Lepidium juvencum

COMMON NAME

scurvy grass

SYNONYMS

None (first described in 2013)

FAMILY

Brassicaceae

AUTHORITY

Lepidium juvencum Heenan et de Lange

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

NVS CODE

LEPJUV

CURRENT CONSERVATION STATUS

2017 | Threatened - Nationally Critical | Qualifiers: CD, DP, RR

PREVIOUS CONSERVATION STATUS

2012 | Threatened - Nationally Critical | Qualifiers: CD, DP, RR

BRIEF DESCRIPTION

Perennial, strongly aromatic (smelling of cress) herb. Plants with sparse, straggling, sprawling, leafy branches. Leaves dark green, margins serrated apices and bases often drawn out. Inflorescences at branch tips, Flowers white with four stamens. Fruits elliptic-rhomboid to orbicular-rhomboid apices very slightly notched, splitting cleanly into two valves, seeds brown or orange-brown.

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Herekopere. Jan 2005. Photographer: Peter B. Heenan, Licence: CC BY-NC.



Flowering stem of Lepidium juvencum showing multiple inflorescences and trailing growth habit. Photographer: Peter B. Heenan, Licence: CC BY-NC.

DISTRIBUTION

Endemic. New Zealand. South Island (known from a few site near Dunedin and from Stewart island (and possibly adjoining smaller islands)

DETAILED DESCRIPTION

Tap-rooted, strongly pungent smelling, perennial herb. Growth habit open, straggly, up to 50 cm tall. Stems usually decumbent to sprawling, slender, flexible, sparse; mature stems woody, 100-1000 × 8-12 mm, often devoid of foliage on middle and lower parts of stems; new stems 100-400 × 3-4 mm, leafy, glabrous. Leaves glabrous, subcoriaceous, green, often undulate, rosette and stem leaves usually withering, variable in size and shape. Leaves of young and vigorous plants and stems: lamina 37–87 × 12–32 mm, elliptic, obovate or elliptic-oblanceolate; apex truncate to obtuse, usually with 2-3 prominent teeth and often appearing irregular; margin singly crenate, with 4-19 pairs of teeth; teeth up to 1.5 mm deep, not overlapping; base attenuate to cuneate, tapering to a distinct or indistinct petiole; petiole up to 23.0 × 2.0-5.0 mm, or sessile. Leaves of mature plants and cauline stems: lamina 10-60 × 3-21 mm, elliptic, elliptic-oblanceolate, obovate to elliptic-obovate; apex subacute, truncate or obtuse, usually with 2-3 prominent teeth and often appearing irregular; margin singly crenate in upper and/or lower half, with 4-19 pairs of teeth; teeth up to 1.3 mm deep, not overlapping; base attenuate to cuneate, tapering to distinct or indistinct petiole, or sessile. Inflorescence terminal and lateral, racemose, 10-60 mm long, rachis 1.0-1.3 mm diameter, glabrous; pedicels 4.0-6.0 mm long, erecto-patent, usually glabrous although lower pedicels occasionally sparsely hairy on adaxial surface. Flowers 4.0-5.0 mm diameter. Sepals 4, 1.3-1.5 mm long, saccate, overlapping at base, green, apex obtuse, margin white, shape dimorphic; lateral sepals broad, 1.1-1.5 mm diameter, orbicular, abaxial surface often hairy, hairs 0.1-0.5 mm long; median sepals narrow, 0.9-1.2 mm diameter, broadly elliptic, glabrous. Petals white, 2.0-2.4 × 1.1-1.5 mm, spreading, claw 0.6-1.0 mm long; limb broadly elliptic to orbicular, apex obtuse to rounded. Stamens 4(-5); filaments 1.4-1.7 mm long, base 0.3-0.5 mm diameter, equal; anthers 0.3–0.4 mm long. Ovary 1.0–1.5 × 0.9–1.4 mm, broadly ovate to broadly elliptic, green to green-brown, apex usually with shoulders; style 0.15–0.25 mm long, cylindrical; stigma 0.3–0.5 mm diameter. Nectaries 4, 0.2–0.3 x c. 0.1 mm, oblong-obovate, green. Silicles cartilaginous when fresh, coriaceous when dry, 3.1-4.2 x 2.5-3.5 mm, ellipticrhomboid to orbicular-rhomboid, valves light brown, glabrous, apex shallowly notched, not winged; style 0.2-0.3 mm long, exserted. Seeds 1.6-1.8 × 0.9-1.3 mm, narrowly ovoid, brown to orange-brown, not winged.

SIMILAR TAXA

Lepidium juvencum is distinguished by open, sprawling, straggling growth habit, and the stems are often trailing on the ground. The leaves are elliptic, elliptic-oblanceolate, obovate to elliptic-obovate, and have attenuate bases; the marginal teeth are usually small and are mostly confined to the distal third of the leaf. The silicles are most like L. oleraceum but differ by possessing a rounded, slightly notched apex.

FLOWERING

November - May

FLOWER COLOURS

White

FRUITING

November - June

PROPAGATION TECHNIQUE

Easily grown from fresh seed. However prone to a wide range of exotic and indigenous diseases and so can sometimes be difficult to maintain in cultivation.

THREATS

Known from one site near Dunedin and from several offshore islands from the Otago Peninsula to Stewart Island. Not common at any site. Historically more wide ranging (as evidenced from herbarium specimens). Most populations are very small (< 10 plants) and one is threatened by trampling.

ETYMOLOGY

lepidium: Scale-shaped (pods)

ATTRIBUTION

P.J. de Lange (7 September 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.; 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.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

 $\underline{\text{https://www.nzpcn.org.nz/flora/species/lepidium-juvencum/}}$