 slide 9533)

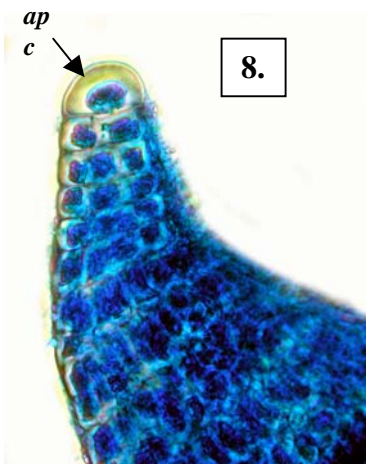
6. *Dilophus tener* J Agardh,



7.



8.



Dilophus tener J Agardh (A30323 slide 9381) stained blue and viewed microscopically:

- 7. forked and pointed tips
- 8. protruding apical cell (*ap*)
c) at a higher