Limonium australe var. *australe*

Images by Richard Schahinger

FAMILY: PLUMBAGINACEAE

BOTANICAL NAME: *Limonium australe* (R.Br.) Kuntze var. *australe*, *Revis. Gen. Pl.* 2: 395 (1891)

COMMON NAME: Yellow sea-lavender

COMMONWEALTH STATUS (EPBC Act): Not listed

TASMANIAN STATUS (TSP Act): rare

Description

Limonium australe is a glabrous perennial herb with a stout, erect, woody rootstock. The leaves form a basal rosette, are oblanceolate to spathulate in shape, 5 to 15 cm long by 8 to 25 mm wide; the leaf margins are entire but often undulate. Flowering stems are erect, 20 to 45 cm high, green and angular, much-branched and forming corymbose panicles that bear numerous subsessile spikelets towards the end of the branches. The white to pink calyx is 6 to 8 mm long, with a 5-ridged tube 4 to 5 mm long, each ridge having a row of short inclined hairs. The petals are slightly longer than the calyx, with small oblong yellow lobes. The fruit is a five-angled capsule, with a solitary flattened-fusiform brown seed 3 to 3.5 mm long. Flowering occurs mainly in the period January to April. (Curtis 1967, Walsh & Entwisle 1996, pers. obs.). **Confusing species:** *Limonium australe* var. *baudinii* is very similar, the key distinguishing feature being the lack of hairs on the calyx (Linczevski 1986, Walsh & Entwisle 1996, Gray & Duretto 2011).

Distribution and Habitat

On mainland Australia *Limonium australe* occurs in Victoria, New South Wales and Queensland (Walsh & Entwisle 1996). In Tasmania the species has been recorded from the north coast (west of and including the Tamar Estuary) and the southeast, where it is restricted to saltmarshes. Associated species may include *Sarcocornia* spp., *Suaeda australis, Tecticornia arbuscula*, *Austrostipa stipoides* and *Distichlis distichophylla*.

Key Sites and Populations

Short Island, Harcus Island, Stony Point, Port Sorell, Swan Point, Barilla Bay.

Known Reserves

Lees Point Conservation Area*, Pitt Water Nature Reserve, Port Sorell Conservation Area, Ralphs Bay Conservation Area*, Tamar Conservation Area, West Inlet Conservation Area (* not seen in recent times despite targeted surveys).

Plates 1 & 2. *Limonium australe*: saltmarsh habitat at Harcus Island (left) & East Inlet (right)

Ecology and Management

Members of the Plumbaginaceae family have leaves with chalk-glands that allow them to cope with extremely saline conditions. The glands excrete calcareous salts that are dissolved in the water of the plant's tissues … excretion moves the salts out of the plant where they may crystallise and be washed away (University of California 2003).

Threats to the species' saltmarsh habitat in Tasmania are manifold (Kirkpatrick & Glasby, Schahinger 2004 & 2009, Mount et al. 2010, Prahalad & Pearson 2013):

- drainage and land reclamation;
- changes to sediment supplies due to coastal engineering or catchment modifications (through vegetation clearance, dam construction, etc);
- stock grazing and trampling;
- physical disturbance by vehicles;
- invasion by the introduced rice grass (*Spartina anglica*);
- rising sea levels associated with climate change, habitat being at risk from erosion due to increased wave action during storm events, or inundation (the latter being compounded by the presence of barriers to 'migration' inland).

In August 2013 the habitat of *Limonium australe*, the ecological community 'Subtropical and Temperate Coastal Saltmarsh' was listed as Vulnerable on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

Conservation Status Assessment

There is no immediate need for a reassessment of *Limonium australe*.

