

Tetragonia tetragonoides

COMMON NAME

kōkihi, New Zealand spinach, tutae-ikamoana

SYNONYMS

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

FAMILY

Aizoaceae

AUTHORITY

Tetragonia tetragonoides (Pall.) Kuntze

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lianes & Related Trailing Plants - Dicotyledons

CHROMOSOME NUMBER

2n = 96

CURRENT CONSERVATION STATUS

2012 | At Risk – Naturally Uncommon | Qualifiers: EF, SO, Sp

PREVIOUS CONSERVATION STATUSES

2009 | At Risk – Naturally Uncommon | Qualifiers: EF, SO

2004 | Sparse

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 vegetation of 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.



Devonport Beach. Photographer: Bec Stanley



An image of NZ spinach. Photographer: Photo courtesy of Missouri Botanic Gardens

FEATURES

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, sessile, 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.

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.

FLOWERING

October-February

FLOWER COLOURS

Green, Yellow

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.

THREATS

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

ETYMOLOGY

tetragonia: Four-angled

WHERE TO BUY

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

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 1 February 2008. Description based on Allan (1961)

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

NZPCN FACT SHEET CITATION

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<https://www.nzpcn.org.nz/flora/species/tetragonia-tetragonoides/> (Date website was queried)

MORE INFORMATION

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