

Gahnia rigida

COMMON NAME

gahnia

SYNONYMS

Gahnia robusta Kirk; *Gahnia rigida* Kirk *car. robusta* (Kirk) Benl

FAMILY

Cyperaceae

AUTHORITY

Gahnia rigida Kirk

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

GAHRIG

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. North Island (near Pureora, Mamaku Plateau, Mangaroa Swamp) and South Island (western Nelson and Westland to about Haast).

HABITAT

Coastal to lowland in swamps, bogs, mires and pakihi—often forming the dominant cover.

WETLAND PLANT INDICATOR STATUS RATING

FACW: Facultative Wetland

Usually is a hydrophyte but occasionally found in uplands (non-wetlands).



Pinehaven, Upper Hutt. Photographer: Jeremy R. Rolfe, Date taken: 12/07/2006, Licence: CC BY.



Pinehaven, Upper Hutt. Photographer: Jeremy R. Rolfe, Date taken: 12/07/2006, Licence: CC BY.

DETAILED DESCRIPTION

Robust perennial sedge arising from a stout, lignaceous rootstock and forming dense yellow-green tussocks 0.6–2.2 m tall. **Culms** 4–6 mm diameter (but up to 10 mm diameter near base). **Leaves** up to 3 m long, mostly erect with apices slightly drooping; sheaths dull pinkish brown, open, often frayed or shattered up to 50 mm wide at the base; lamina very hard, scabrid right across undersides, margins strongly involute when dry, scabrid; lamina when dry becoming undulate for some distance above the transverse line demarcating sheath from lamina. **Panicle** rigid, 18–760 × 60 mm, bearing numerous stiffly erect branchlets, primary branchlets up to 250 mm long. **Spikelets** 2-flowered, 6–7 mm long, stalked, light chestnut-brown to dark brown. **Glumes** 6–7; 3–4 outer glumes 6–7 mm long, empty; 3 inner glumes enclosing fruit brown. **Stamens** 4–5. **Style-branches** (2)–4. **Nut** 3.5–4.0 × 1.5–2.0 mm, ellipsoid-obovoid, usually light red-brown with a band of dark brown round the centre or the upper half dark brown, occasionally dark brown at the base and apex and then almost black at the centre, tipped with a fine scabrid point; endocarp transversely grooved within.

SIMILAR TAXA

Gahnia rigida could only ever be confused with the other giants of the New Zealand species *G. setifolia* (A. Rich.) Hook.f. and *G. xanthocarpa* (Hook.f.) Hook.f. *Gahnia rigida* rarely grows with either of these species. *Gahnia xanthocarpa* differs from *G. rigida* by its glossy light to dark green leaves, drooping rather than rigidly erect panicles, and dark glossy black nuts. *Gahnia setifolia* differs from *G. rigida* also by its drooping rather than rigidly erect panicle and reddish brown nuts. The nuts of *G. rigida* are diagnostic being the only ones to be consistently bicoloured light red-brown/dark brown, or dark brown with a broad black central band.

FLOWERING

December–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 though it does best in full sun in an acidic, poorly drained soil.

ETYMOLOGY

gahnia: After Gahn

rigida: Rigid

ATTRIBUTION

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

REFERENCES AND FURTHER READING

Druce AP. 1961. Rediscovery of the sedge *Gahnia robusta*. *Wellington Botanical Society Bulletin* 32: 12–14.

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-rigida/>