

Sonchus grandifolius

COMMON NAME

Pūhā pāākau rahi, embergeria, Chatham Island sow thistle

SYNONYMS

Embergeria grandifolia (Kirk) Boulos

FAMILY

Asteraceae

AUTHORITY

Sonchus grandifolius Kirk

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

Yes

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledonous composites

CHROMOSOME NUMBER

2n = 36

CURRENT CONSERVATION STATUS

2012 | At Risk – Recovering | Qualifiers: CD, EF, IE, RR

PREVIOUS CONSERVATION STATUSES

2009 | At Risk – Recovering | Qualifiers: CD, EF, IE, RR

2004 | Threatened – Nationally Endangered

DISTRIBUTION

Endemic to the Chatham Islands. Endemic. Rēkohu (Chatham), Rangihaute (Pitt), Mang'ere, Tapuaenuku, Wharekaikite (Rabbit), Hokoreoro (South East) Islands, and many of the smaller islets and rock stacks.

HABITAT

Coastal. Sand dunes (usually the foredunes), also coastal cliff ledges, clay promontories and talus slopes, and on rock stacks.



Embergeria grandifolia plant in flower in sand dunes. Photographer: Geoff Walls



Close up of flowers and buds, Kaiangaroa Point, Chatham (Rekohu) Island. Photographer: Gillian Crowcroft

FEATURES

Stout, rhizomatous, widely spreading, herb, exuding milky latex if severed, when flowering and fruiting plants erect, 0.8–1.5(–2.2) m tall. Rhizomes 30–50(–70) mm diameter and fleshy when fresh, becoming semi-woody with age and senescence. Stems seasonally produced, robust, 30–50(–70) mm diameter, up to 2.2 m tall, corymbosely branched in upper half to third, ± terete, glabrate, exuding milky latex if severed, finely longitudinally striate (more evident in senescent stems). Basal leaves 0.8–1.5 m long, 40–60(–80) mm wide, coriaceous, somewhat fleshy, succulent, borne on stout, plano-convex petioles 0.2–0.4 m long. Lamina, narrow to broadly oblong, irregularly pinnatifid to subpinnate; lobes coarsely doubly serrate to dentate, sharply toothed; scabrid above, sparsely covered in hispid and strigose hairs, adaxially yellow-green, dark yellow-green to dark green, often glaucescent; veins impressed, scarcely evident, abaxially paler, often glaucescent, veins raised. Cauline leaves initially similar to basal, decreasing in size up stems, upper half or less, 100–300 × 10–20(–40) mm, sessile, broadly lanceolate, initially irregularly pinnatifid, subpinnate, then irregularly dentate or entire, apices acute. Inflorescence, corymbose, much-branched, bearing (10–)30 or more, capitula. Capitula, 30–45 mm diameter, pedicels 10–20(–40) mm long, stout, covered in white floccose hairs, these shedding after anthesis. Involucral bracts multi-tiered, narrowly lanceolate, gradually tapering to subacute apex, green, yellow-green, glaucescent; outer bracts abaxially, medially furnished with short, darkly pigmented spines. Dray florets numerous, yellow-orange, apricot, pink, or mauve, usually lighter coloured prior to, and then darkening after anthesis. Cypsela (3.5–)4.3–5.0(–5.6) mm long, oblong, oblong-elliptic, elliptic, often strongly compressed; brown to dark brown or orange-brown; ribs 3–6(–8) on each surface, irregular, thickened; margin unevenly, and thickly winged, surfaces glabrous. Pappus (8–)10–15(–18) mm long, smooth, white. Caducous.

SIMILAR TAXA

A well-marked species that has little resemblance to other species of pūhā / sow thistle indigenous to, or naturalised on the Chathams group or in Aotearoa / New Zealand. On the Chatham Islands, pūhā pāṛākau rahi and the indigenous pūhā (*Sonchus kirkii*) are present. Pūhā is a much smaller, non-rhizomatous plant (up to 0.8 m tall usually much less), with usually one, rarely more erect stems, distinctive, less divided, glaucous (grey-green) often pink-pigmented, submembranous leaves, and smaller bright yellow capitula. All parts freely exude milky latex, whereas pūhā pāṛākau rahi, whilst producing latex, has less copious production. Pūhā pāṛākau rahi though initially described by Kirk (1894) as a species of *Sonchus* was placed by Boulos (in Eichler 1965) in a new genus *Embergeria* mostly because the pappus hairs are not dimorphic, lacking the stiff clavate barbellate bristles usually found scattered in *Sonchus* species amongst the otherwise shorter slender soft pappus hairs (Garnock-Jones 2014). On the basis of phylogenetic evidence through a wider assay of *Sonchus* done by others, Garnock-Jones (2014) elected to treat *Embergeria* as a synonym of *Sonchus*, and at least for now that view point is accepted here.

FLOWERING

December - February

FLOWER COLOURS

Violet/Purple, Yellow

FRUITING

Late summer and autumn.

PROPAGATION TECHNIQUE

Easy from fresh seed. Does best in a free draining, fertile but damp soil in full sun. Dislikes humidity. Plants are often prone to dying in hot weather.

THREATS

Reasonably widespread and secure in some parts of its range where it grows on cliff faces and pest-free islands and islets. On the main islands threatened by livestock and other browsing animals (including pigs, possums and rodents). Competition from invasive exotic plants, coastal development and coastal erosion is also a problem in some areas. However, this species has made a spectacular recovery over large parts of its range, and is actively colonising new areas of beach and coastal cliff. It now occurs in numerous secure sites across the Chatham Island group.

ETYMOLOGY

sonchus: Sow thistle

WHERE TO BUY

Occasionally available from specialist native plant nurseries.

TAXONOMIC NOTES

Garnock-Jones (2014) advocated that *Embergeria* should be treated as a synonym of *Sonchus*. Although this decision differs from the conclusion reached by Heenan et al. (2010) NZPCN for now has elected to follow this decision.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 4 May 2022. Description by P.J. de Lange (4 May 2022).

REFERENCES AND FURTHER READING

Eichler, H. 1965: Supplement to J. M. Black's Flora of South Australia (2nd Ed.). Adelaide.

Garnock-Jones P.J. 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](https://doi.org/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.

Kirk, T. 1894: Remarks on the New Zealand Sow-thistles, with Description of a New Species. *Transactions of the New Zealand Institute* 26: 263–266.

Walls, G.; Baird, A.; de Lange, P.J.; Sawyer, J.W.D. 2002: Threatened plants of the Chatham Islands. Wellington, Department of Conservation.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

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