

Celmisia graminifolia

SYNONYMS

Celmisia adamsii var. *rugulosa* Cheeseman

FAMILY

Asteraceae

AUTHORITY

Celmisia graminifolia Hook.f.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledonous composites

NVS CODE

CELAVR

CHROMOSOME NUMBER

2n = 108

CURRENT CONSERVATION STATUS

2017 | Data Deficient | Qualifiers: RR

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon

2009 | At Risk – Naturally Uncommon | Qualifiers: OL

2004 | Range Restricted

DISTRIBUTION

Endemic. North Island: Mt Manaia, Bream Head and other nearby high points

HABITAT

In coastal forest where it mostly grows on steep-sided, shaded or exposed, sparsely vegetated slopes, rock outcrops, cliff faces and rock tors. Also recorded from rough pasture and reverting shrubland.

DETAILED DESCRIPTION

Tufted herb with simple or sparingly branched stock, pseudo-stem up to ± 60 mm long. Lamina subcoriaceous, acute, often with fine apiculus, 60-250 × 10-15 mm, narrowly to broadly oblong-lanceolate to almost linear-oblong (diverse forms may occur on same plant); upper surface ± glabrous, dark green to yellow-green, with a distinct thin, persistent pellicle, midrib broad, grooved, main veins prominent; lower clad in soft white appressed or subappressed tomentum, midrib prominent; margins distantly finely denticulate, narrowing to petiole up to c. 30 mm long; sheath 40-50 × 15 mm, dark green, sometimes tinged purple, veins evident, surface tomentum ± as in lamina, margins floccose. Scape 150-300 mm long, rather slender, often flexuous, ± flattened, floccose. Bracts usually few, up to 10 mm long, lamina almost filiform. Capitula 30-50 mm diameter; involucre bracts, green to pale green, linear-subulate to narrow-lanceolate, c.12 mm long, margins ciliolate, midrib evident. Ray-florets numerous, up to 30 mm long, tube slender; limb gradually widened to 4-toothed apex, veins distinct. Disk-florets 6.0-6.5 mm long, narrow-funnelform, teeth narrow-triangular. Achenes glabrous, strongly ribbed, narrowly compressed-cylindric to very narrowly obovoid, c.3.0-3.8 mm long. Pappus-hairs sordid-white, up to 5 mm long, slender, finely barbellate.



Mt Manaia, November. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Mt Manaia, November. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

SIMILAR TAXA

Celmisia graminifolia is closely allied to *C. adamsii*. Indeed it has even been described as a variety of that species (var. *rugulosa* Cheeseman). Using those names authors have stressed that the key difference is that *C. graminifolia* (as *C. adamsii* var. *rugulosa*) has shorter and stouter foliage but these distinctions seem very arbitrary. The only real difference between these species seems to be that *C. graminifolia* has generally narrower leaves and a more markedly silvery, persistent upper leaf pellicle than *C. adamsii*. Further, morphologically *Celmisia graminifolia* grades into *C. major* var. *major* which appears to be a linking form between the northerly *C. graminifolia* and the more southerly *C. adamsii*. A thorough, modern taxonomic investigation into the status of all these species and varieties is required.

FLOWERING

September - April

FLOWER COLOURS

White, Yellow

FRUITING

October - July

PROPAGATION TECHNIQUE

Easily grown from fresh seed. One of the few *Celmisia* that adapts well to cultivation. Does best in a semi-shaded site in a moist, free draining soil. Dislikes humidity and inclined to be short-lived.

THREATS

A naturally uncommon, narrow range endemic that is abundant within its few known locations. Some populations have been damaged by tracking and illegal plant collection but most are inaccessible to the general public and one of the most vulnerable has been secure from these threats by a change in track systems to protect waahi tapu.

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

graminifolia: Grassy-leaved

WHERE TO BUY

Occasionally available from specialist native plant nurseries.

NOTES ON TAXONOMY

Celmisia graminifolia is a much confused name (de Lange 1994; de Lange & Rolfe 2010). The species was described by Joseph Hooker (Hooker 1844) from a type purportedly collected by Andrew Sinclair from the Bay of Islands. However, examination of the type material in Kew and AK, and correspondence between William Colenso and Joseph Hooker (St George 2009) make it quite clear that: 1. Colenso collected the type from the Whangarei Hills, and 2. He gave it to Andrew Sinclair to pass on to Hooker. Joseph Hooker evidently made a mistake as to collector and locations but even when Colenso drew this fact to his attention he did not revise his statements in his subsequent treatments of the New Zealand Flora. Much later, Thomas Cheeseman (Cheeseman 1906) described *Celmisia graminifolia* again, as *Celmisia adamsii* var. *rugulosa*, seemingly unaware that his new variety was already described as a species. Subsequent taxonomic treatments of *Celmisia graminifolia* are confused (e.g., Allan 1961) and have tended to treat any, grassy, somewhat flat-leaved, often South Island *Celmisia* as this species. Clearly further study is needed, especially of those Central North Island and South Island *Celmisia* which have been erroneously placed within *C. graminifolia*.

ATTRIBUTION

P.J. de Lange (7 April 2009). Description adapted from Allan, H.H. 1961

REFERENCES AND FURTHER READING

- Allan, H.H. 1961: *Flora of New Zealand*. Vol. I, Government Printer, Wellington.
- Cheeseman, T. F. 1906: *Manual of the New Zealand Flora*. Wellington, N.Z., Government Printer
- de Lange, P.J. 1994: *Celmisia* on Mt Pirongia Western Waikato some notes on its identity and taxonomy. *Auckland Botanical Society Journal* 49: 74-76.
- de Lange, P.J.; Rolfe, J.R. 2010: *New Zealand Indigenous Vascular Plant Checklist*. Wellington, New Zealand Plant Conservation Network. 164pp.
- Hooker, J.D. 1844-1845[1844] : *The Botany of the Antarctic Voyage of H.M. Discovery Ships Erebus and Terror in the Years 1839-1843*. Vol. 1. Flora Antarctica Part I. Botany of Lord Auckland's Group and Campbell's Island ed. London., Reeve, Brothers. 208 p.
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NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/celmisia-graminifolia/>