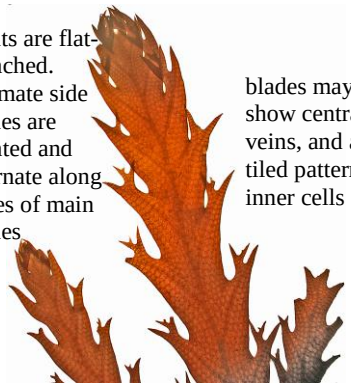
DICTYOMENIA AT A GLANCE, 2ND EDITION

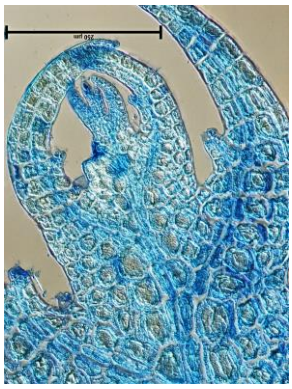
(specimens viewed microscopically are usually stained blue, or have a dark background; the coin scale is 24 mm or almost 1" wide)

FEATURES OF THE GENUS

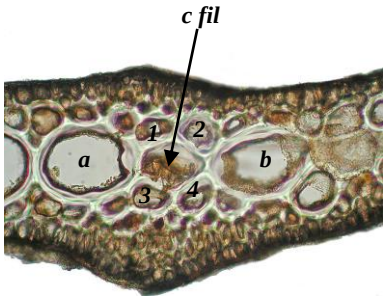
plants are flat-branched. Ultimate side blades are pointed and alternate along edges of main blades



blades may show central veins, and a tiled pattern of inner cells



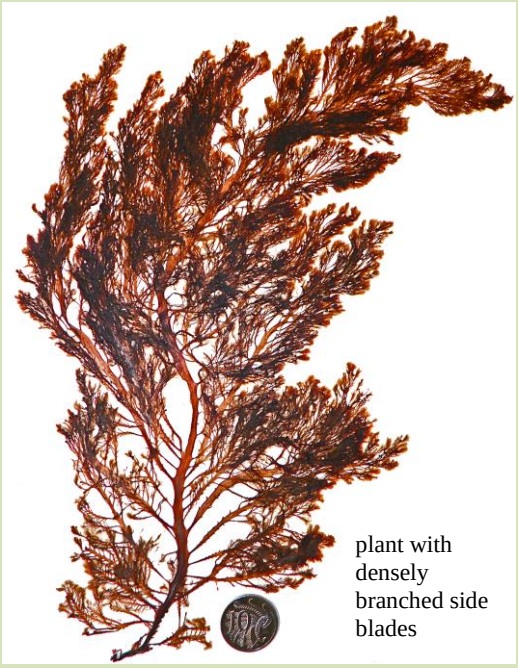
lines of cells forming central veins form at branch tips. Each cell is quickly surrounded by blocks of six flanking cells



blade in cross section through the mid-line vein: central thread (***c fil***), 4 small flanking cells (***1, 2, 3, 4***), two large flanking cells (***a, b***)

SPECIES AT A GLANCE

I. MAIN BLADES FEATHERY − BRANCHED OPPOSITELY SEVERAL TIMES OVER (bi- to tri-pinnate); reproductive structures found within ultimate branches



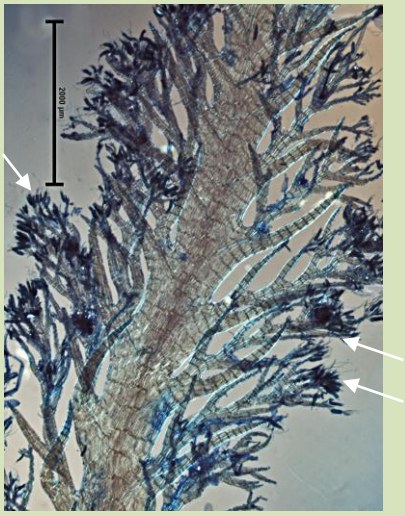
plant with densely branched side blades

plant with moderately branched side blades

plant heavily denuded basally

Dictyomenia harveyana
a variable species

detail of blades: tiled surface pattern, opposite side blades, spikey ultimate branches

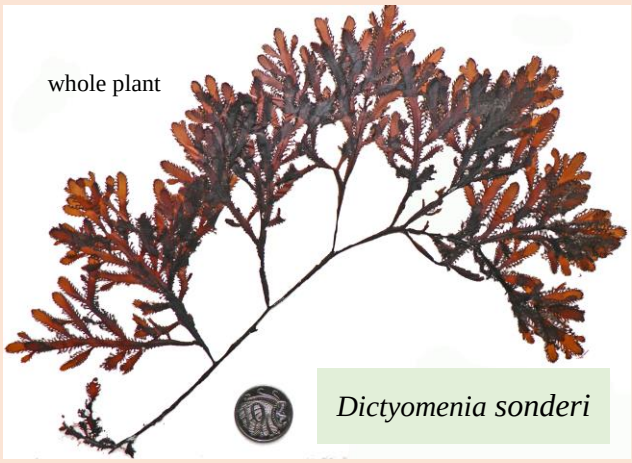


male plant: minute sperm clusters (arrowed) at the tips of ultimate branches, a distinguishing feature of this species

