

# Sonchus novae-zelandiae

## COMMON NAME

dryland sow thistle

## SYNONYMS

*Crepis novae-zelandiae* Hook.f., *Kirkianella novae-zelandiae* (Hook.f.) Allan; *Kirkianella novae-zelandiae* f. *minor* Allan nom. inval. *Kirkianella novae-zelandiae* f. *glauca* Allan nom. inval.;

## FAMILY

Asteraceae

## AUTHORITY

*Sonchus novae-zelandiae* (Hook.f.) Garn.-Jones

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Herbs - Dicotyledonous composites

## NVS CODE

KIRNOV

## CHROMOSOME NUMBER

2n = 90, 126

## CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Vulnerable | Qualifiers: RR

## PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Vulnerable | Qualifiers: De, DP, Sp

2009 | Threatened – Nationally Vulnerable | Qualifiers: DP

2004 | Sparse

## DISTRIBUTION

Endemic. Three Kings Islands and South Island from the Marlborough Sounds to Southland and Fiordland.

## HABITAT

Coastal to subalpine (10 - 1200 m a.s.l.) amongst sea bird colonies or within open stony ground, short and tall tussock grassland, on or near rock outcrops (on rock ledges, within crevices, and on talus slopes), sometimes on recently exposed alluvium. Rarely in open ground under grey scrub.



Flower. Ahuriri Valley, Otago. Photographer: John Barkla, Licence: CC BY.



Manuherikia Valley. Photographer: John Barkla, Licence: CC BY.

## DETAILED DESCRIPTION

Rosulate, perennial, scapigerous herb arising from a stout, deeply descending, often multicapital tap root. All parts when broken leaking copious amounts of white latex exudate. Leaves and petiole 20-150 mm long, flattened, and more or less held appressed to the surrounding substrate; lamina crisply membranous, glabrous, lyrate, bright green, yellow-green, or glaucous, sinuately shallowly to deeply, closely or distantly lobulate, or pinnatifid; lobules rounded, apical, often mottled with darker brown pigmentation or glaucous; terminal lobes 30-50 x 20-30 mm, lateral lobes diminishing in size from 10 to 1 mm, confluent, merging into the broadly winged petiole. Scapes 150 mm or more long, slender, initially sparsely and finely tomentose, becoming glabrous, except near capitulum; bracteate, bracts 1-5, linear, tomentose mainly with eglandular hairs, glandular hairs either absent or sparse. Capitula 15-30 x 10-40 mm, receptacle shallowly concave, alveolate. Involucrum 4-seriate, imbricating, membranous with scarious margins; outer involucral bracts 3-5 mm long, narrow-ovate, undersides densely tomentose with dark spreading glandular hairs; inner bracts narrowly ovate-oblong up to 15 mm long, dark brown-green, undersides initially clad in white tomentum and glandular hairs becoming glabrous, margins scarious with rather fine teeth. Florets 30-36, ligulate; limb pale lemon-yellow, about equal in length to the slender claw, apex deeply 5-fid. Style arms long, densely covered in minute processes, finely coiled. Anthers conspicuous. Fertile achenes few, 2-3 mm long, dark brown, slightly compressed, broad at first, apices bluntly obtuse to rounded, narrowed slightly to base, crowned with minute asperities glabrous, primary ribs longitudinal, 4-5, prominent; secondary ribs 4-5, less obvious, otherwise strongly transversely wrinkled towards base. Sterile achenes numerous, narrowly subcylindric, pale and finely ribbed. Pappus hairs up to 7 mm long, copious, white, slender and soft, fused at base otherwise barbellate in upper half.

## SIMILAR TAXA

*Sonchus novaezelandiae* is set well apart from other members of *Sonchus* in New Zealand by its involucral bracts which are characteristically covered in dark, spreading glandular hairs, and often secondarily white tomentose (rarely glabrous), and by its flattened achenes, and slender white, fluffy, pappus hairs.

## FLOWERING

November - April

## FLOWER COLOURS

Yellow

## FRUITING

November - May

## LIFE CYCLE

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

## PROPAGATION TECHNIQUE

Easy from fresh seed - the unusual foliage and colourful leaf markings make it a rather attractive pot plant or plant from a dry, free draining, sunny place in a rockery.

## THREATS

*Sonchus novae-zelandiae* appears to have always been biologically sparse but recent ad hoc field surveys for this species have found that it has declined from large parts of its former range. Many populations are at risk from the spread of *Pilosella*, and in some sites *Sonchus novae-zelandiae* is now confined to cliff and rock outcrop refugia

## ETYMOLOGY

**sonchus:** Sow thistle

**novae-zelandiae:** Of New Zealand

## WHERE TO BUY

Not commercially available.

## TAXONOMIC NOTES

Allan (1961, Flora of New Zealand Vol. I, pp. 762-763) did not designate types or provide Latin diagnoses for his *Kirkianella novae-zelandiae* f. *minor* Allan and f. *glauca* Allan. These names are therefore illegitimate. Although Garnock-Jones (2014) published a new combination for *Kirkianella* in *Sonchus* a thorough study of the variation within that species is still required.

## ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (6 August 2006). Description adapted from Allan (1961) supplemented with observations made from fresh and dried material (see also de Lange et al. 2010).

## REFERENCES AND FURTHER READING

- Allan, H.H. 1961: Flora of New Zealand. Vol. I. Wellington, Government Printer
- de Lange, P.J.; Heenan, P.B.; Norton, D.A.; Rolfe, J.R.; Sawyer, J.W.D. 2010: Threatened Plants of New Zealand. Canterbury University Press, Christchurch.
- Garnock-Jones PJ. 2014: Evidence-based review of the taxonomic status of New Zealand's endemic seed plant genera, *New Zealand Journal of Botany*, DOI: 10.1080/0028825X.2014.902854
- Heenan, P.B.; Mitchell, A.D.; de Lange, P.J.; Keeling, J.; Paterson, A.M. 2010: Late Cenozoic origin and diversification of Chatham Islands endemic plant species revealed by analyses of DNA sequence data. *New Zealand Journal of Botany* 48: 83–136.
- 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): *Sonchus novae-zelandiae* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

<https://www.nzpcn.org.nz/flora/species/sonchus-novae-zelandiae/> (Date website was queried)

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/sonchus-novae-zelandiae/>