

Lepidium flexicaule

COMMON NAME

coastal cress

SYNONYMS

Lepidium incisum Banks et Sol. ex Hook.f., *Nasturtium neozelandicum* Kuntze

FAMILY

Brassicaceae

AUTHORITY

Lepidium flexicaule Kirk

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

NVS CODE

LEPFLE

CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Endangered | Qualifiers: CD, EF, TO

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Endangered | Qualifiers: CD, EF, TO

2009 | Threatened – Nationally Vulnerable | Qualifiers: CD, EF

2004 | Threatened – Nationally Vulnerable

DISTRIBUTION

Indigenous. In New Zealand known from historic records around Auckland, Coromandel, the firth of Thames, and Wellington. In 2003 it was discovered at one site on the South Taranaki Coast. In the South Island, *L. flexicaule* is known from Cape Farewell to Greymouth. The species was also gathered on the Chatham Islands in the 1860s. It was rediscovered there, at one site, in 2004. Also present on the west coast of Tasmania, Australia. It is not considered common in Tasmania and it may well be threatened there (A. Buchan pers. comm.).

HABITAT

A coastal species usually found in coastal turfs, but also on rock stacks, outcrops, headlands, cliff faces and amongst boulders; often but not always in association with nesting or roosting seabird sites, and seal haul outs.



Punakaiki (January). Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Taranaki Coast. Photographer: Bec Stanley, Licence: CC BY-SA.

DETAILED DESCRIPTION

Decumbent, perennial, fleshy, tap-rooted herb producing 1-8(-many) trailing stems up to 400 mm long. Stems woody near base, square in cross-section, with angles finely denticulate. Basal leaves 30-150 x 10-45 mm. dark green to yellow-green, glabrous, pinnatifid to pinnate, narrow-obovate or narrow-oblong; pinnae in 2-8 pairs, coarsely to bluntly toothed. Stem leaves 10-30 x 3-10 mm, dark green or yellow-green, glabrous or sparsely and minute hairy, narrow- or broadly-obovate, spatulate, to linear-lanceolate, toothed or crenate at apex, cuneate or abruptly narrowed at base, margins finely papillate-denticulate. Racemes leaf-opposed, 10-40 mm, rachis and pedicels glabrous or sparsely hairy. Sepals green, 1 x 0.5 mm, glabrous or sparsely hairy. Petals < sepals, white. Stamens 2. Silicles 3-4 x 2-3 mm, ovate, crowded. Style = notch, free from narrow wing, valves glabrous. Seeds 1-1.5 mm, brown, narrow-ovoid.

SIMILAR TAXA

It is most often confused with winter cress *Lepidium didymum* L. and *L. squamatum* Forssk. which have similar, though more strongly pungent, foliage and seed capsules, and grow in much the same, though usually more modified habitats. Both differ from *L. flexicaule* in that their seed capsules are net-veined and/or covered in warty protuberances, and when they split they come away as two entire halves, never splitting by the valves and never leaving behind a replum.

FLOWERING

Flowering occurs from November to January.

FLOWER COLOURS

Green, White

FRUITING

Fruiting from December to March.

LIFE CYCLE

Mucilaginous seeds are dispersed by attachment and possibly wind and water (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Easy from fresh seed. Can be grown from cuttings but these can be tricky to strike. *L. flexicaule* forms compact mats and the stems die back to the root stock in winter, resprouting in spring. It is less susceptible to diseases than *L. oleraceum* Sparrm., or *L. banksii* Kirk. In cultivation *L. flexicaule* readily hybridises with *L. banksii* and *L. oleraceum*, so it should be planted well away from those species. It does best in a permanently damp, fertile soil, in full sun.

THREATS

Habitat loss through weed encroachment and development, browsing; susceptible to many of the pests and diseases of introduced brassicas, e.g., cabbage white butterfly, aphids, snails, white rust and diamondback moth.

ETYMOLOGY

lepidium: Scale-shaped (pods)

TAXONOMIC NOTES

Recent collections from the Chatham Islands lack the marginal stem and leaf denticles. Denticles are also decidedly infrequent in Australian material.

Story about rediscovery on the West Coast in [Trilepidea Issue 30](#) (May 2006)

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 25 August 2008. Description subsequently published in de Lange et al. (2013).

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).

David A. Norton and Peter J. de Lange. 1999. Coastal cress (Nau) recovery plan. Threatened Species Recovery Plan 26. Department of Conservation

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285-309

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

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