

Solanum aviculare var. aviculare

COMMON NAME

poroporo

SYNONYMS

Solanum aviculare var. *albiflorum* Cheeseman, *Solanum cheesemanii* Herasim., *Solanum aviculare* f. *aviculare* nom. nud.

FAMILY

Solanaceae

AUTHORITY

Solanum aviculare G.Forst. var. *aviculare*

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

SOLAVA

CHROMOSOME NUMBER

2n = 46

CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Vulnerable | Qualifiers: DP, TO, Sp

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Declining | Qualifiers: DP, Sp, TO

2009 | At Risk – Declining | Qualifiers: DP, Sp, TO

2004 | Not Threatened

BRIEF DESCRIPTION

Fleshy shrub to 3 m tall bearing dark green thin narrow leaves that have 1–3 large sharp lobes and large white or pink flowers that have a projecting yellow centre. Leaves 4–40 cm long by 1–1.5 cm wide. Flowers to 4 cm wide. Fruit yellow or orange, 15–25mm long. POISONOUS.

DISTRIBUTION

Indigenous. New Zealand: Kermadec Islands, North Island, South Island (south to about Banks Peninsula and Westland), Chatham Islands. Also Norfolk Island (extinct), Lord Howe Island (extinct), eastern Australia and New Guinea. Naturalised in at least China and Russia, probably elsewhere.

HABITAT

Coastal to lowland (0–400 m a.s.l.). Usually in open shrubland, in and around sea bird nesting grounds, seal haul-outs, or along forest margins. Sometimes an urban weed.



Close up of *Solanum aviculare* var. *aviculare* flowers showing acute corolla lobes, Mangaonua Gully, Hamilton. Photographer: Peter J. de Lange, Date taken: 09/12/2006, Licence: CC BY-NC.



Solanum aviculare var. *aviculare* in flower, Mangaonua Gully, Hamilton. Photographer: Peter J. de Lange, Date taken: 09/12/2006, Licence: CC BY-NC.

DETAILED DESCRIPTION

Small, softly woody shrub up to 3 × 2 m. **Branches** sparse to many, suberect to spreading, initially dark green, purple-green to reddish-brown, maturing with fine grey, chartaceous bark. **Leaves** alternate with decurrent, fleshy petioles up to 30 mm long; lamina fleshy-membranous to almost coriaceous, 40–400 × 10–15–(20) mm, dark green, purple-green or rarely yellow-green, narrowly lanceolate to elliptic, entire, or deeply 1–3–(4)-lobed to pinnatifid; lobes/pinnae broadly lanceolate. **Flowers** axillary in 1–3 few to many-flowered cymes. **Calyx lobes** short, broad, spreading. **Corolla** broadly campanulate to rotate, up to 40 mm diameter; tube up to 10 mm long, funnelform, widely flaring at mouth, lobes 10–15 mm, lanceolate; white, lavender, or dark blue, in all cases usually fading to white after anthesis. **Filaments** up to 5 mm long. **Anthers** 3–6 mm long, oblong, spreading, yellow, opening by apical slits. **Berry** 15–25 mm long, broadly ovoid to ellipsoid, maturing yellow or orange, fleshy, pendent; stone cells sparse, inconspicuous. **Seeds** 1.3–2 mm long, dull to semi-glossy, orange-brown, purple-brown or dark purple brown, obovate to circular or transversely elliptic, often asymmetric, compressed.

SIMILAR TAXA

Often confused with the much more widespread and common *S. laciniatum* Aiton which has much wider (up to 50 mm diameter) rotate flowers with broader lobes, that are distinctly frilled (ruffled), emarginate lobe apices, large seeds (2–3 mm cf. 1–2 mm) and a different chromosome number (2n = 92 cf 2n = 46). *S. aviculare* var. *aviculare* differs from *var. latifolium* G.T.S.Baylis by its consistently narrower leaves and taller growth habit. Sterile material of either *Solanum* is impossible to determine to species level.

FLOWERING

Throughout the year

FLOWER COLOURS

Blue, Violet/Purple

FRUITING

Throughout the year

PROPAGATION TECHNIQUE

Easily grown from fresh seed and semi-hardwood cuttings. Tolerant of heavy shade and full sun, and dry or wet soils but not frost. However, as with all poroporo the green fruits are extremely toxic. The white flowered form (known as *var. albiflorum* in some flora treatments) is particularly attractive and worth growing.

THREATS

It has been observed that *Solanum aviculare* var. *aviculare* is becoming less common in the northern North Island though why is not clear. It was assessed as 'Threatened – Nationally Vulnerable' by de Lange et al. (2018). A full nationwide conservation assessment is needed to clarify its exact status.

ETYMOLOGY

solanum: Derivation uncertain - possibly from the Latin word sol, meaning "sun," referring to its status as a plant of the sun. Another possibility is that the root was solare, meaning "to soothe," or solamen, meaning "a comfort," which would refer to the soothing effects of the plant upon ingestion.

aviculare: Small bird

CULTURAL USE/IMPORTANCE

The fruits of this species and *S. laciniatum* Aiton yield important steroid precursors, so both are widely and commercially grown, especially in eastern Europe, Russia and China.

POISONOUS PLANT

As with *Solanum laciniatum*, the yellow or green berries are poisonous but when ripe (orange) they lose much of their toxicity. The symptoms are often delayed up to 6–12 hours and may include a fever, sweating, nausea and abdominal pain. Click on this link for more information about [Poisonous native plants](#).

ATTRIBUTION

Fact Sheet prepared for the NZPCN by P.J. de Lange 12 May 2006. Description by P.J. de Lange with some elements based on Allan (1961) and Webb et al. (1988).

REFERENCES AND FURTHER READING

- Allan HH. 1961. Flora of New Zealand, Volume I. Indigenous Tracheophyta: Psilopsida, Lycopsidea, Filicopsida, Gymnospermae, Dicotyledones. Government Printer, Wellington, NZ. 1085 p.
- de Lange PJ, Rolfe JR, Barkla JW, Courtney SP, Champion PD, Perrie LR, Beadel SM, Ford KA, Breitwieser I, Schönberger I, Hindmarsh-Walls R, Heenan PB, Ladley K. 2018. Conservation status of New Zealand indigenous vascular plants, 2017. *New Zealand Threat Classification Series 22*. Department of Conservation, Wellington, NZ. 82 p. <https://www.doc.govt.nz/globalassets/documents/science-and-technical/nztcs22entire.pdf>.
- Webb CJ, Sykes WR, Garnock-Jones PJ. 1988. Flora of New Zealand, Volume IV. Naturalised Pteridophytes, Gymnosperms, Dicotyledons. Botany Division, Department of Scientific and Industrial Research, Christchurch, NZ. 1365 p.

NZPCN FACT SHEET CITATION

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<https://www.nzpcn.org.nz/flora/species/solanum-aviculare-var-aviculare/> (Date website was queried)

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/solanum-aviculare-var-aviculare/>