

# Lepidium panniforme

## COMMON NAMES

Maung'Re | Mangere Island scurvy grass

## BIOSTATUS

Native – Endemic taxon

## CURRENT CONSERVATION STATUS

2023 | Threatened – Nationally Critical | Qualifiers: CD, DPT, IE, OL, RR

[Jump to previous conservation statuses](#)

## CATEGORY

Vascular

## STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

## SIMPLIFIED DESCRIPTION

Leafy semi-erect to sprawling perennial herb. Leaves lanceolate to obovate, margins very deeply incised, jaggedly serrated (lacerate). Upper leaves less deeply incised than lower leaves. Inflorescences terminal, flowers white, with four petals and four stamens. Fruit a silicle, orbicular, apically notched.

## FLOWER COLOURS

White





Ex. Cult. *Lepidium panniforme*, inflorescences within flowers and immature silicles Te One, former Department of Conservation Office Grounds. Photographer: Peter J de Lange, Date taken: 03/02/2025, Licence: CC BY.



(From left to right) basal- and mid-stem leaves of *Lepidium panniforme*. Photographer: Peter B. Heenan, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Tap-rooted, pungent-smelling, summer-green, perennial herb arising from stock rootstock 7.3–8(–10) mm diam. Growth habit, erect to suberect, loose to densely branched plants up to 1 m across. Stems ± persistent, sometimes dying down to rootstock over winter or in times of adversity; upright to spreading, bases often very stout, ± spherical, somewhat woody when mature 10–15 × 10–12 mm, comprised of numerous old leaf and stem bases, sometimes producing roots, new seasons grow erect to suberect, glabrous, sometimes with very sparse, appressed, caducous, silky 0.5–1 mm long, hairs near stem apices; at fruiting stems often devoid of foliage for much of length. Leaves glabrous, firmly fleshy to succulent, usually dark green to green, sometimes yellow-green. Rosette and stem leaves usually withering at fruiting but sometimes with a few long persistent. Petiole distinct, 20–35(–40) × 2–9 mm. Lamina oblanceolate, lanceolate, narrowly lanceolate (rarely spatulate), 50–100 × 10–30 mm; either deeply toothed and/or lacerate or with distal  to 1/3 deeply toothed and/or deeply lacerate, teeth in 10–18(–20) pairs, blunt to sharp, running to and including apex and usually extending beyond leaf outline, base cuneate to narrowly cuneate. Middle stems leaves usually with indistinct petioles, these 10–30 mm long; lamina narrowly linear-lanceolate to linear, often recurved to falcate from or near 1/2 to 1/3 of leaf length, 50–80(–120) × 3–6 mm; margins deeply lacerate and/or toothed, teeth usually prominent, often confined to the upper , in 12–18(–30) pairs, these running to and including the apex; lamina base tapered, very narrowly cuneate. Upper stem leaves with or without a distinct petiole, petiole if present 40–60 mm, linear to linear-spathulate, occasionally narrowly lanceolate, usually toothed and/or lacerate, patent or recurved and/or falcate for upper 1/2 of leaf length, 30–50(–100) × 2.0–3.0(–30) mm. Racemes (5–)10–15 mm long, terminal and axillary; rachis glabrous; pedicels glabrous, erecto-patent, 2–5(–8) mm long at fruiting. Flowers c.0.4–0.8(–1.0) mm diam. Sepals glabrous or finely pubescent, or with both states within the one flower, green, broadly ovate to oval, c.0.6–1.0 × 0.6–1.2 mm, with pale-green to white thickened margin, apex broadly obtuse. Petals white, 1.5–2.0 × 0.3–0.8(–1) mm, erecto-patent to somewhat spreading, clawed; limb narrowly obovate, apex obtuse, occasionally emarginated. Stamens (2–)4, equal. Nectaries 2, subulate, 0.35 mm long. Silicles cartilaginous when fresh, coriaceous when dry, orbicular, orbicular-rhomboid (2.5–)3.0–3.5 × (1.5–)1.8–2.5(–3.3), slightly winged in upper 1/3, apex minutely notched, based obtuse to ± cordate, valves glabrous, dried surface often distinctly reticulate; style 0.1–0.2(–0.3) mm long, free from the narrow wing, exceeding the shallow notch; stigma 0.2–0.3 mm diam., capitate. Seeds 2, narrowly ovoid, brown, red-brown to orange-brown, not winged, 1.25–1.3 × 0.35–0.60 mm.

