Digitaria setigera

COMMON NAMES
Pacific crab grass

BIOSTATUS
Native

CURRENT CONSERVATION STATUS
2023 | At Risk – Naturally Uncommon | Qualifiers: SO
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Grasses

FLOWER COLOURS
Brown, Purple

DETAILED DESCRIPTION
Annual, weakly caespitose to loosely matted grass forming tufts up to 1 m tall (usually much less). **Stem** rooting at lower nodes. **Leaf-sheath** folded, ribbed, light green to dark green, sometimes glaucescent or darkly maroon pigmented, bearing long, fine, spreading, tubercle-based hairs. **Ligule** 1.0–2.5 mm, membranous, glabrous, truncate, erose. **Leaf-blade** 35–100 × 2–7 mm, light green, dark green, often glaucescent, soft, linear tapering to long, finely pointed tip, surfaces finely hairy, ribs and margins scabrid. **Culm** 0.1–0.45(–1.0) m, ascending-erect or floppy, internodes glabrous. **Raceme** 3–5, 35–100 mm, slender, compressed, digitate or spreading; rachis 3-angled, winged, 0.3–0.8 mm widfe, scabrid on angles, short-hairy at base. **Spikelets** 2.5–3.5 mm, paired, lanceolate, long-acute, laterally with fine acute-tipped hairs. **Lower glume** 0, or reduced to a minute rim or scale c.0.1 mm, upper 0.6–1.5 mm, c.¼–(⅓) length of spikelet, 0–3-nerved, deltoid, obtuse to subacute, glabrous, or with long hairs on margins overtopping glume. **Lower floret**; lemma = spikelet, 5–7-nerved, nerves inaequidistant, glabrous, outer internerves with long hairs. **Upper floret**; lemma ≈ spikelet, glabrous, acuminate, yellowish or light brown (amber) at maturity; palea ≈ lemma, similar in texture and shape; anthers 1.0–1.3 mm; stigmas brown; cayopsis c.1.5 mm, oblong.

Digitaria setigera herbarium specimen collected from North Chanter, The Chanters, Herald Islets, Kermadec Islands (P.J. de Lange K1265, AK 356072). Photographer: Peter J de Lange, Date taken: 01/08/2011, Licence: CC BY-ND.

DISTRIBUTION
Indigenous. Northern Kermadec Islands where locally common on The Meyers, Herald Islets, Chanters and Napier. Recorded from Raoul Island but not confirmed from there recently. Collected once sometime between 1838 and 1840 (possibly as a genuinely naturalised occurrence) from the Bay of Islands, North Island, New Zealand. Widespread through tropical Asia, Pacific to French Polynesia and North Australia.

HABITAT
Seemingly restricted to makatea and low shrubland overlying basalt tuff and rock on the smaller islands of the northern Kermadec group. Often found around the nests of Kermadec petrel (*Pterodroma neglecta*) and Tasman booby (*Sula dactylatra tasmani*). *Digitaria setigera* has also been reported from Raoul Island but there it has been much confused with the superficially similar *D. ciliaris* (common on Raoul as an introduced species) and it is not clear if it still present on that island.

THREATS
Digitaria setigera is locally common on the outer islands of the Northern Kermadec Islands group. Beyond the small area of occupancy there are no active threats known from this species, though it may have been lost from Raoul Island. *Digitaria setigera* is a common, and at times weedy species of the wider Pacific which is close to its world southern limit on the Kermadec Islands.

GENUS
Digitaria

FAMILY
Poaceae

AUTHORITY
Digitaria setigera Roem. et Schult.

ENDEMIC TAXON
No

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
On the Kermadec Islands flowering may occur throughout the year.

FRUITING
On the Kermadec Islands fruiting may occur throughout the year.

LIFE CYCLE AND DISPERSAL
Annual. Seeds dispersed by sea birds, gravity and water.

PROPAGATION TECHNIQUE
Not known to be cultivated in New Zealand.

