Celmisia hookeri

COMMON NAME Hooker's mountain daisy

SYNONYMS None

FAMILY Asteraceae

AUTHORITY Celmisia hookeri Cockayne

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS No

ENDEMIC FAMILY

STRUCTURAL CLASS Herbs - Dicotyledonous composites

NVS CODE CELHOO

CHROMOSOME NUMBER 2n = 108

CURRENT CONSERVATION STATUS 2017 | At Risk – Naturally Uncommon | Qualifiers: Sp

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: Sp 2009 | At Risk – Naturally Uncommon 2004 | Sparse

DISTRIBUTION

Endemic. South Island Northern and eastern Otago from Moeraki and Shag Points inland through the Wainakarua River, Trotters Gorge, Otepopu River to the Horse Range and Macraes Flat; also by the Mataura River and between Mid Dome and Slates Ranges. There are historical but unverified records from the Waitaki Valley.

HABITAT

Coastal to montane (0 - 450 m a.s.l.). A rupestral favouring open to partially shaded rocky headlands, bluffs, cliff faces, steep gullies and boudler field. Sometimes found under grey scrub but only in relatively open situations.





Celmisia hookeri. Photographer: John Barkla, Licence: CC BY.



Horse Range. Photographer: John Barkla, Licence: CC BY.

DETAILED DESCRIPTION

Stout, woody based herb with short branchlets arising from a weakly multicipital, partially buried rootstock. Leaves in dense rosettes at branchlet apices; the whole plant forming a mat of rosettes. Leaf-sheaths greenish-purple, persistent, densely imbricate and compacted to form a pseudostem. Petioles 1/4-1/2 lamina length, pale or deep purple, often with a thin covering of pale lustrous pale hairs which are floccose towards base. Lamina 120-400 x 40-90 mm, oblanceolate to elliptic, upper surface yellow to pale green with greenish-purple midrib; upper surface initially hairy, becoming glabrate to glabrous with age (except for margins), veins impressed; lower surface densely covered in lustrous indumentum of pale buff or creamy hairs, veins distinct; apex acute, margins entire, not recurved, with a broad rim of whitish to buff hairs; base obliquely cuneate; lamina coriaceous, initially erect, tending to suberect or decumbent with age. Scape up to 500 mm long, purplish, covered in pale indumentum, bracteate, bracts numerous, erect, linear, foliaceous. Capitula solitary, up to 100 mm diameter. Involucral bracts in several rows, linear-subulate, erect, densely brown-tomentulose. Ray florets up to 80, ligulate, limbs linear-lanceolate, white. Disc florets up to 250, funneliform, yellow; tube covered with eglandular biseriate hairs. Achene 5 mm long, fusiform-cylindric, ribbed, glabrous. Pappus unequal, 9 mm long, of between 35-40 bristles.

SIMILAR TAXA

A well marked and distinctive species whose stout, coriaceous leaves up to 400 mm long, greenish-purple sheath and leaf midrib, broad capitula up to 100 mm in diameter, and pappus hairs up to 9 mm long serve to distinguish it from other allied Celmisia. C. hookeri is allopatric from all other New Zealand members of Celmisia subgenus Pelliculatae section Petiolatae.

FLOWERING September - December

FLOWER COLOURS White, Yellow

FRUITING October - April

LIFE CYCLE

Pappate cypselae are dispersed by wind (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Difficult. Can be grown in non-humid climates and is one of the few Celmisia that generally grows well in most garden conditions. However, it can be fickle. Should be grown from fresh seed and planted in a fertile, free draining sunny situation. Dislikes excessive moisture, and humidity.

THREATS

A widespread, at times locally common but usually sparsely distributed species. Its cliff, bluff and gorge habitats could be relictual and it is possible that past fires and animal browse has confined this species to these habitats. However, there appear to be few existing threats, populations appear stable, and as there is no direct proof of past decline this species best fits the concept of a sparse defined by the New Zealand Threat Classification System.

ETYMOLOGY

celmisia: Apparently named after Kelmis, one of Idaean Dactyls, a group of skilled mythical beings associated with the Mother Goddess Rhea in Greek mythology. Kelmis, whose name means 'casting', was a blacksmith and childhood friend of Zeus, son of Rhea and later king of the gods. In Ovid's 'Metamorphoses', Kelmis is described as offending Zeus who turned him into adamant so he was as hard as a tempered blade

hookeri: Named after Sir Joseph Dalton Hooker (born 1817) - a world famous botanist who travelled on the Antarctic expedition of 1839 under the command of Sir James Ross and wrote "Handbook of New Zealand Flora" published in 1864-67 describing many specimens sent to Kew by collectors. He died in 1911 and has a memorial stone at Westminster Abbey London.

WHERE TO BUY

Not commericially available.

ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (1 February 2009). Description adapted from Allan (1961) and Given (1984).

REFERENCES AND FURTHER READING

Allan, H.H. 1961: Flora of New Zealand. Vol. I, Government Printer, Wellington. Given, D. R. 1984: A taxonomic revision of *Celmisia* subgenus Pelliculatae section Petiolatae (Compositae – Astereae). *New Zealand Journal of Botany 22*: 139-158 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 2009 Vol. 11 No. 4 pp. 285-309

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/celmisia-hookeri/