



Atriplex hollowayi

Common Name(s):

Holloway's crystalwort

Current Threat Status (2012):

Threatened - Nationally Critical

Distribution:

Endemic. North Island, formerly recorded from Te Pahi south and east to Hicks Bay, including Mayor (Tuhua) Island, with a disjunct southerly gathering made by Thomas Kirk in the 1800s from Lyall Bay, Wellington. Now known naturally only from Waikuku and Whareana Beaches, on the eastern side of Te Pahi.

Habitat:

Sandy Beaches, at or just above the high water tide mark. Usually found at or in the vicinity of a fresh water stream draining across a beach

Features*:

Annual, succulent, densely branched herb, forming circular 0.8 x 1.2 m mounds on sandy beaches just above mean annual high water tide mark. All exposed parts copiously covered in fine, sugar-like, deciduous, spherical, glistening, ball-like papillae. Branches 10-50 mm long, succulent, creamy yellow, rooting at nodes. Stems pale yellow. Leaves 2-12 x 1-6 mm, grey-green, margins distinctly but irregularly toothed. Plants monoecious. Male flowers axillary, in clusters of 2-4, rarely single; perianth lobes 5, green or pale-cream, 0.8-1 mm, elliptic-oblong; stamens 5, anthers yellow; female flowers minute, 0.8-1.2 mm, shortly stipitate, solitary or paired in leaf-axils. Perianth absent, bracteole fused for 1/2 length, lips triangular, obtuse, lacinate, fimbriate to entire; styles 2 not connate; stigmas 2, white, 0.7-1 mm. Fruits 2.8-4.0 x 1.5-2.3, straw-yellow, urceolate, papery. Seed circular, convex 0.9-2 mm diam., chestnut-brown maturing purple-brown.

Flowering:

October - February

Fruiting:

December - April

Threats:

At risk from trampling and/or browsing by livestock and palatable to most herbivores. There is some historical evidence suggesting that some of this species decline was caused by botanists collecting whole plants - which to an annual species can be a serious threat. Holloways Crystalwort is also threatened by competition from other introduced strand plants, summer cyclonic storms, human beach users - especially from the ever increasing use of All Terrain Vehicles on sand beaches.

*Attribution:

Description based on de Lange et al. (2000).

References and further reading:

de Lange, P.J. ; Norton, D.A.; Crowcroft, G.M. 2000: Taxonomy, ecology, and conservation of *Atriplex billardi* and *A. hollowayi* sp. nov. (Chenopodiaceae) in Australasia. *New Zealand Journal of Botany* 38: 551-567.

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 2009 Vol. 11 No. 4 pp. 285-309

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=4



Caption: Ex cult Waikuku Beach

Photographer: Peter de Lange



Caption: *Atriplex hollowayi* adult plant

Photographer: Lisa Forester