NOTES ON STATUS
Digitaria setigera was initially treated as indigenous to the Kermadec Islands by Cheeseman (1888, 1906, 1925) and Oliver (1910). It was Sykes (1977, p. 166–167) as *D. pruriens* (Trin.) Büse who first treated this grass as naturalised, though his comments about it being suited to long distance avian dispersal, its close association on the Kermadec Islands with sea bird nesting sites and other general comments about its indigenous status in the 'Tropical Pacific' implies that he may also have considered it indigenous there. Velkamp (1973), who synonymised *D. pruriens* with *D. setigera*, included the Kermadec Islands in this species' natural distribution without further comment. Despite this, Edgar & Shand (1987), Edgar & Connor (2000, 2010) treated *Digitaria setigera* as naturalised to the Kermadec Islands though without providing any justification for their decision (it is assumed they took advice from W.R. Sykes). Despite this view, Pacific flora and grass treatments and view points of botanists studying that region, notably including Sykes himself when questioned in 2013, regard this grass as indigenous to tropical Asia, Malesia, the Pacific Islands and northern Australia, and significantly with respect to the Kermadec Islands, also the nearby Norfolk Island group, so its presence on the Northern Kermadec Island group is not incompatible with it being indigenous there (Green 1994, Whistler 1995; Edgar & Connor 2010; R. O. Gardner, W.R. Sykes & W.A. Whistler *pers. comm*. December 2013). For this reason de Lange et al. (2018) accept *Digitaria setigera* as indigenous to the Kermadec Islands. The sole New Zealand record noted by Edgar & Connor (2000, 2010) is however, probably a genuine naturalisation stemming from early shipping.

MANAAKI WHENUA ONLINE INTERACTIVE KEY
Key to the grasses of New Zealand

NVS CODE
DIGSET

PREVIOUS CONSERVATION STATUSES

2017 | At Risk – Naturally Uncommon | Qualifiers: SO
2012 | At Risk – Naturally Uncommon | Qualifiers: OL, SO
2009 | Not Evaluated
2004 | Not Evaluated
Jump to current conservation status

REFERENCES AND FURTHER READING

Cheeseman TF. 1888. On the flora of the Kermadec Islands: with notes on the fauna. *Transactions and Proceeding of the New Zealand Institute 20*: 151–181.
Cheeseman TF. 1906. Manual of the New Zealand Flora. Government Printer, Wellington,
Cheeseman TF. 1925. Manual of the New Zealand Flora. 2nd ed. Government Printer, Wellington.
de Lange PJ, Rolfe JR, Barkla JW, Courtney SP, Champion PD, Perrie LR, Beadel SM, Ford KA, Breitwieser I, Schönberger I, Hindmarsh-Walls R, Heenan PB, Ladley K. 2018. Conservation status of New Zealand indigenous vascular plants. 2017. *New Zealand Threat Classification Series*, 22: 1–82.
Edgar E, Connor HE. 2000. Flora of New Zealand. Vol. V. Grasses. Christchurch, Manaaki Whenua Press. 650 p.
Edgar E, Connor HE. 2010. Flora of New Zealand. Vol. V. Grasses, 2nd edition. Christchurch, Manaaki Whenua Press. 650 p.
Edgar E, Shand JE. 1987. Checklist of Panicoid grasses naturalised in New Zealand; with a key to native and naturalised genera and species. *New Zealand Journal of Botany 25*: 343–353.
Oliver WRB. 1910. The vegetation of the Kermadec Islands. *Transactions and Proceedings of the New Zealand Institute 42*: 118–175.
Sykes WR. 1977. Kermadec Islands Flora. An annotated checklist. With Appendix: Hepaticopsida (Hepaticae) & Anthocerotopsida by Ella O. Campbell. *New Zealand Department of Scientific and Industrial Research Bulletin 219*: 1–199.
Veldkamp JF. 1973. A revision of *Digitaria* Haller (Gramineae) in Malesia. *Blumea 21*: 1–80.
Whistler WA. 1995. Wayside Plants of the Islands – a guide to the lowland Flora of the Pacific Islands. Ilse Botanica, Honolulu, Hawaii.

ATTRIBUTION

Prepared by P.J. de Lange for NZPCN, 29 May 2020. Description adapted from Edgar & Connor (2000).

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/digitaria-setigera/

PDF DATE

25 May 2026