

# Cyperus insularis

## SYNONYMS

None - this species is a recently recognised segregate of the New Zealand endemic *C. ustulatus* A.Rich

## FAMILY

Cyperaceae

## AUTHORITY

*Cyperus insularis* Heenan et de Lange

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Sedges

## NVS CODE

CYPINS

## CHROMOSOME NUMBER

$2n = 112-114$

## CURRENT CONSERVATION STATUS

2017 | At Risk – Declining | Qualifiers: PD, RR

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Declining | Qualifiers: RR

2009 | At Risk – Declining

2004 | Not Threatened

## DISTRIBUTION

Endemic. Known only from the Kermadec, Three Kings Islands, and northern North Island and associated offshore islands south to Port Waikato and Moutohora (Whale) Island (Bay of Plenty).

## HABITAT

Northern offshore islands, and rocky headlands, usually in association with sea bird nesting grounds, though on the Kermadec Islands, where it is the only species present it is also present along sandy beaches and in swamps.



Macauley Island. Photographer: John Barkla, Licence: CC BY.



Macauley Island. Photographer: John Barkla, Licence: CC BY.

## DETAILED DESCRIPTION

Robust sedge up to 2 m tall with leaves crowded at base of culms. **Culms** stout, triquetrous, glabrous, striated, green, rarely brown in distal part, at base, upright at flowering, collapsing at seed fall. **Leaves** 1.4–3.2 mm × 1–2 m, grey green, strongly keeled, leaf margin and keel sharply scabrid, sheath light pink to light purple-pink.

**Inflorescence** a terminal umbel of 6–12 unequal rays, each subtended by a leaf-like involucre bract, these 0.3–3.2 mm × 0.1–1.15 m, grey-green, base green, often flushed light pink to purple-pink, or rarely pale brown.

**Spikelets** 9–12 mm long. **Glumes** 3–5.8 × 2–2.8 mm, ovate-oblong or ovate, green some times pale green or translucent, distal end and margin red-brown, drying yellow-brown to light brown, keeled, mucronate or obtuse, crowded into a dense spike 40–60 mm long. **Stamens** with persistent filaments. **Nut** 1.6–1.7 mm, red-brown to orange-brown, oblong to broadly oblong.

## SIMILAR TAXA

Distinguished from *C. ustulatus* A.Rich. by the grey-green leaves and involucre bracts, leaf sheaths light pink to purple-pink the culm/involucre bract junction green, pink or rarely pale brown, by the stout, usually branched rays, and by the culms which collapse after flowering. There are other floral characters which also distinguish these species, for these and other details see Heenan & de Lange (*N.Z.J.Bot.* 43: 351–359 (2005) - see link below).

## FLOWERING

July–December

## FRUITING

July–April

## LIFE CYCLE

Nuts are dispersed by water, granivory and attachment (Thorsen et al., 2009).

## PROPAGATION TECHNIQUE

Easily grown from fresh seed, and often self sows in gardens. A quite attractive plant which may in time prove popular in cultivation. However it should be planted with caution, the leaf, keel and culm margins are very sharp and can cause very deep cuts.

## THREATS

Declines are happening on Raoul and Macauley Islands, and there is some evidence of this also in the North Island part of its range. The nature of the decline is not clear, though in some places, such as Macauley Island it appears to be part of natural succession while on Raoul the decline at Denham Bay may be due to the spread of buffalo grass (*Stenotaphrum secundatum*). Within the mainland portion of its North Island range, the species appears restricted to sites frequented by sea birds, especially their nesting grounds, and it seems that as these habitats have been lost, so too has the *Cyperus*.

## ETYMOLOGY

**cyperus**: From the ancient Greek name for sedge, kypeiros

**insularis**: From the Latin insula 'island, pertaining to or growing on islands

## ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange (31 July 2004). Description adapted from Heenan & de Lange (2005).

## REFERENCES AND FURTHER READING

Heenan PB, de Lange PJ. 2005. *Cyperus insularis* (Cyperaceae), a new species of sedge from northern New Zealand. *New Zealand Journal of Botany* 43: 351–359. <https://doi.org/10.1080/0028825X.2005.9512958>.

Thorsen MJ, Dickinson KJM, Seddon PJ. 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): *Cyperus insularis* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/cyperus-insularis/> (Date website was queried)

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/cyperus-insularis/>