

Solanum americanum

COMMON NAME

small-flowered nightshade

SYNONYMS

Solanum nodiflorum Jacq.; *Solanum nodiflorum* subsp. *nutans* R.J.F.Hend.;
S. americanum subsp. *nutans* (R.J.F.Hend.) R.J.F.Hend.

FAMILY

Solanaceae

AUTHORITY

Solanum americanum Mill.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

NVS CODE

SOLNOD

CHROMOSOME NUMBER

2n = 24

CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: SO

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Indigenous. Kermadec, Three Kings, North, South and Chatham Islands. In the North Island locally common to about the Bay of Plenty and Taranaki; scarce otherwise. In the South Island reported from Nelson, Marlborough, North Canterbury and Westland. Uncommon on the Chatham Islands. Abundant on northern offshore islands, especially the Kermadec Islands.

Present also in Australia, Africa, India, south-east Asia and the Pacific.

HABITAT

Usually coastal but also found inland in open forested situations up to about 400 m a.s.l. Occasionally an urban weed.

Solanum americanum is the typical *Solanum* of northern offshore islands, where it grows in great abundance on the richly manured, frequently disturbed ground of petrel colonies, and may on occasion form dense thickets.

WETLAND PLANT INDICATOR STATUS RATING

FACU: Facultative Upland

Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).



Solanum americanum subsp. *nutans*.
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Solanum americanum subsp. *nutans*.
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DETAILED DESCRIPTION

Small, annual to perennial bright-green to purple-green herb up to 1 x 1 m but usually much less. All parts glabrous to glabrescent except on occasion on very young growth. Branches and branchlets usually unarmed though sometimes furnished on the flanges with sparse blunt-ended hooks. Petioles to 50 mm long. Cauline leaves 40-100 x 15-55 mm, usually bright green rarely dark green, ovate, ovate-oblong to lanceolate-ovate, entire or distally coarsely toothed to lobulate, sometimes sinuate; base cuneate, broad-cuneate or attenuate, rarely cordate to truncate; apex more or less acute, sometimes acuminate. Flowers in few-flowered umbels. Peduncles 20 mm long, slender; pedicels up to 5 mm long, more or less pendent, markedly deflexing at fruiting. Calyx <2 mm long, accrescent; lobes very narrowly elliptic to ovate, reflexed at fruiting. Corolla 5-8 mm diameter, stellate, white, pale mauve, glabrous; lobes triangular. Anthers 1.0-1.5 mm long, yellow. Fruit a berry 5-8 mm diameter, globular, glossy black to purple-black, stone cells present, often copious. Seeds 1.0-2.5 mm long, semi-glossy buff to pale orange-yellow or dark yellow, obovate to broadly obovate, sometimes circular, asymmetric, strongly compressed.

SIMILAR TAXA

Most frequently confused with *Solanum nigrum*, with which it often grows on the more disturbed northern offshore islands. From *S. nigrum*, *S. americanum* differs by its umbellate rather than pseudumbellate inflorescences, smaller flowers (5-8 cf 8-13 mm diameter), strongly reflexed, narrow calyx lobes in fruiting specimens, smaller anthers (1-1.6 cf. 2-2.7 mm long), and by the presence of stone cells, these being absent in *S. nigrum*. Both species are chromosomally distinct, with *S. nigrum* having $2n = 72$ and *S. nodiflorum* $2n = 24$ chromosomes. *Solanum americanum* is indeed the correct name for the New Zealand plant (S. Knapp pers. comm., July 2017) that has been recently (Manoko et al. 2007) though incorrectly, referred back to *S. nodiflorum* (as *S. nodiflorum* subsp. *nutans*). The treatment offered here is for this species (there as *S. americanum*) by Webb et al. (1988) is correct. A third species, *S. opacum*, is also present in New Zealand, and that species has caused much confusion between *S. americanum* and *S. nigrum* because it has deflexed, broad calyx-lobes, dull black- or green-coloured fruits with stone cells, and stamens which are 1.5 mm long - features that are 'intermediate' between *S. americanum* and *S. nigrum* as treated by Webb et al. (1988). However, Webb et al. (1988) state that *S. opacum* is not present in New Zealand, which is now known to be incorrect. For differences between *S. americanum* and *S. opacum* see the factsheet for *S. opacum*.

FLOWERING

October - April

FLOWER COLOURS

Violet/Purple, White

FRUITING

November - June

PROPAGATION TECHNIQUE

Very weedy and invasive

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.

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, H.H. 1961: Flora of New Zealand. Vol. I. Government Printer, Wellington.

Manoko, M.L.K.; van den Berg, R.G.; Feron, R.M.C.; van der Weerden, G.M.; Mariani, C. 2007: AFLP markers support separation of *Solanum nodiflorum* from *Solanum americanum* sensu stricto (Solanaceae). *Plant Systematics and Evolution* 267: 1-11.

Webb C.J., Sykes W.R., Garnock-Jones P.J. 1988: Flora of New Zealand. Vol. IV. Botany Division, DSIR, Christchurch.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

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