## SIMILAR TAXA

*Lepidium panniforme* has an erect, suberect, or spreading growth habit which immediately separates it from the decumbent *L. oligodontum*, and *L. rekohuense*. It is further separated from these taxa by the long persistent, much larger, usually deeply toothed or lacerate and often rather tattered basal and lower stem leaves, and from *L. oligodontum* and *L. rekohuense* by the flowers which consistently have (2–)4 stamens. In growth habit, the species is most similar to *L. oblitum* and *L. oleraceum*. The deeply toothed and/or lacerate leaves of *L. panniforme* serve to readily distinguish it from *L. oblitum*. From *L. oleraceum* it is easily separated, especially when fruiting when the notched rather than acute silicle apex can be seen, but also when vegetative, as the leaves of *L. panniforme* are diagnostically deeply toothed and/or lacerate.

## DISTRIBUTION

Endemic. Chatham Islands (Maung'Re | Mangere and probably Tapuaenuku | Little Mangere Islands)

## HABITAT

*Lepidium panniforme* is known only from a few sites where it grows in coastal herbfield along cliff tops, in rough pasture, shrubland, regenerating forest and sites kept artificially open, such as track sides. Few of these habitats are natural, and as such it is difficult to determine what the real habitat preferences of *Lepidium panniforme* are. In less modified parts of the island, plants are mainly confined to the steeper, often heavily seabird burrowed slopes and cliff margin sites which are probably indicative of its natural habitat preferences.

## THREATS

*Lepidium panniforme* may once have been on Rekohu | Wharekauri | Chatham Island - historical accounts of *Lepidium* sound very like this species and further in 1986 it seems to have been on Motuhinahina, a karst island in Te Whanga Lagoon. Here plants were seen by a Lands & Survey Ranger who when shown images of the Chatham Islands *Lepidia* immediately recognised *L. panniforme* as the one he had seen. on Maung'Re | Mangere Island some of the past records of this species we now know are examples of *Lepidium oblitum*, further hybrids between *L. panniforme* and *L. oblitum* have also been found. From 2018 *Lepidium panniforme* has only been confirmed from Maung'Re | Mangere Island from one site a track leading from the Mangere Hut to the isthmus ridge. Here plants are trampled from time to time by people, and the track sides are pedoturbated by burrowing seabirds. Disturbance seems necessary to maintain this species, so the track usage is actually keeping the species in the wild. The most recent census data for this species (March 2024) confirmed 50 plants remain in this site and that all the other known populations have gone as a consequence of forest regeneration. The records from Tapuaenuku | Little Mangere Island are on the basis of images, from these it is clear that *Lepidium oblitum* is also on that island. It is unclear how common *L. panniforme* is on that island, at best images indicate two plants. That island needs a proper survey for this species.

## GENUS

*Lepidium*

## FAMILY

Brassicaceae

## AUTHORITY

*Lepidium panniforme* de Lange et Heenan

## SYNONYMS

None (first described in 2013)

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## ETYMOLOGY

**lepidium:** Scale-shaped (pods)

**panniforme:** Derived from 'panniformus' - as in a 'shedded rag' and used here to refer to the often tattered and torn, appearance of the basal leaves of this species (see de Lange et al. 2013)

## NVS CODE

LEPPAN

## PREVIOUS CONSERVATION STATUSES

2017 | Threatened – Nationally Critical | Qualifiers: CD, DP, IE, OL, RR

2012 | Threatened – Nationally Critical | Qualifiers: CD, DP, IE, OL, RR

[Jump to current conservation status](#)

## REFERENCES AND FURTHER READING

[de Lange, P.J.; Heenan, P.B.; Houliston, G.; Rolfe, J.R.; Mitchell, A.D. 2013: New \*Lepidium\* \(Brassicaceae\) from New Zealand. \*Phytokeys\* 24:1-147pp. , doi: \[10.3897/phytokeys.24.4375\]\(https://doi.org/10.3897/phytokeys.24.4375\).](#)

## ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 1 March 2025. Description from de Lange et al. (2013)

### **NZPCN FACT SHEET CITATION**

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### **MORE INFORMATION**

<https://www.nzpcn.org.nz/flora/species/lepidium-panniforme/>

### **PDF DATE**

25 May 2026