

# Empodisma minus

## COMMON NAME

Wire rush, lesser wire rush

## SYNONYMS

*Calorophus minor* Hook.f.; *Calorophus elongatus* var. *minor* Hook.f.;  
*Hypolaena lateriflora* var. *minor* (Hook.f.) Cheeseman

## FAMILY

Restionaceae

## AUTHORITY

*Empodisma minus* (Hook.f.) L.A.S.Johnson et D.F.Cutler

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

No

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Rushes & Allied Plants

## NVS CODE

EMPMIN

## CHROMOSOME NUMBER

2n = 24

## CURRENT CONSERVATION STATUS

2012 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Indigenous. New Zealand: North, South and Stewart Islands. From the Central Volcanic Plateau south in upland areas. Throughout the South Island but scarce in Marlborough and north Canterbury. Also Australia.

## HABITAT

Coastal to alpine (up to 1350 m a.s.l.). The dominant peat-forming species of low moor and high moor (raised bogs), oligotrophic, ombrotrophic wetland systems in New Zealand (montane to alpine in the North Island). Tolerates extremely acidic conditions (up to pH 2.5).



Mt Ruapehu, January. Photographer: John Smith-Dodsworth



Charleston, West Coast.

## FEATURES

Dioecious, perennial herb producing numerous, branched, flexuose culms collectively forming densely interwoven tangles. Rhizome rather robust for plant, erect, up to 8 mm diameter, covering with light brown, imbricating scale-like sheaths and very thick tufts of brown hairs; roots numerous, mostly horizontal-ascending rather than descending, 1-1.5 mm diameter, densely covered in pinkish-white root hairs. Culms 0.012-0.81 m, 0.7-1.3 mm diameter, much-branched, flexuose, terete or slightly flattened and grooved on one side, glabrous, dark green to dark brown, erect when short, otherwise more or less prostrate to ascending, widely spreading and lianoid. Leaves reduced to mucronate sheaths, 3.5-10.2 mm long, closely appressed to culm, spaced 15-48 mm distant, initially light green to light brown maturing dark brown to brown-black, margin entire; cilia protruding through the mouth of the sheath as white tufts of woolly white hairs; hairs arising from the outer scale of the axillary bud enclosed within sheath; mucro persistent, 1.5-4.2 mm long, initially light green maturing dark brown, fine, sharp-pointed, strongly reflexed. Spikelets distant within uppermost sheaths. Male spikelets 1-2, 3.9-8.0 mm long, 1-6-flowered, 1 sessile and 1 stalked, each borne within a hard, mucronate sheath; tepals 6, narrow-linear, acute; stamens 3, filaments slender, > tepals, anthers 1.2-2.0 mm long, exerted beyond the floral bract. Female spikelets 3.5-7.0 mm long, solitary within 1-3 uppermost, bearded, obtuse sheaths, 1-flowered, subtended by 2 imbricate, empty floral bracts; tepals 6-4, very small, hyaline; styles 3, free. Fruit a hard, oval nut, 2.6 mm long, protruding over persistent tepals, sessile on a thick receptacle.

## SIMILAR TAXA

Differs from *Empodisma robustum* by the diminutive stature and slender growth habit; culms mostly < 1 mm in diameter, sheaths mostly < 7.5 mm long and spikelets generally < 6.0 mm long. Readily distinguished from the two other New Zealand restiad genera *Sporadanthus* and *Apodasmia* by the mostly widely spreading, decumbent, trailing to lianoid growth habit, and 1-6-flowered male and 1-flowered female spikelets.

## FLOWERING

August - December

## FLOWER COLOURS

Yellow

## FRUITING

November - March

## LIFE CYCLE

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

## PROPAGATION TECHNIQUE

Easily grown from seed. Prefers an open, permanently damp, acidic soil but can be grown in dry soils as well. Not often cultivated.

## ETYMOLOGY

**empodisma**: Tangle-foot

**minus**: Small; from the Latin minor

## WHERE TO BUY

Not commercially available

## TAXONOMIC NOTES

The description in Flora II (Moore & Edgar 1970) includes two elements which are now treated as two species *Empodisma minus* and *E. robustum*.

## ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (18 June 2005). Description based on fresh material and herbarium specimens.

## REFERENCES AND FURTHER READING

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.

### **NZPCN FACT SHEET CITATION**

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

### **MORE INFORMATION**

<https://www.nzpcn.org.nz/flora/species/empodisma-minus/>