

# Lepidium amissum

## COMMON NAME

Waitakere scurvy grass

## SYNONYMS

None (first described in 2013)

## FAMILY

Brassicaceae

## AUTHORITY

Lepidium amissum de Lange et Heenan

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

## CURRENT CONSERVATION STATUS

2017 | Extinct

## PREVIOUS CONSERVATION STATUS

2012 | Extinct

## BRIEF DESCRIPTION

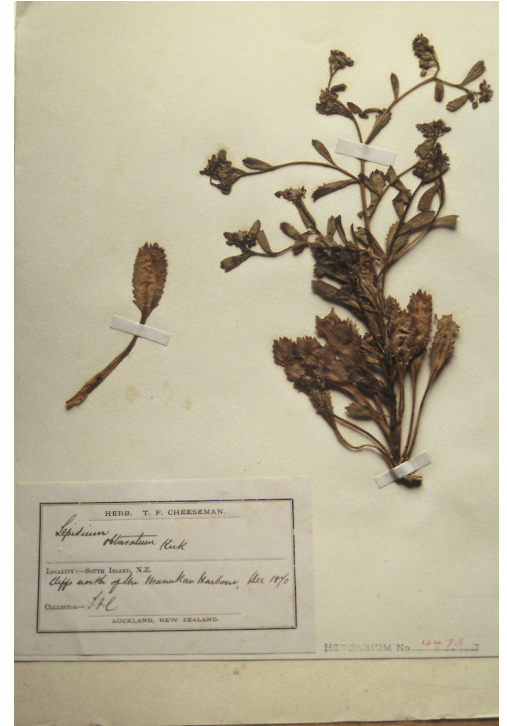
Perennial herb arising from stout tap-root. Plants with untidy, suberect to sprawling, leafy branches. Leaves dark green, with deeply toothed margins (probably smelling of cress when crushed). Inflorescences at branch tips, Flowers white with four stamens. Fruits circular, apices deeply notched, splitting cleanly into two valves, seeds orange-brown or brown.

## DISTRIBUTION

Endemic. New Zealand. North Island (Waitakere Ranges Coastline)

## HABITAT

Coastal cliffs. Exact habitat preferences unknown (see de Lange et al. 2013)



Cheeseman, Manukau Heads. Photographer: Peter J. de Lange, Licence: CC BY-NC.