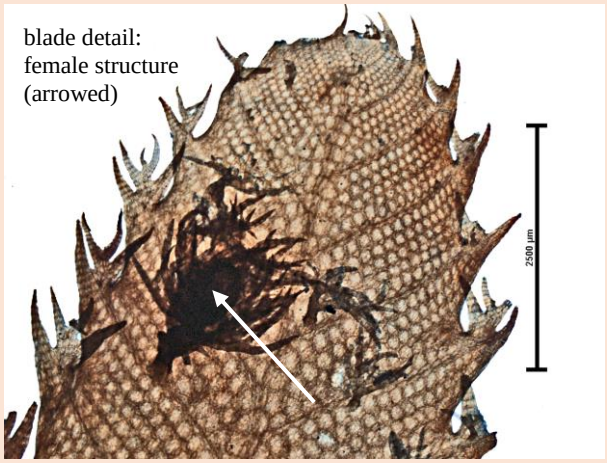
Baldock, R.N. (2018). *Dictyomenia* at a glance, 2nd edition. *Algae Revealed.* 3pp. Adelaide: State Herbarium of South Australia. flora.sa.gov.au/algae_revealed

II. MAIN BLADES MORE STRAP-LIKE − IRREGULARLY AND SPARSELY BRANCHED; reproductive structures found above veins on blades

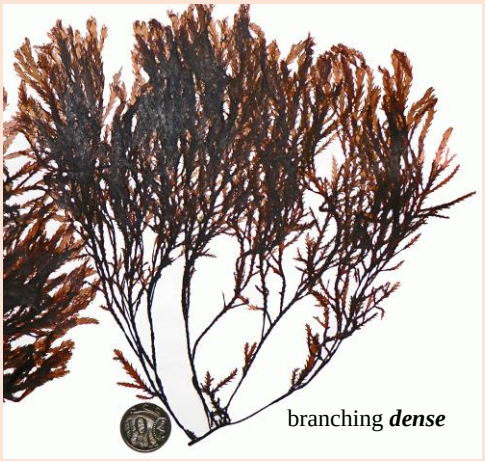
II A. MAIN BLADES 4-6 MM WIDE

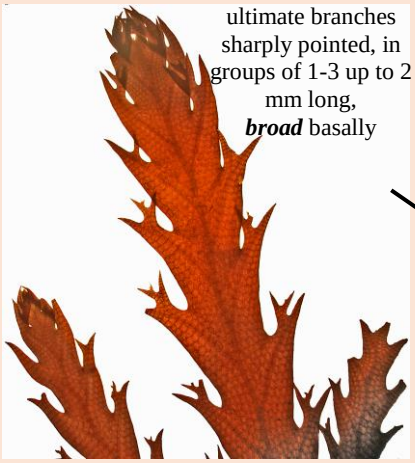


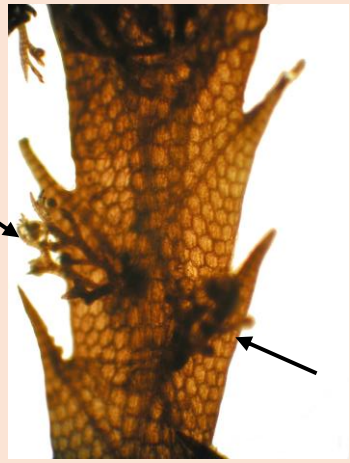
Dictyomenia sonderi



II B. MAIN BLADES 1-3 MM WIDE

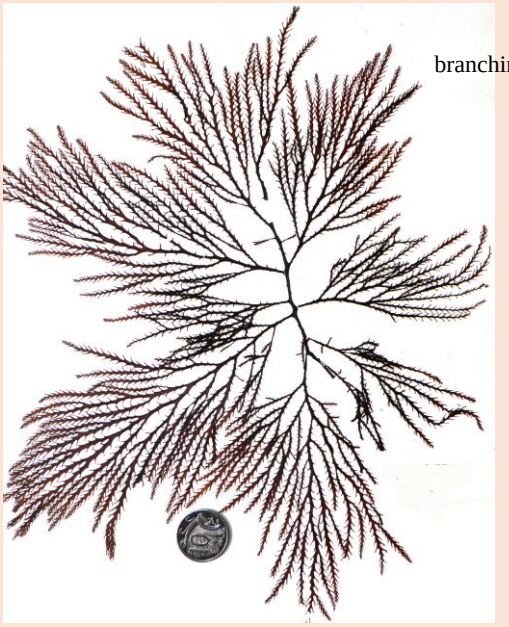






Dictyomenia tridens – a deep-water species in rough-water coasts

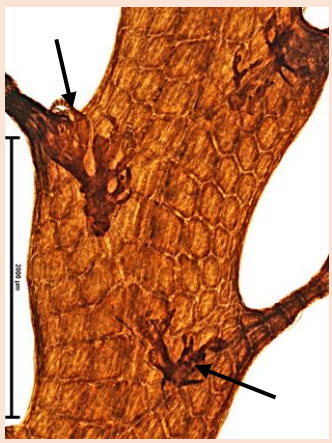
reproductive structures in tufts (arrowed), above veins



