Austroderia splendens

COMMON NAME toetoe

SYNONYMS Cortaderia splendens Connor

FAMILY Poaceae

AUTHORITY Austroderia splendens (Connor) N.P.Barker et H.P.Linder

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS Yes

ENDEMIC FAMILY No

STRUCTURAL CLASS Grasses

NVS CODE AUSSPL

CHROMOSOME NUMBER 2n = 90

CURRENT CONSERVATION STATUS 2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened 2009 | Not Threatened 2004 | Not Threatened

DISTRIBUTION

Endemic. A northern species common from the Three Kings Islands south to about Waikawau in the west and Ohiwa Harbour in the east—exact southern limit unclear.

HABITAT

Abundant in coastal situations, within dunefield, associated shrublands, on cliff faces and on offshore islands.

WETLAND PLANT INDICATOR STATUS RATING

FAC: Facultative Commonly occurs as either a hydrophyte or non-hydrophyte (non-wetlands).





Cortaderia splendens. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Lake Morehurehu. Photographer: Lisa Forester, Licence: CC BY-SA.

DETAILED DESCRIPTION

Generally a robust, stout, rhizomatous tussock forming grass up to 6 m tall when in flower. **Leaf-sheath** clothed in long hairs, pale green, copiously covered in white wax. Ligule 3 (or more) mm long, contra-ligule (line of hairs at the leaf blade/culm junction) present. **Leaf-blade** 2–3(–4.8) × 0.3–0.5 m, yellow-green, green to dark-green, upper side glabrous, underside basally with dense weft of hairs, this becoming sparse toward midribs, trending toward mintuely hairy throughout. **Culm** up to 6 m, inflorescence portion up to 1 m tall, erect to nodding, plumose. **Spikelets** numerous, 40 mm with 2–3 florets per spikelet. Glumes equal, 40 mm with awn-like apex, > florets. **Lemma** 11 mm, 3-nerved, scabrid. **Palea** 9 mm, keels ciliate. **Callus** hairs 4 mm. **Rachilla** 1 mm. **Flowers** either perfect or female. **Anthers** of perfect flowers 6 mm, in females 4 mm. **Ovary** of perfect flowers 0.7 mm, stigma-styles 2 mm; female flowers with ovary 1 mm, stigma-style 4 mm. **Seed** 4–5 mm.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the grasses of New Zealand

SIMILAR TAXA

This species can be distingushed from the other native Austroderia species best by the leaf blade, which is densely hairy above the ligule, and by the 3 mm (or more) long ligule, and presence of a contra-ligule. For distinctions from the naturalised Cortaderia see notes under Austroderia toetoe.

FLOWERING September–November

FRUITING October–March

LIFE CYCLE Florets are wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Easily grown from fresh seed (as a revegation exercise ripe seed heads can be pinned to soil surface, and if kept damp, soon germinate) and division of established plants.

THREATS

Abundant and not threatened. Often naturalising in suitable habitats.

ETYMOLOGY splendens: Splendid

WHERE TO BUY

Uncommon in cultivation. Occasionally offered by specialist native plant nurseries.

CULTURAL USE/IMPORTANCE

Two ecotypes exist, a small form typical of coastal cliff faces and rocky islets, and a robust form confined to active and semi-consolidated dune field. The robust form, from which the type specimen was selected, is rhizomatous, and produces very large (2-3(-6) m) culms which push through sand, and so in cultivation can be recognised because the culms soon flop and fall over without support. The small ecotype (which some consider as a distinct, as yet undescribed species) is not rhizomatous, and has a more compact growth form, otherwise in leaf, ligule, flower, and seed characters it matches the robust form.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 1 October 2006. Description adapted from Edgar & Connor (2000).

REFERENCES AND FURTHER READING

Edgar E, Connor HE. 2000. Flora of New Zealand. Vol. V. Grasses. Christchurch, Manaaki Whenua Press. 650 p. Thorsen MJ, Dickinson KJM, Seddon PJ. 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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https://www.nzpcn.org.nz/flora/species/austroderia-splendens/ (Date website was queried)