Schizoseris bombayensis (Børgesen) Womersley

**Techniques needed and shape** 

Classification

\*Descriptive name Features

Variations **Occurrences** 

**Usual Habitat Similar Species Description in the Benthic Flora** Part IIID, pages 112-114 **Special Requirements** 



Phylum: Rhodophyta; Family: Delesseriaceae; Tribe: Nitophylloideae; Group: Myriogramme

## small red Vein-blades

plants red-brown, fading to pink, fan-shaped, 10-50mm tall, of thin, filmy, flat-branched blades with *prominent*, broad, thick, forked mid-line veins; basal parts about 2mm wide, expanding to 30mm wide blades with ruffled edges

occasional tufts of rhizoids may occur at the edges of the blades

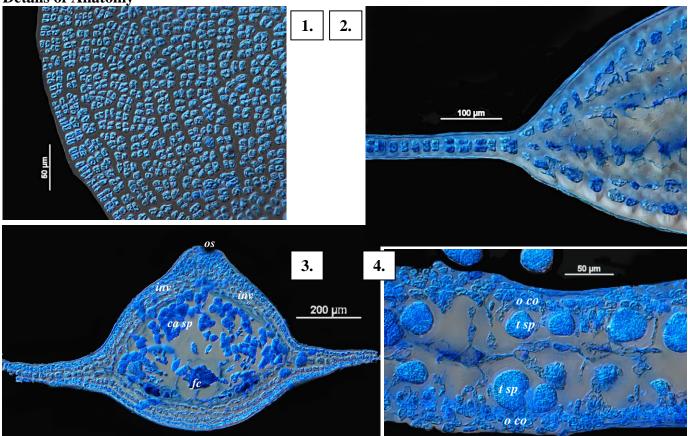
possibly widespread in the Indian Ocean. Also from S USA and Hawaii. In Australia, from the Queensland, Lord Howe I., Port Phillip Bay, Victoria and SE Tasmania on rock and shells, in shallow to deep water

*Myriogramme*, but there are no obvious mid-line veins in that genus

view microscopically to find:

- in surface views: blades are generally one cell thick, except at mid-line veins and reproductive regions; dividing cells are in irregular lines
- in cross sections through scattered, swollen, pustulate, developing female structures (cystocarps): large basal (fusion) cells, spreading branched threads (gonimoblast), terminal chains of sporangia (carposporangia), thin wrappings (involucres) of threads, slight necks, and single small openings (ostioles)
- in sporangial plants: scattered, irregular tetrasporangia on *both* sides of blades, *covered* by cells of the outermost layer (cortex)

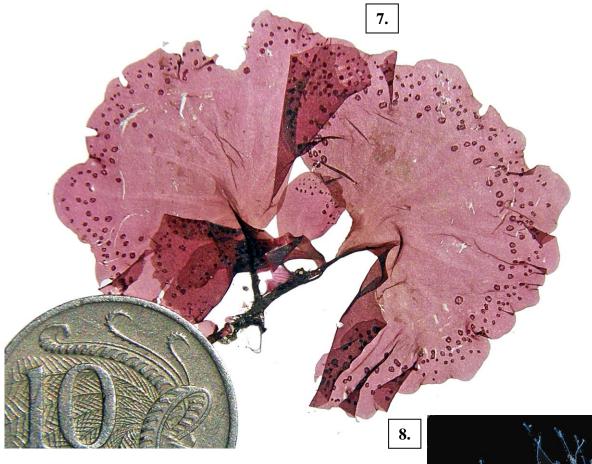
## **Details of Anatomy**



Schizoseris bombayensis stained blue and viewed microscopically:

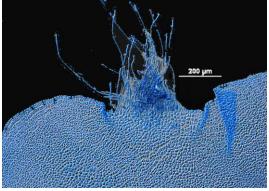
- 1. surface view of a blade edge (slide 18311): fringe of many, paired, dividing cells; cells in irregular lines
- 2. cross section through part of a vein (slide 18308): blade (to the left) generally one cell thick, vein with rows of inner large and outer small cells
- 3. cross section through a cystocarp (slide 18309): fusion cell (fc), thin sheath (involucre, inv), sporangia (ca sp), opening (ostiole, os)
- 4. cross section through a spore plant blade (slide 18310): tetrasporangia (*t sp*) covered by outer (cortical) cells (*o co*)





Schizoseris bombayensis (Børgesen) Womersley from Williamstown Victoria, 5-6m deep

- 5, 6. specimens A68032, unstained and stained blue with prominent broad, forked midribs, and pustule-like patches of sporangia
- 7. specimen A68330 with prominent sporangial patches (sori)
- 8. specimen stained blue and viewed microscopically: tuft of rhizoids on the ruffled edge (slide 18311)



\* Descriptive names are inventions to aid identification, and are not commonly used "Algae Revealed", R N Baldock, State Herbarium, S Australia, January 2009; revised July 2014