

Techniques needed and shape



Classification

Phylum: Phaeophyta; Order: Chordariales; Family: Myrionemataceae

*Descriptive name

seagrass scale

Features

plants brown, of tiny, basal encrusting discs and erect hairs on Eel grass leaves

Special requirements



view microscopically the thin, **domed** crusts of radiating filaments, brown when fresh, **greenish** when preserved, to find:-

- **sparse, short** upright coloured (assimilatory) filaments
- long **broad** hairs (characteristic of the species)
- spore sacs with several compartments (plurilocular sporangia)
- swollen, club-shaped **ascocysts** about as **long** as the assimilatory filaments in the Onkaparinga estuary, S. Australia, possibly more widespread but unobserved because of its cryptic nature

Occurrences

Usual Habitat

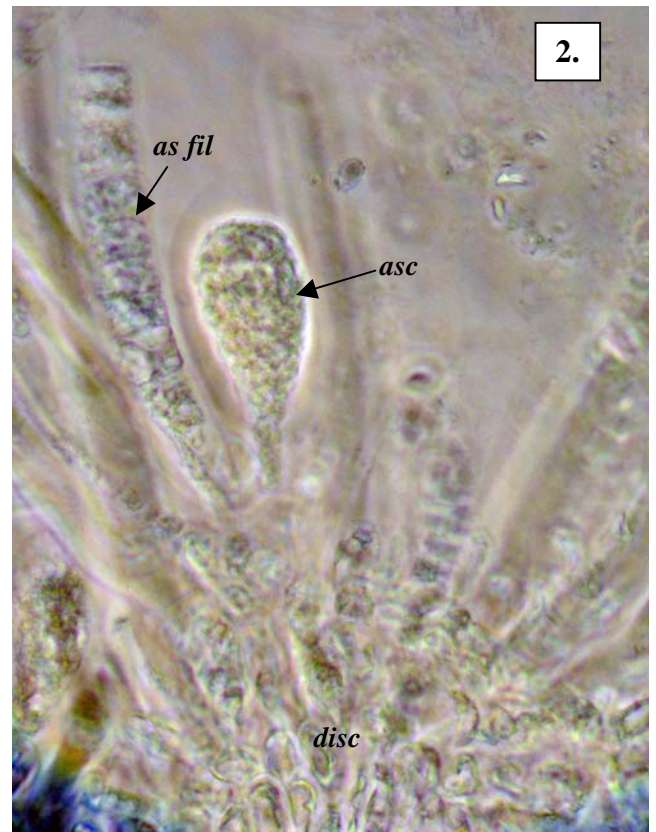
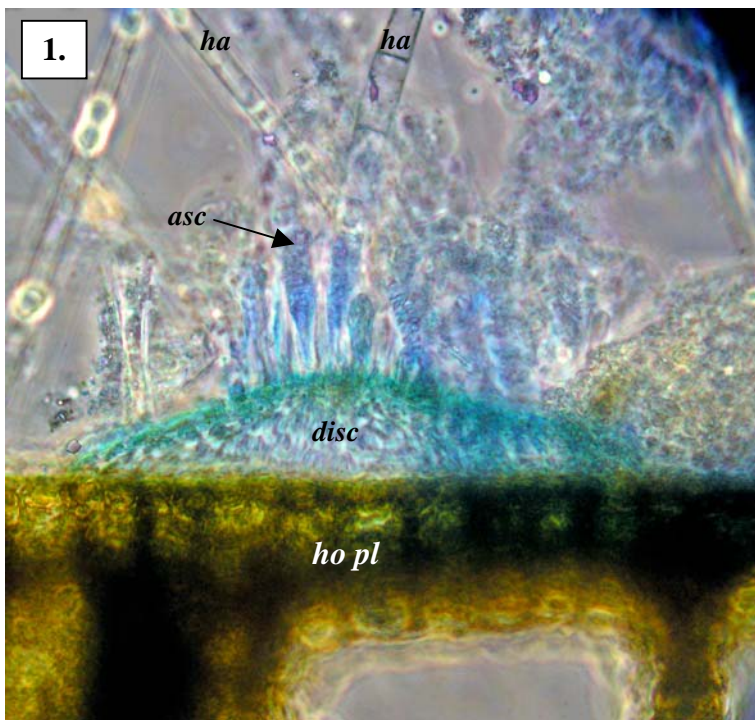
only known on *Zostera* leaves

