

# Gahnia setifolia

## COMMON NAME

Mapere, 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

2012 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

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.

## FEATURES

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 more or less = to 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.



Rimutaka Forest Park. Photographer: Jeremy Rolfe



Eastbourne. Sep 1998. Photographer: Jeremy Rolfe

## 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

Mapere 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. Mapere 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, R.O. 1995. Identifying *Gahnia setifolia* and *G. xanthocarpa*. *Auckland Botanical Society Journal*, 50: 82-83.

Moore, L.B.; Edgar, E. 1970: *Flora of New Zealand*. Vol. II. Government Printer, Wellington.

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

## CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Gahnia setifolia* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/gahnia-setifolia/> (Date website was queried)

## MORE INFORMATION

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