# **Cyperus ustulatus**

## COMMON NAME

coastal cutty grass, giant umbrella sedge, cyperus

## **SYNONYMS**

Mariscus ustulatus (A.Rich.) C.B.Clarke, Cyperus ustulatus f. grandispiculosus Carse ex Kük.

## FAMILY

Cyperaceae

**AUTHORITY** Cyperus ustulatus A.Rich.

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Sedges

CURRENT CONSERVATION STATUS 2017 | Not Threatened

## **PREVIOUS CONSERVATION STATUSES**

2012 | Not Threatened 2009 | Not Threatened 2004 | Not Threatened

## DISTRIBUTION

Abundant in the North Island and northern South Island, west to Fiordland, and not threatened. Naturally uncommon at its eastern South Island limit, where it is known only from Tai Tapu, Motukarara, Banks Peninsula and the Rakaia River mouth. Also on the Chatham Islands, where it is not very common.

## HABITAT

Coastal to lowland sites in open ground. Tolerant of a wide range of habitats and conditions but evidently preferring wetland margins, seepages, streamsides, lagoon and estuary margins.

## WETLAND PLANT INDICATOR STATUS RATING

FACW: Facultative Wetland Usually is a hydrophyte but occasionally found in uplands (non-wetlands).





Cyperus ustulatus f. ustulatus plant, Coromandel, February. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Cyperus usulatus f. ustulatus inflorescences, Coromandel, February. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

## **DETAILED DESCRIPTION**

Robust, 0.6–2.0 m tall, with leaves crowded at base of culms. **Culms** triquetrous, glabrous, striated. **Leaves** 0.6–1.2 m long, 8–15 mm wide, lamina coriaceous, strongly keeled, multitubular with numerous septa prominent on the abaxial side, margins and keel very sharply and minutely serrulate; sheath brown. **Inflorescence** a terminal umbel 40–140 mm long, of 6–12 unequal rays; rays usually unbranched, rarely with secondary branches at base; involucre of numerous leaf-like bracts very much > inflorescence. **Spikelets** 8–13 mm long, numerous, dark brown or yellow-brown, crowded on each ray into a dense spike 35–70 mm. long. **Glumes** 5–20 in each spikelet, ovate-oblong, obtuse or mucronate, hard, smooth and shining, keeled, red-brown with white nerves, 2–(3) lowermost and 1–2 uppermost glumes smaller, empty, the remainder fertile. **Stamens** with persistent filaments. **Nut** 1.5–2 × c. 0.5 mm., c.  $\frac{1}{2}$  length of glume, linear-oblong, trigonous, brown.

#### **SIMILAR TAXA**

Distinguished from <u>Cyperus insularis</u> by its light green leaves (*C. insularis* has grey-green leaves and involucral bracts). It has a brown adaxial midrib whereas *C. insularis* is grey-green. Its leaf sheaths are brown to red-brown and are rigid and hard (whereas in *C. insularis* they are light pink to purple-pink and flexible and soft). The culm in *C. ustulatus* is green, distal 5–15 mm is always brown to red-brown and long persistent after flowering. The culm of *C. insularis* is green, rarely pale brown in distal part and is upright at flowering but weakens and collapses at seed fall 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)—link provided 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 now 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.

## **ETYMOLOGY**

**cyperus**: From the ancient Greek name for sedge, kypeiros **ustulatus**: Burned or scorched

## **TAXONOMIC NOTE**

In many populations seed is not formed due to the endemic smut fungus *Bauerago (Ustilago) gardneri* (Vankey) Vankey which infects the spikes. Infected spikes can be recognised by the abundance of pollen-like yellow powder—the fruiting bodies of the smut fungus—within the spikelets. Plants bearing this smut were formerly thought to be a genetic form and were named *Cyperus ustulatus* f. *grandispiculosus* Carse ex Kük.

#### WHERE TO BUY

Over the last decade this species has become very popular and is now widely sold by most nurseries either as *Cyperus ustulatus* or *Mariscus ustulatus*.

## **ATTRIBUTION**

Description adapted from Moore and Edgar (1970)

#### **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: <u>https://doi.org/10.1080/0028825X.2005.9512958</u>. Moore LB, Edgar E. 1970. Flora of New Zealand, Volume II. Indigenous Tracheophyta: Monocotyledones except Gramineae. Government Printer, Wellington, NZ. 354 p.

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.

MORE INFORMATION https://www.nzpcn.org.nz/flora/species/cyperus-ustulatus/