

# Disphyma australe subsp. australe

## COMMON NAME

horokaka, native ice plant, New Zealand ice plant

## SYNONYMS

Mesembryanthemum australe W.T.Aiton

## FAMILY

Aizoaceae

## AUTHORITY

Disphyma australe (Aiton) N.E.Br. subsp. australe

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

## CHROMOSOME NUMBER

2n = 36

## CURRENT CONSERVATION STATUS

2017 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Endemic. New Zealand: Three Kings, North, South, Stewart and Chatham Islands

## HABITAT

Coastal (rarely inland). Mostly on cliff faces, rock stacks, and boulder/cobble beaches, more rarely in saltmarsh and estuaries. Often in petrel scrub on offshore islands, and extending into coastal forest around petrel burrows. Occasionally on limestone or sandstone cliffs in lowland forest (Western Waikato).

## WETLAND PLANT INDICATOR STATUS RATING

UPL: Obligate Upland

Rarely is a hydrophyte, almost always in uplands (non-wetlands).



Ice plant. Photographer: Department of Conservation, Licence: Public domain.



Cape Terawhiti. Photographer: Jeremy R. Rolfe, Date taken: 01/11/2006, Licence: CC BY.

## DETAILED DESCRIPTION

Trailing, succulent herb. Stem terete, glabrous. Short shoots prostrate, rooting freely at nodes. Leaves 3-angled, linear-lanceolate to oblong, acute, often mucronate, tapering to connate base, 6-40 × 4-9 mm; margins entire, smooth, very rarely with a few papillae towards the distal end of the keel. Flowers 20-40 mm diameter. Sepal keel entire, smooth. Petals uniformly white to deep pink, in 3-5 rows, 10-30 mm long. Stamens 4-6 mm long; inner filaments hairy at base. Stigmas (5)-6-8-(10). Capsule valves 5-10, with parallel or ± divergent expanding keels; placental tubercle rounded or 0. Seeds brown, obovoid, rugose, c. 1 mm long.

## SIMILAR TAXA

Distinguished from the other New Zealand species by the leaf margin and sepal keel smooth (very rarely papillate near the apex), 3-angled, linear-lanceolate to oblong, acute and often mucronate leaves, and petals in 3-5 rows. The Kermadec endemic subsp. *stricticaule* differs by the short shoots mostly ascending, rarely rooting at nodes, papillate leaves and sepal keels, and 5 rarely 6 capsule valves.

## FLOWERING

Present throughout the year

## FLOWER COLOURS

Red/Pink, Violet/Purple

## FRUITING

Present throughout the year

## LIFE CYCLE

Fleshy capsules are dispersed by frugivory and possibly wind and water (Thorsen et al., 2009).

## PROPAGATION TECHNIQUE

Easy from rooted pieces and fresh seed. Does well in free draining soil within a sunny site. Not fussy about soil fertility or moisture regime. Some cultivar selection might be necessary as there is a diverse range of foliage colours, and flower colour ranges from white to fully pink.

## ETYMOLOGY

**disphyma**: Two-nodule

**australe**: Southern, from the Latin australis

## ATTRIBUTION

Description modified from: Webb, C. J.; Sykes, W. R.; Garnock-Jones, P. J. 1988: Flora of New Zealand. Vol. IV. Naturalised Pteridophytes, Gymnosperms, Dicotyledons. 4. Christchurch, New Zealand, Botany Division, D.S.I.R. Forms natural intergeneric hybrids with both *Carpobrotus chilensis* and *C. edulis*.

## REFERENCES AND FURTHER READING

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 11: 285-309

## NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Disphyma australe* subsp. *australe* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

<https://www.nzpcn.org.nz/flora/species/disphyma-australe-subsp-australe/> (Date website was queried)

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/disphyma-australe-subsp-australe/>