Tetragonia tetragonoides

COMMON NAMES
kōkihi, New Zealand spinach, tutae-ikamoana

BIOSTATUS
Native

CURRENT CONSERVATION STATUS
2023 | At Risk – Naturally Uncommon | Qualifiers: EF, RR, SO, Sp
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Lianes & Related Trailing Plants - Dicotyledons

FLOWER COLOURS
Green, Yellow

DETAILED DESCRIPTION
Widely trailing perennial herb forming dense patches, circular mats, or rarely mounds of interlacing branches up to 1 m thick. Branches up to 1 m long, bright to dark green or yellow green, subterete, numerous, woody near base, decumbent, trailing not or only rarely rooting at nodes. Petioles firmly fleshy up to 20 mm long. Leaves 15-80 x 10-60 mm, dark green to yellow green, darker above and paler beneath, ovate-rhomboid, rhomboid to triangular, obtuse to subacute, entire or rarely slightly sinuate or shallowly lobed, both surfaces very densely though finely papillose. Flowers solitary or paired, mostly perfect sometimes unisexual, subsessile, 7-8 mm diameter, perianth dark yellow to pale yellow (rarely yellow-green). Calyx-tube broadly turbinate, lobes broad-triangular, obtuse. Stamens variable but between 10-20. Ovary 3-8-celled, styles 3-8. Fruit 8-10(15) mm long, subturbinate, angled, woody horns 2-4 apical, sharp to blunted-ended, seeds 4-10.



Devonport Beach. Photographer: Bec Stanley, Licence: CC BY-SA.



An image of NZ spinach. Photographer: Missouri Botanic Gardens, Licence: Public domain.

SIMILAR TAXA
Tetragonia trigyna is similar but has reddish stems, more usually broadly ovate or deltoid leaves, distinctly pedicellate flowers and globose rather than turbinate, succulent rather than woody, red fruits lacking horns.

DISTRIBUTION
Indigenous. Kermadec, Three Kings, North, South, Stewart and Chatham Islands. Also present in Australia, the western Pacific, Malesia, Japan and southern South America.

HABITAT
A species of the coastal strand zone often growing along beaches amongst driftwood, and sea weed but also in sand dunes, on boulder and cobble beaches, on cliff faces and rock ledges and in some areas such as the Kermadec Islands an conspicuous and important associated of the vegetationof many of the outer islands in the archipelago. Partly because it has been cultivated as a vegetable this species often appears in landfills or as a casual weed of urban areas. Indeed some wild occurrences near urban coastal settlements may stem from discarded plants or seed in garden waste.

THREATS
It is threatened by disturbance of coastal sands and stony beaches.

GENUS
Tetragonia

FAMILY
Aizoaceae

AUTHORITY
Tetragonia tetragonoides (Pall.) Kuntze

SYNONYMS
Demidovia tetragonoides Pall., Tetragonia cornuta Gaertn., Tetragonia expansa Murray nom. illegit., Tetragonia halimifolia G.Forst., Tetragonia inermis F.Muell.

ENDEMIC TAXON
No

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
October-February

FRUITING
November - March

PROPAGATION TECHNIQUE
Easily grown from seed and once established self-sows freely. A moderately popular vegetable whose seed is sold as New Zealand Spinach. Frost tender but once established usually resprouts from the base when warmer weather returns.

WHERE TO BUY
Seed and plants often sold by main stream garden centres, often in the herb section or as a New Zealand vegetable.

ETYMOLOGY
tetragonia: Four-angled

NVS CODE
TETTTR

CHROMOSOME NUMBER
2n = 96

PREVIOUS CONSERVATION STATUSES
2017 | At Risk – Naturally Uncommon | Qualifiers: EF, RR, SO, Sp
2012 | At Risk – Naturally Uncommon | Qualifiers: EF, SO, Sp
2009 | At Risk – Naturally Uncommon | Qualifiers: EF, SO
2004 | Sparse
Jump to current conservation status

REGIONAL CONSERVATION STATUSES
Auckland: 2025 | Regionally Threatened – Regionally Endangered | Qualifiers: Sp, DPR, DPS, DPT, EF, NO, RR, SO
Help
Current regional threat status assessments prepared according to Crisp et al. (2025) are displayed when available. The Auckland conservation status information is sourced from the "Conservation status of vascular plant species in Tāmaki Makaurau / Auckland" Simpkins E et al. (2025) report.
Northland: 2026 | Regionally At Risk – Regionally Naturally Uncommon | Qualifiers: Sp Help
Current regional threat status assessments prepared according to Crisp et al. (2025) are displayed when available. The Northland conservation status information is sourced from the "Conservation status of indigenous vascular plants in Northland | Taitokerau" Ford et al. 2026 report.

REFERENCES AND FURTHER READING

Allan, H.H. 1961: Flora of New Zealand. Vol. I. Wellington, Government Printer.
Wilcox, M.D. New Zealand spinach in Mangere. Auckland Botanical Society Journal, 56: 82

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 1 February 2008. Description based on Allan (1961)
Some of this factsheet information is derived from Flora of New Zealand Online and is used under a Creative Commons Attribution 3.0 New Zealand licence.

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/tetragonia-tetragonoides/

PDF DATE

25 August 2026