

Gahnia setifolia

COMMON NAME

māpere, gahnia, giant gahnia, razor sedge

SYNONYMS

Lampocarya setifolia A.Rich.

FAMILY

Cyperaceae

AUTHORITY

Gahnia setifolia (A.Rich.) Hook.f.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

GAHSET

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. North Island (throughout), South Island (Nelson and Marlborough Sounds).

HABITAT

Coastal to montane (up to 780 m a.s.l., possibly higher). Mostly in lowland areas in light forest, scrub along logging tracks in pine plantations and cut over indigenous forest and lining streams, rivers, ponds and lakes. Sometimes colonising the fringes of swamps, bogs and mires.

WETLAND PLANT INDICATOR STATUS RATING

FACU: Facultative Upland

Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).



Mature fruit. Remutaka Forest Park.

Photographer: Jeremy R. Rolfe, Date taken: 17/12/2004, Licence: CC BY.



Eastbourne. Photographer: Jeremy R. Rolfe, Date taken: 22/09/1998, Licence: CC BY.

DETAILED DESCRIPTION

Robust, large perennial sedge arising from a stout, lignaceous rootstock and forming tufts up to 3 m tall. **Culms** 10–15 mm diameter (but up to 20 mm at the base). Leaves \pm = culms in length; lamina dark green to yellow green above paler and often glaucous beneath, harshly scabrid, rugose, margins involute and scabrid with a few longitudinal rows of teeth just inside the margin on the upper lamina surface; sheaths up to 300 mm long, dull brownish-black. **Panicle** robust up to 1 m long, drooping, branches numerous, primary branchlets up to 400 mm long. **Spikelets** 2-flowered, 6–7 mm long, stalked, dark red-brown to blackish brown. **Glumes** 6–7; 3–4 outermost empty, 5–6 mm long, 3 inner glumes 4 mm long in young flowers white with a red-brown apex, becoming dark red-brown throughout as fruit matures. **Stamens** 4–(6). **Style-branches** 3. **Nut** 3.5–4.5 mm long, 1.9–2 mm diameter, elliptic-obovoid, smooth and glossy, yellow-cream at first, maturing reddish brown when fully ripe; endocarp transversely grooved within.

SIMILAR TAXA

Gahnia setifolia could only ever be confused with the other giants of the New Zealand species *G. rigida* Kirk and *G. xanthocarpa* (Hook.f.) Hook.f. Of these species *G. setifolia* most frequently grows with *G. xanthocarpa* which differs by its glossy light to dark green leaves, reddish brown spikelets which are > 7 mm long, and dark glossy black nuts which are > 5 mm long. From *G. rigida*, *G. setifolia* differs by its drooping rather than rigidly erect panicle and reddish brown rather than bicoloured light brown/dark brown nuts with black centres.

FLOWERING

November–March

FRUITING

Fruits may be found throughout the year

LIFE CYCLE

Florets are wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Can be difficult to cultivate. The seed is difficult to germinate, and plants resent root disturbance and usually die if transplanted. However, considerable success has been achieved growing plants and/or germinating seed in untreated saw dust. Despite these problems this is an attractive species well worth attempting to grow. Once established it flourishes in a range of conditions but does best in full sun in a well drained or only seasonally wet soil.

ETYMOLOGY

gahnia: After Gahn

setifolia: With bristly leaves

CULTURAL USE/IMPORTANCE

Māpere is often known as razor sedge on account of its wickedly sharp leaves which are a constant hazard to those pushing tracks through places where this species has become well established. Māpere flourishes on damp clay and other forest soils, such as those left exposed following logging operations.

ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (30 October 2005). Description adapted from Moore and Edgar (1970)

REFERENCES AND FURTHER READING

- Gardner RO. 1995. Identifying *Gahnia setifolia* and *G. xanthocarpa*. *Auckland Botanical Society Journal* 50: 82–83.
- 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.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/gahnia-setifolia/>