

Microlaena carsei

SYNONYMS

Microlaena avenacea var. *carsei* (Cheeseman) Zotov

FAMILY

Poaceae

AUTHORITY

Microlaena carsei Cheeseman

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Grasses

CHROMOSOME NUMBER

2n = 48

CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Endangered | Qualifiers: DP, Sp

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: Sp

2009 | At Risk – Naturally Uncommon | Qualifiers: DP

2004 | Sparse

DISTRIBUTION

Endemic. New Zealand: North Island (Te Pahi south to Kerikeri and Waipoua, thence disjunct to Great Barrier Island (Aotea Island)).

HABITAT

Seemingly endemic to kauri (*Agathis australis* (D.Don) Lindl)-dominated forest where it most usually found in damp, shaded hollows amongst tree roots and in shaded sites on the margins of fast flowing streams, and/or river banks. It is very easily overlooked.



Close up of *Microlaena carsei*. Photographer: Wendy Holland, Licence: CC BY-SA.



Growing in moss/liverwort hammock beds, Tutamoe Northland. Photographer: Marley Ford, Date taken: 28/09/2020, Licence: CC BY-NC.

DETAILED DESCRIPTION

Shortly creeping, rhizomatous, tufted, narrowly-leaved perennial grass. **Rhizomes** short, branching extravaginal, cataphylls 10-20 mm, bases swollen, glossy, keeled, acute. Internodes elongated, slender, glossy, glabrous, distinctly stramineous, apex to dark brown. **Leaf-sheath** glabrous, keel stout, margin membranous. **Ligule** 0.75-1 mm, triangular. **Auricles** 2, marginal hairs 1.5-2.5 mm. **Leaf-blade** 80-250 × 4-8 mm, glaucous green to green, keel stout; margins sharp, prickle-edged. **Culm** up to 600 mm laterally compressed, internodes longitudinally grooved, glabrous. **Panicle** 200-300 mm, narrow, slender, nodes close-set, branches appressed, erect, filiform, nodes shortly branched with numerous close-set spikelets, often with longer, naked branches below; rachis longitudinally grooved, rachis, branches and pedicles finely prickled. **Spikelets** 15-23 mm, numerous, solitary, on short or long pedicels. **Glumes** unequal, covering base of spikelet, margins ciliate; lower 0.2-0.6 mm, 1-nerved, < callus hairs, upper 0.75-1.7 mm, 3-nerved, triangular acute or irregularly lobed to erose, > callus hairs. **Lower sterile lemma** 5-16 mm, 3-5-nerved, keel prickled edged and also above, otherwise smooth, undersides hairy, awn ½ lemma length, sometimes less than or equal lemma bearing perfect flowers, callus hairs 0.5 mm; **upper sterile lemma** 14-25 mm, 3-5-nerved, densely prickled-toothed on keels and above, smooth elsewhere, undersides hairy, awn ½ lemma length; callus hairs 1.5 mm, lemma bearing perfect flowers 5-10 mm, 3-5-nerved, awn 0-0.5 mm set between minute lobes, margins ciliate above, apex deeply bifid (0.4-0.8 mm), ciliate. **Stamens** 2; anthers 1-2.2 mm, yellow. **Ovary** 0.65-75 mm; stigma-styles 1-2.2 mm, nude below. **Seed** 3-4 mm.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

[Key to the grasses of New Zealand](#)

SIMILAR TAXA

Microlaena avenacea (Raoul.) Hook.f. from which *M. carsei* differs by its shortly creeping rhizomatous habit, narrower leaves and panicles. The two species are sympatric throughout the known range of *M. carsei*.

FLOWERING

September-February

FLOWER COLOURS

Yellow

FRUITING

October-May

PROPAGATION TECHNIQUE

Easily grown from rooted pieces, from divisions of whole plants and from fresh seed. An attractive creeping, tufted grass that does best in partially shaded, moist soils.

THREATS

Exact distribution is still unknown but most populations that are known about seem secure and are well protected within forest reserves. One population near Kerikeri is at risk from frequent flooding depositing silt on plants and also spreading weeds such as *Tradescantia fluminensis* Vell and *Selaginella kraussiana* (Kunze) A.Braun which are rapidly smothering this grass and other indigenous riparian species.

ETYMOLOGY

microlaena: Small cover (outer scales of spikelet)

WHERE TO BUY

Not commercially available

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange (1 November 2009). Description based on Edgar & Connor (2000). See also Cheeseman (1914).

REFERENCES AND FURTHER READING

Cheeseman TF. 1914 (1915). New Species of Flowering-plants. *Transactions of the New Zealand Institute* 47: 45-47. <https://paperspast.natlib.govt.nz/periodicals/TPRSNZ1914-47.2.4.1.3>

Edgar E, Connor HE. 2000. Flora of New Zealand. Vol. V. Grasses. Manaaki Whenua Press, Christchurch, NZ. 650 p.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/microlaena-carsei/>