Similar Species

other *Myrionema* species, but these are often larger, the disc is **not domed** and they grow on algae and *Pseudolithoderma* species but these have large sporangia with **single** compartments, or **terminal** ones with many compartments

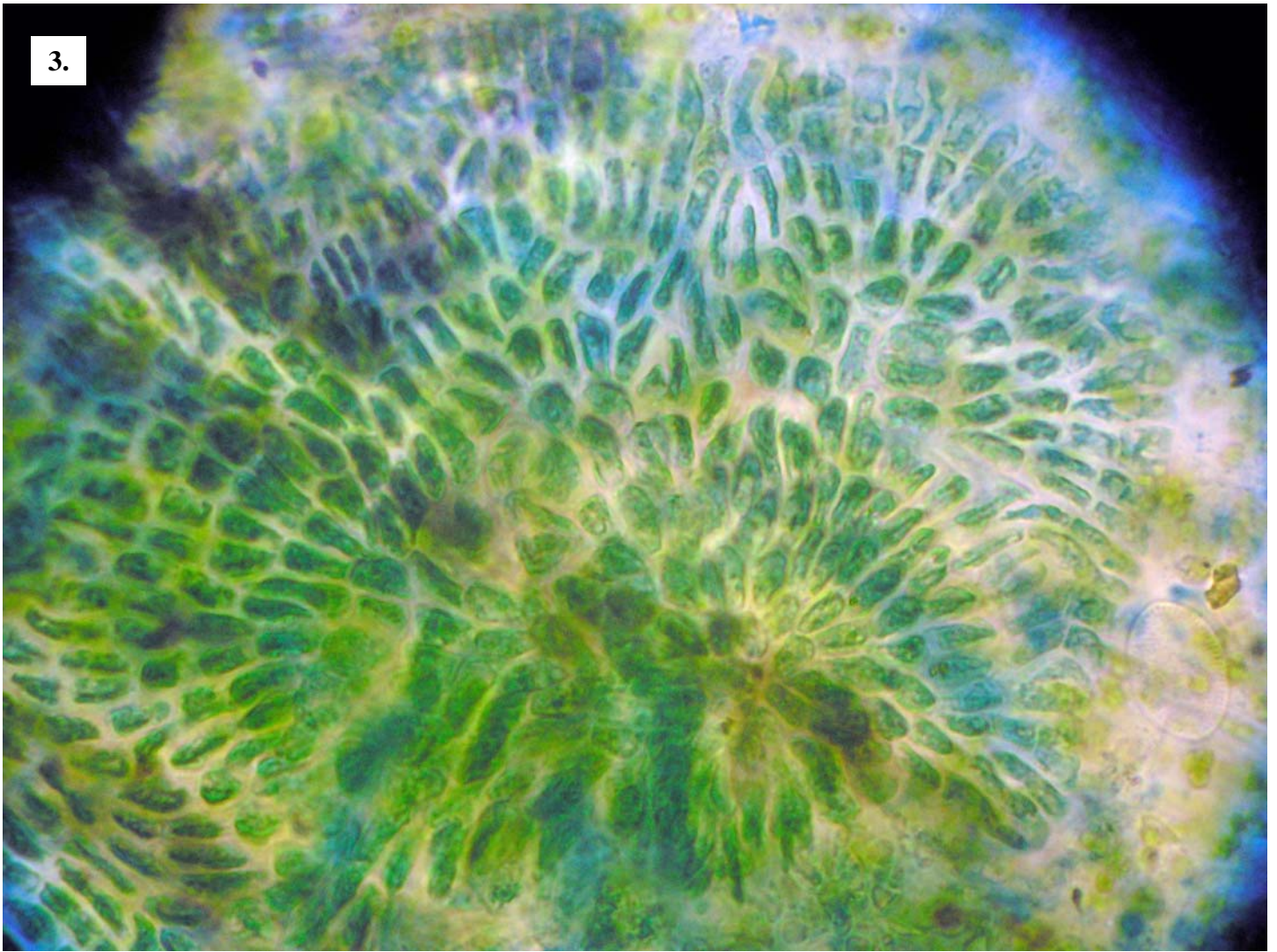
Description in the Benthic Flora Part II, pages 63-64

