

COMMON SEAGRASSES OF SOUTH AUSTRALIA

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1. a long, wiry, prominently jointed stem wider than 1mm is present. Stiff, stubby leaves are usually clustered towards stem ends (Fig. 1)
 - Sea-nymphs or Wireweeds 2
1. stems are absent or inconspicuous (< 150mm long and, about 1mm wide and only obscurely jointed). Leaves usually arise in clumps of 1-4 from the sand or mud (Fig. 2)
 - 3
2. leaves are twisted, their basal sheaths don't overlap except at the base. Tips of leaves have two sharp teeth (Figs. 1, 3)
 - *Amphibolis antarctica*
2. leaves not twisted, their basal sheaths overlap. Leaf tips have two rounded teeth (Fig. 4)
 - *Amphibolis griffithii*
3. leaves are paddle-shaped, delicate, semi-transparent and often in pairs (Fig. 5)
 - *Halophila australis*
3. leaves string- or strap-shaped 4
4. leaves string-like (1-2mm wide). 1-several unbranched roots arise from the base of each tuft of leaves (Fig. 6)
 - 5
4. leaves strap-like (wider than 2mm). 1-several branched roots arise from the base of leaf tufts (Fig. 11)
 - 7
5. a slice across the stem between leaves (the internode) shows 4 – 12 veins (vascular bundles) (Fig 7). Often in shallow water
 -[§]*Zostera (Heterozostera) tasmanica*
5. a slice across the stem between leaves (the internode) shows 2 veins (vascular bundles) (Fig. 8). Often in deep water
 - 6
6. the leaf tip is rounded or deeply notched (Fig. 9). Several roots arise from the base of each notch (node) on the runner (rhizome)
 - *Zostera muelleri*
6. the leaf tip has 3 points (Fig.10). Only 2 roots arise from the base of each notch (node) on the runner (rhizome)
 - *Zostera mucronata*
7. leaves thick, stiff *Posidonia coriacea*
7. leaves thin, flexible 8
8. leaves in tufts of 2-3, wrapped at their bases with pale sheaths that become fibrous with age (Figs. 11, 12) 9
8. leaves in tufts of 1-2, wrapped at their bases by dark, smooth sheaths with concave tips at the base of leaf tufts (Fig. 12)
 - *Posidonia sinuosa*
9. leaves 10-15mm wide. Surface cells are box-shaped when viewed microscopically from above
 - *Posidonia australis*
9. leaves 4-6mm wide (Fig. 13). Surface cells are rectangular when viewed microscopically from above
 - *Posidonia angustifolia*

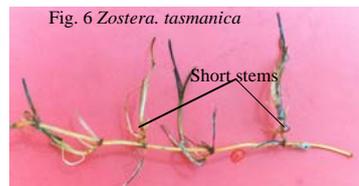
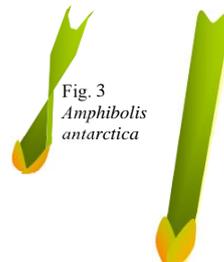


Fig. 8 view of veins in the internode of *Zostera muelleri*



Fig. 7 view of veins in the internode of *Zostera tasmanica*



Fig. 9 *Zostera muelleri*



Fig. 10 *Zostera mucronata*



Fig. 11 pale fibrous sheath at the base of a leaf tuft of *Posidonia australis*



Fig. 12 smooth, black sheaths with concave tips at the base of a leaf tufts of *Posidonia sinuosa*



Fig. 13 pale fibrous sheaths and narrow leaves of *Posidonia angustifolia*

([§] *Heterozostera tasmanica* is now considered a species of *Zostera*)