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## DETAILED DESCRIPTION

Glabrous, suberect, sparingly branched, succulent, perennial, herb forming open patches up to c. 1 m diameter. Rootstock stout, woody, exposed portion rough, covered in old dead stem and rosette-leaf remnants admixed with actively growing stems. Stems arching, widely spreading, possibly with apices weakly ascendent, succulent, mature stems woody, 200–300 × 3–6 mm, densely leafy near base, leaves more widely spaced along upper stems. Leaves glabrous, coriaceous, probably succulent, dark green, planar, variable size and shape. Rosette leaves persistent at fruiting 71.7–95.2 × 12.4–23.2 mm, spatulate; apex, truncate, praemorse, with 3–8 deeply incised teeth; margin coarsely and often irregularly incised or dentate, often weakly bidentate, with 24–36 pairs of teeth; teeth up to 4.8 mm deep, irregular in size, protruding beyond leaf outline; base narrowly attenuate to cuneate, ± decurrent, petiole distinct, 43.4–55.2 × 1.4–2.3 mm long, slightly winged, or not, channelled. Lower stem leaves similar to rosette leaves, apparently persistent, widely spaced, gradually decreasing in size toward inflorescence; petioles distinct, slightly winged or not. Upper stem leaves much reduced; lamina 10.3–27.5 × 3.4–7.6 mm, lanceolate, narrowly oblanceolate, lanceolate to narrowly oblanceolate-spathulate to obovate obdeltoid, apex truncate, with 3–4 prominent teeth, margins prominently toothed in upper third of lamina with 4–6 deeply incised pairs of teeth (rarely entire except for apex), base cuneate to broadly cuneate; petiole distinct or indistinct, up to 6 mm long when present, channelled. Inflorescence racemose, terminal and lateral, conspicuous, sparingly leafy and unfettered by associated vegetative leafy stems; racemes 22–68 mm long, rachis 0.9–1.6 mm diam., glabrous; pedicels 2.8–3.2 mm long at flowering, erecto-patent, elongating somewhat after anthesis, glabrous. Flowers 4.3–4.6 mm diameter. Sepals 4, saccate, overlapping at base, green, apex obtuse, margin white, shape and size dimorphic; lateral sepals 2.2–2.9 × 2.1–3.0 mm, suborbicular, mostly glabrous, sometimes sparsely hairy, hairs 0.2–0.4 mm long, caducous; median sepals 1.9–2.9 × 1.5–1.7 mm, broadly elliptic to obovate, abaxial surface glabrescent, sparsely hairy, hairs 0.2–0.4 mm long, caducous. Petals white, 1.3–1.8 × 1.3–1.8 mm, erect, claw minute, 0.2–0.3 mm; limb orbicular, apex obtuse. Stamens 4, ± equal lengths, 1.2–1.8 mm long, base 0.6–1.0 mm wide; anthers 0.6–0.8 mm long, yellow, pollen yellow. Ovary 1.3–1.8 × 1.3–1.7 mm, broadly ovate to suborbicular green, apex distinctly notched; style 0.3–0.5 mm long, cylindrical below, spreading at apex; stigma 0.5–0.6 mm diameter. Nectaries 4, green, 0.12–0.14 × c. 0.09 mm, narrow oblong, apex obtuse. Silicles 3.4–4.5 × 2.9–3.9 mm, broadly ovate, oval to obovate, apex prominently notched, valves yellow-green (in dried specimens), glabrous, slightly winged; style 0.2–0.5 mm long, not or only slightly exerted. Seeds 2.0–2.7 × 1.8–2.0 mm, obovate, broadly obovate, brown to orange-brown, not winged.

## SIMILAR TAXA

*Lepidium amissum* was previously included within another extinct species *Lepidium obtusatum*. From that species *L. amissum* differs by the non-rhizomatous, suberect growth habit; arching, sparingly leafy stems; long persistent, deeply, and sharply incised rosette and lower stem leaves; upper stem leaves which are lanceolate, narrowly oblanceolate, to narrowly obdeltoid and mostly prominently toothed, with up to 6 pairs of deeply incised teeth, and with a truncate apex bearing 3–4 prominent teeth. The inflorescences of *L. amissum* are larger, only sparsely leafy when mature, and without associated vegetative stems. The silicles are smaller than those of *L. obtusatum*.

## FLOWERING

December - January

## FRUITING

December - January

## PROPAGATION TECHNIQUE

Unknown. Species is extinct.

## THREATS

Extinct. The reasons for the extinction of *Lepidium amissum* are not clear. The species is known only from four herbarium sheets, one of these collected in 1870 and the other three portions of the same gathering made in 1917. The species was evidently already very uncommon when it was “discovered” by Thomas Cheeseman, who it seems unwittingly contributed to its extinction. Much of the coastline from where this species was said to grow was grossly modified during the late 1800s and early 1900s and this may have contributed to this species demise.

## ETYMOLOGY

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

**amissum:** From amissus - meaning missing, in reference to the loss through extinction of this species from our indigenous flora (see de Lange et al. 2013)

### **ATTRIBUTION**

P.J. de Lange (15 August 2013). Description from de Lange et al. (2013) - see references for free download link for that paper.

### **REFERENCES AND FURTHER READING**

de Lange, P.J.; Heenan, P.B.; Houlston, 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).

### **NZPCN FACT SHEET CITATION**

Please cite as: de Lange, P.J. (Year at time of access): *Lepidium amissum* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/lepidium-amissum/> (Date website was queried)

### **MORE INFORMATION**

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