Dictyomenia angusta– may be a form of *D. tridens*

ultimate branches
slender, in groups of 1-3
up to 4 mm long,
narrow basally

reproductive structures in tufts (arrowed), above veins



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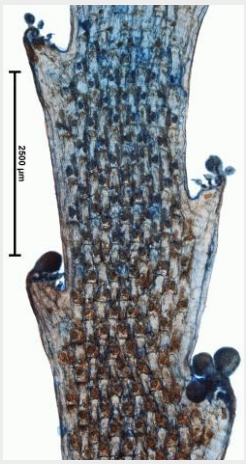
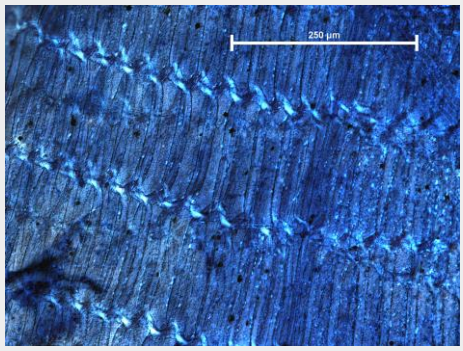
LOOK ALIKE ALGAE

Some flat-bladed algae superficially resemble *Dictyomenia*

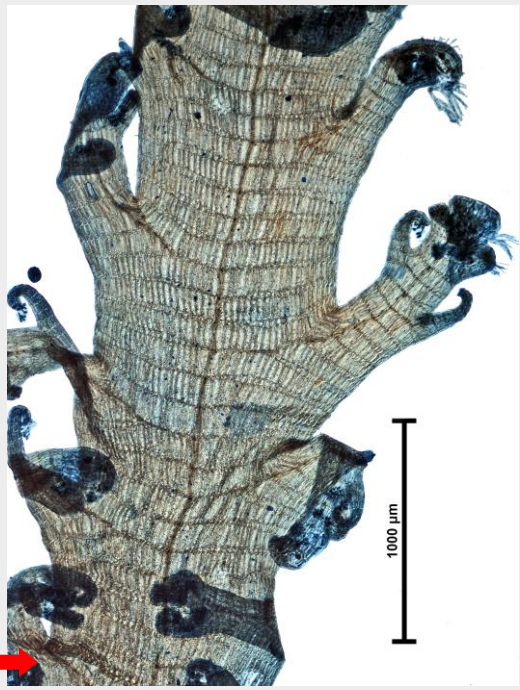
Amansia spp





Amansia pinnatifida has pointed ultimate branches from edges of blades. ***Patterns of surface cells*** are different to *Dictyomenia*

Amansia serrata has curved ultimate branches from edges of blades. ***Patterns of surface cells*** are different to *Dictyomenia*

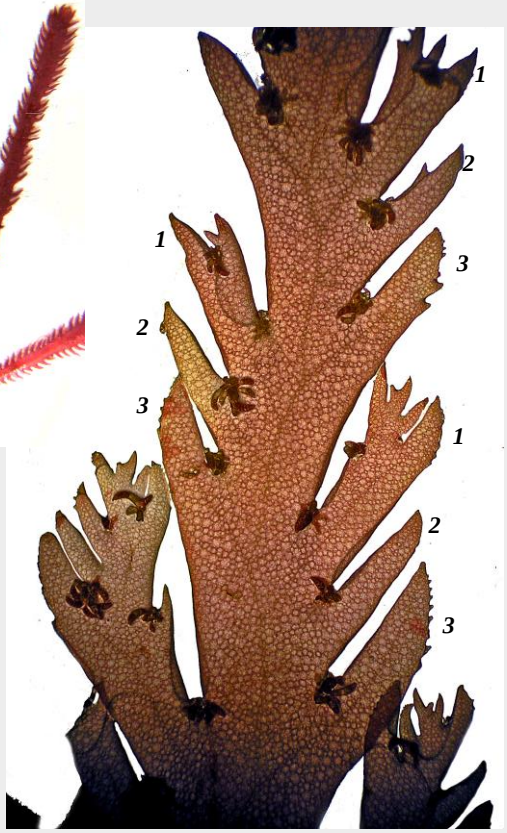


Vidalia spiralis

blades are toothed and ***twisted spirally***

Phacelocarpus spp.

blades have a ***thick midrib*** and margins with curved teeth



Plocamium spp.

blades have alternating series of side blades in 2's or 3's or 4's and reproductive structures in the angle between main and side blades

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