Details of Anatomy

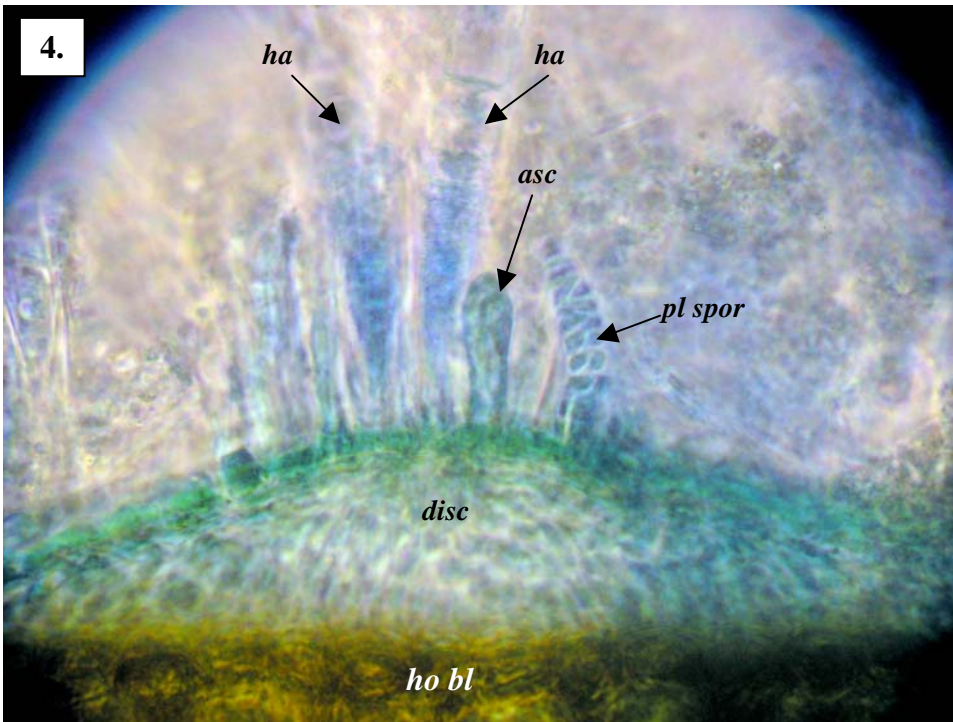


Myrionema latipilosum (A48142, slide 6210) stained blue and viewed microscopically at different magnifications.

1. cross section through a host (*Zostera*) plant (*ho pl*) showing the domed disc (*disc*), broad, long hairs (*ha*) and heavily stained ascocysts (*asc*)
2. dissected piece of plant showing photosynthetic (assimilatory) filaments (*as fil*) and an ascocyst (*asc*)



3.



4.

Microscope views of plants of *Myrionema latipilosum* Skinner & Womersley (A48142, slide 6210) stained blue.

3. an encrusting disc (*disc*) viewed from above, showing the radiating, closely adhering filaments

4. highly magnified side view of the host plant (*ho pl*), domed disc (*disc*), erect hairs (*ha*), many-compartmented sporangium (plurilocular sporangium, *pl spor*) and ascocyst (*asc*)

* Descriptive names are inventions to aid identification, and are not commonly used
 "Algae Revealed" R N Baldock, S Australian State Herbarium, August 2005