Further Information

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- Gray, A.M. & Duretto, M.F., (2011). *Limonium australe* var. *baudinii* (Lincz.) A.M.Gray, a new combination in Plumbaginaceae. *Kanunnah* 4: 117–118.
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- Linczevski, I. (1986). Generis Limonium Mill. (Limoniaceae) Species Novae Ex Australia. *Novitates Sytematicae Plantarum Vascularum* 23: 101–110.
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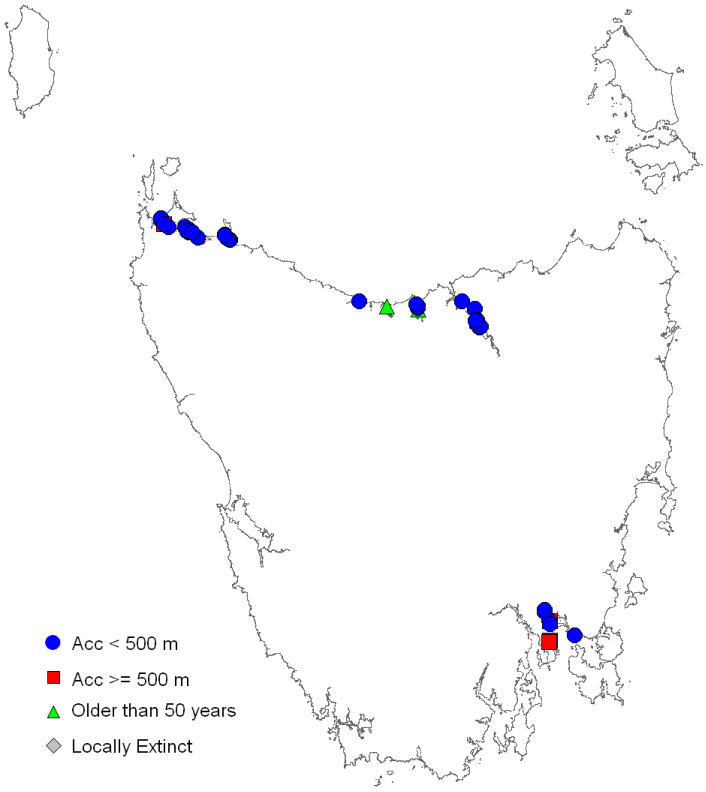
- Prahalad, V. & Pearson, J. (2013). *Southern Tasmanian Coastal Saltmarsh Futures: A Preliminary Strategic Assessment*. NRM South, South Hobart.
- Schahinger, R. (2004). The Taxonomic Status of Baudin's sea lavender (*Limonium baudinii* Lincz.) (with notes on its distribution & conservation status). A report for the Threatened Species Section, Department of Primary Industries, Water and Environment, Hobart.
- Schahinger, R. (2009). *Limonium australe in the Cradle Coast NRM Region: a rare salt marsh species at risk from climate change?* A report to the Cradle Coast NRM Region Committee, Threatened Species Section, Department of Primary Industries and Water, Hobart.
- University of California Berkeley (2003). *Introduction to the Plumbaginaceae: The Leadwort*s, www.ucmp.berkeley.edu/anthophyta/caryos/plumbaginaceae.html.
- Walsh, N.G. & Entwisle, T.J. (1996). *Flora of Victoria. Volume 3. Dicotyledons: Winteraceae to Myrtaceae.* Inkata Press, Melbourne.

Tasmanian Distribution

(As per Threatened Species Section records, September 2013)



1:25 000 Map Sheets

Beaconsfield, Bell Bay, Carlton, Devonport, Exeter, Grim, Harford, Hobart, Montagu, Port Sorell, Richmond, Smithton, Stanley, Studland, Taroona, Ulverstone.

Date last modified: 1/10/2013

View

http://www.dpipwe.tas.gov.au/threatenedspecieslists

Contact details

Threatened Species Section, Department of Primary Industries, Parks, Water & Environment, GPO Box 44, Hobart, Tasmania, Australia, 7001. Phone (03) 6233 6556; fax (03) 6233 3477.

Permit

It is an offence to collect, disturb, damage or destroy this species unless under permit.