Spinifex sericeus

COMMON NAME

spinifex, kōwhangatara

SYNONYMS

New Zealand plants have long been referred to Spinifex hirsutus Labill. a species that is now considered quite unrelated and confined to Western Australia

FAMILY

Poaceae

AUTHORITY

Spinifex sericeus R.Br.

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

No

ENDEMIC GENUS

Nο

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Grasses

NVS CODE

SPISER

CHROMOSOME NUMBER

2n = 18

CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: SO

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Indigenous. Common throughout New Zealand. Also present in Australia

HABITAT

Strictly coastal where it is confined to sandy beaches. This is the main dune forming indigenous plant in New Zealand. It is usually found at the front of actively accumulating foredunes. Its does not tolerate stable dune systems and does not compete well with other introduced dune plants.

WETLAND PLANT INDICATOR STATUS RATING

UPL: Obligate Upland

Rarely is a hydrophyte, almost always in uplands (non-wetlands).





New Chums beach, Whangapoua, February. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



New Chums beach, Whangapoua, February. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DETAILED DESCRIPTION

Stoloniferous, often forming colonies stretching to 80–(160) m along sand dunes, with much-branched, knotted, rope-like, hard, creeping culms. **Leaf-sheath** leathery, strongly-nerved, silky-hairy. **Ligule** minute, ciliate, hairs very dense to 6 mm. **Leaf-blade** c. 300 mm, inrolled and c. 1.5 mm diameter, leathery, strongly nerved, silky-villous. **Culm** 2.5-6.0 mm diameter, internodes glabrous, silky-villous below inflorescence. Dioecious*: **male inflorescence** with numerous pedunculate racemes, 0–120 mm, bearing up to 15 silky-villous spikelets, each terminated by a short bristle c. 10 mm; raceme clusters subtended by spathaceous bracts ≤ raceme. **Male spikelets** 100 mm; glumes ≤ spikelet, 7–9-nerved; lemmas similar to glumes but less villous, 5-nerved; each floret with 2 emarginate lodicules 0.6 × 0.3 mm, and 3 pollen-filled anthers to 6 mm. **Female inflorescence** very conspicuous, globular, appearing spiny with strict bracts to 150 mm, disarticulating from culm at maturity and wheeling along sand; spikelets solitary, hidden at base of bract, 15–18 mm; glumes equal to spikelet, 5–7-nerved, silky-villous; lemmas shorter, less villous, rather chartaceous, 3–5-nerved; lower floret sterile; upper floret female, larger, with 2 lodicules c. 1 × 1 mm, and 3 stamens with stout filaments bearing white, pollen-less anthers up to 1.5 mm; ovary 1.5–2.0 mm, stigma-styles 17–20 mm; seed free, c. 4.5–5.0 × 2.5 mm.

* but stems with both male and female flowers are known

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the grasses of New Zealand

SIMILAR TAXA

None—the distinctive softly spiny female seed heads, which disarticulate and are usually seen rolling down the beach readily identify this species.

FLOWERING

September-December

FLOWER COLOURS

White

FRUITING

November-May

PROPAGATION TECHNIQUE

Easily grown from fresh seed (which is best). Can be grown from layered pieces but often slow to start and fickle. Does best when planted directly into sand dunes—not a good plant for the average garden.

WHERE TO BUY

Sold by a number of specialist native plant nurseries. Popular plant for dune restoration.

ATTRIBUTION

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

REFERENCES AND FURTHER READING

Edgar E, Connor HE. 2000. Flora of New Zealand. Vol. V. Grasses. Manaaki Whenua Press, Christchurch, NZ. 650 p. Gardner R. 1999. *Spinifex sericeus* in Auckland. *Auckland <u>Botanical Society Journal 54*: 36</u>.

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/spinifex-sericeus/