

Lepidium seditiosum

COMMON NAME

Bounty Islands scurvy grass

SYNONYMS

None (first described in 2013)

FAMILY

Brassicaceae

AUTHORITY

Lepidium seditiosum de Lange, Heenan et J.Rolfe

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

NVS CODE

LEPSED

CURRENT CONSERVATION STATUS

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

PREVIOUS CONSERVATION STATUS

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

BRIEF DESCRIPTION

Dark green, leafy herbaceous plant. Leaves with jagged margins, aromatic (smelling of watercress when crushed). Flowers in leafy terminal inflorescences, white. As with all other N.Z. *Lepidium* species the fruits are flattened, 2-valved capsules, these shed at maturing. Mature fruits and seeds for this species have yet to be seen.

DISTRIBUTION

Endemic. Bounty Islands (Funnel and Molly Cap Islands). *Lepidium seditiosum* is the only flowering plant known to occur on the Bounty Islands (see Amey et al. 2007).

HABITAT

Rock ledges and crevices



Inflorescence of the holotype of *Lepidium seditiosum*. Photographer: Jeremy R. Rolfe, Date taken: 25/10/2012, Licence: CC BY.



Inflorescence of the holotype of *Lepidium seditiosum*. Photographer: Jeremy R. Rolfe, Date taken: 25/10/2012, Licence: CC BY.

DETAILED DESCRIPTION

Erect, perennial herb. Stems sparse, erect; mature stems long, 4.14–4.41 mm diameter stout, woody, rigid, ± square, prominently angled, bases much covered in leaf abscission scars, middle and upper portion leafy. Leaves fleshy, dark green, stem leaves evidently withering with age; petiole distinct, 14–22.0 × 1.9–2.6 mm, decurrent, prominently channelled, broadly winged, with a broadly sheathing base; lamina variable 32.4–45.4 × 21.2–26.4 mm decreasing in size toward inflorescences, broadly elliptic, elliptic to oblanceolate; apex praemorse or tridentate; margin coarsely and ± regularly dentate to deeply incised; teeth protruding beyond leaf outline; in 8–12 uneven pairs, up to 5.3 mm deep, increasing in size toward apex; base broadly attenuate tapering, extending into a broad petiole wing. Inflorescences immature but evidently racemose, rachis 1.3–1.5 mm diameter, terminal and lateral, leaf-opposed, densely and mostly circumferentially covered in 0.4–0.6 mm long, white, clavate hairs; pedicels 1.6–2.2 mm long at flowering, erecto-patent, densely and mostly circumferentially covered in 0.4–0.6 mm long, white, clavate hairs. Flowers 2.3–2.6 mm diameter. Sepals 4, saccate, dark green usually with a narrow white, ± undulose margin; lateral sepals broad, 0.8–1.2 mm diam., obovate to broadly obovate, ± overlapping at base, apex rounded to obtuse, abaxial surface densely hairy, hairs 0.1–0.4 mm long, eglandular or glandular, mostly clavate, some setose, median sepals 0.8–1.0 mm diam., broadly obovate, dark green, usually with a narrow white, ± undulose margin, apex rounded to obtuse, abaxial surface densely hairy, hairs 0.1–0.4 mm long, eglandular or glandular, mostly clavate, some setose. Petals white, 1.3–2.0 × 1.0–2.3 mm, mostly recurved over stigma some spreading, claw 0.4–0.9 mm long; limb obovate, obovate-spathulate rarely orbicular, apex obtuse or slightly emarginate, margins smooth. Stamens 4, filaments 1.2–1.8 mm long, white; anthers 0.3–0.4 mm long, yellow. Ovary 1.1–1.8 × 0.6–1.3 mm, broadly ovate to elliptic, dark green, apex round or weakly notched; style 0.11–0.4 mm long, cylindrical below, broadly spreading at apex; stigma 0.2–0.4 mm diameter. Nectaries 4, 0.2–0.3 × 0.1–0.15 mm, narrow-oblong, pale translucent green. Mature silicles not seen.

SIMILAR TAXA

Morphologically, *Lepidium seditiosum* is most similar to the Chatham Islands endemic *Lepidium panniforme*, which also has deeply toothed (though also lacerate leaves) but whose stems and inflorescence rachis are glabrous (only very rarely furnished with sparse silky hairs). However, *Lepidium seditiosum* differs from *L. panniforme* (and indeed all other members of the *Lepidium oleraceum* complex) by its distinctly clavate-hairy upper stems and inflorescence rachises. DNA sequence data clearly places *L. seditiosum* with the Southern island endemics *L. aegrum*, *L. crassum* and *L. juvencum* from which it is easily separated by its deeply toothed leaves, and hairy inflorescences. Although mature silicles are as yet unknown from *L. seditiosum* (which is only known from the holotype), the immature fruits suggest that in this species the apices are deeply notched.

FLOWERING

November

FLOWER COLOURS

White

FRUITING

Mature fruit not seen

LIFE CYCLE

Probably a short-lived perennial. Seed almost certainly dispersed by sea birds as well as by water and gravity.

PROPAGATION TECHNIQUE

Unknown - probably has the same cultivation requirements as *Lepidium oleraceum* (see that species fact sheet)

THREATS

Lepidium seditiosum was discovered in November 2004 (see Amey et al. 2007). When it was discovered 'at least 13' plants were recorded from two sites (Funnel Island (12 plants) and Molly Cap (1 plant)). On this basis, *L. seditiosum* qualifies as 'Threatened / Nationally Critical'. The species is also appropriately qualified 'CD' (Conservation Dependent), 'DP' (Data Poor – because accurate data on the total number of individuals and trend data is not available), 'IE' (Island Endemic), and 'OL' (One Location – as the species is confined to the Bounty Islands group). For more details see de Lange et al. (2013).

ETYMOLOGY

lepidium: Scale-shaped (pods)

sediciosum: The epithet 'sediciosum' is derived from the Latin 'seditio' (meaning: dissension, insurrection, mutiny, rebellion), and alludes to the mutiny of the majority of Lieutenant William Bligh's crew on the 28 April 1789. In 1788, some months before the rebellion, Bligh had discovered and named the Bounty Islands (where this species is endemic) taking the name from his ill-fated ship The Bounty (see de Lange et al. 2013).

ATTRIBUTION

P.J. de Lange (11 August 2013). Description from de Lange et al. (2013) - see references for free download link for that paper.

REFERENCES AND FURTHER READING

Amey J, Lord JM, de Lange P (2007) First record of a vascular plant from the Bounty Islands: *Lepidium oleraceum* (nau, Cook's scurvy grass) (Brassicaceae). *New Zealand Journal of Botany* 45: 87–90. doi:

10.1080/00288250709509705

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).

NZPCN FACT SHEET CITATION

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MORE INFORMATION

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