Anthosachne solandri

COMMON NAME
Native wheatgrass, blue wheatgrass

SYNONYMS
Triticum solandri Steud., T. squarrosum Hook.f., T. youngii Hook.f., Agropyron youngii (Hook.f.) P.Candargy; Elymus solandri (Steud.) Connor

FAMILY
Poaceae

AUTHORITY
Anthosachne solandri (Steud.) Barkworth et S.W.L.Jacobs

FLORA CATEGORY
Vascular – Native

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

STRUCTURAL CLASS
Grasses

NVS CODE
ANTSOL

CHROMOSOME NUMBER
2n = 42

CURRENT CONSERVATION STATUS
2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES
2009 | Not Threatened
2004 | Not Threatened

DISTRIBUTION
Endemic to New Zealand. North and South Islands. Uncommon north of the Waikato.

HABITAT
Coastal to alpine (1 to 1500 m), often on rocky ground such as talus slopes, cliff faces and scree, but also a component of tussock grassland.

Elymus solandri. Photographer: Alan Stewart

Seatoun, Wellington. Mar 2011. Photographer: Jeremy Rolfe

FEATURES
Glaucous to green grass forming loose to open, somewhat floppy tufts. Leaf-sheath 50 mm, keeled, pubescent, hairy or glabrous. Ligule 0.5 mm, truncate. Leaf-blade 210 × 2-4 mm, glaucous or green, flat, folded or inrolling, under side ribbed, upper surface short hairy or with prickle-teeth on ribs, margin involute, glabrous or faintly toothed. Culm 0.4-1 m, spreading, erect, suberect or drooping. Inflorescence 80-200 mm, of 3-15 spikelets. Spikelets 25-80 mm, of 4-10 florets. Glumes unequal, keeled, sometimes produced to a point or awned, lower 3-11 mm, 3-nerved, upper 5-12 mm, 3-5-nerved. Lemma with central nerve prominent, this extending into a recurved awn 35-75 mm long. Palea 9-12 mm, apex pointed, bifid. Rachilla 1.5-3 mm, covered with short, stiff, hairs. Callus 0.75 mm, hairs just reaching lemma. Anthers 3-5 mm.

SIMILAR TAXA

Anthosachne solandri has long been confused with the introduced Australian wheatgrass A. scabra (long known in New Zealand as E. rectisetus and then, more recently as E. scaber), from which it differs by the usually glaucous leaf-blades whose undersides are glabrous (though green in shaded plants, strongly recurved awn (though on some spikes the awn may be only slightly curved), and by the palea apex being pointed and bifid. Recognition in the field is complicated by the wide range of leaf and flower stalk sizes. When in flower/fruit the spikes are held close to the main stem and the awns are often distinctly curved. A form of A. solandri with long drooping culms found in dryland eastern South Island is sometimes confused with Connorochlora tenuis. However, the finer culms of Connorochloa lie flat along the ground and are easily detached (the detached culm is the easiest way of identifying C. tenuis). In contrast the culm of Anthosachne solandri is difficult to detach from the plant. The transfer of Elymus solandri to Anthosachne was undertaken by Barksworth & Jacobs (2011).

FLOWERING

September-Feburary

FRUITING

October -May

LIFE CYCLE

Florets are dispersed by wind and attachment (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Very easy from fresh seed or rooted pieces, often self sows into gardens but not invasive, and short-lived in humid or wet climates. Does best in full sun, in a dry or airy place. Excellent on rock walls where the foliage can hang.

ETYMOLOGY

solandri: Named after Daniel Carlsson Solander (19 February 1733 - 13 May 1782) who was a Swedish naturalist and an apostle of Carl Linnaeus.

WHERE TO BUY

Commonly sold by most retail plant nurseries, often under the name Elymus cv. Blue

NOTES

Rather variable and there have been some attempts to split this species into discrete entities. One form, with inrolled, channelled leaves known by the tag name Elymus Channel, occurs locally in Marlborough and Otago. Though often sympatric with E. solandri, it is not stable, and in cultivation soon reverts to the typical form. E. solandri is also very variable with respect to the leaf colouration, which ranges from dark blue-grey through to light green. Another short-culmed few-flowered form is found on alpine screes.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange June 2005. Features description adapted from Edgar & Connor (2000).

REFERENCES AND FURTHER READING

Barkworth, M.E.; Jacobs, S.W.L. 2011: The Triticeae (Gramineae) in Australasia. Telopea 13: 37-56.
Edgar, E.; Connor, H.E. 2000: Flora of New Zealand. Vol. V. Lincoln, Manaaki Whenua Press.
Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. Perspectives in Plant Ecology, Evolution and Systematics 11: 285-309

NZPCN FACT SHEET CITATION

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MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/anthosachne-solandri/