

Koeleria drucei

COMMON NAME

Druce's oatgrass

SYNONYMS

Trisetum drucei Edgar

FAMILY

Poaceae

AUTHORITY

Koeleria drucei (Edgar) Barberá, Quintanar, Soreng et P.M.Peterson

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Grasses

CHROMOSOME NUMBER

2n = 28

CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: DP, RR, Sp

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: RR, Sp

2009 | At Risk – Naturally Uncommon | Qualifiers: DP

2004 | Sparse

DISTRIBUTION

Endemic. North Island from Mt Wharekia, East Cape south to near Taihape. In the South Island in North West Nelson, and eastern Marlborough from the Waima River south to North Canterbury (Parnassus).

HABITAT

A cliff dwelling species preferring calcareous mudstones, siltstones, sandstones, and marble and limestone. Occasionally on greywacke and ignimbrite rock. On these rocks it is usually found growing in seepages.



Fruiting plant on mudstone cliff above Mangawharariki River, Mangaweka. Dec 1991. Photographer: Colin C. Ogle, Licence: CC BY-NC.

DETAILED DESCRIPTION

Dense, tufted grass up to 600 mm with culms usually overtopping the dense, finely scabrid leaves; branching intravaginal. **Leaf-sheath** 20–80 mm, firmly membranous, grey-brown to light greenish brown, sometimes reddish, very densely minutely papillose or minutely scabrid to pubescent, rarely glabrous. **Ligule** 0.8–1 mm, truncate, erose, sparsely finely ciliate. **Collar** sometimes with a few stiff hairs up to 1.5 mm. **Leaf-blade** 30–300 × 0.5–4 mm, dull green, glaucous or reddish, folded with inrolled margins or flat, firmly coriaceous, abaxially scabrid with dense prickle teeth, or smooth, or sparsely scabrid above, adaxially ribbed with minute prickle-teeth or densely pubescent on ribs; margins scabrid. **Culm** 100–400 mm, internodes glabrous or finely pubescent above, sometimes pilose, or minutely prickle-toothed below panicle. **Panicle** 50–200 × 10–30 mm, lanceolate, with short branches, more or less interrupted, not very dense, sometimes quite open; spikelets clustered and individual inconspicuous; rachis, branches and pedicels densely but minutely strigose or puberulous. **Spikelets** 6–8 mm, light green (often tinged reddish brown). **Glumes** unequal, membranous, keels with minute prickle-teeth in upper half; lower glume $\frac{3}{4}$ length of upper, narrow oblong to narrow ovate, upper glume $\frac{3}{4}$ to almost equal the length of the spikelet, elliptic oblong; margins broadly hyaline, sparsely prickle-toothed near the acute, acuminate or rarely mucronate apex. **Lemma** 3.5–6 mm, bidentate or bicuspid, papillose, minutely prickle-toothed near midnerve; awn 3.5–7.5 mm, recurved, insertion in upper $\frac{1}{4}$ of lemma. **Palea** minutely prickle-toothed on keels and on margins near apex. **Callus hairs** up to 1 mm. **Rachilla hairs** up to 2 mm. **Lodicules** 0.8–1.2 mm, glabrous. **Anthers** 0.8–2 mm. **Ovary** 0.8 mm; stigma styles 1.2 mm. **Seed** 2.5–3 × 0.7–0.8 mm.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the grasses of New Zealand

SIMILAR TAXA

A distinctive species usually inhabiting damp seepages on cliff faces. It is somewhat similar to *Trisetum antarcticum* (G.Forst.) Trin. in possessing intravaginal innovation shoots, and superficially similar in overall appearance to the more usually coastal *T. arduanum* Edgar et A.P.Druce. From both it differs through a combination of the having a dense tufted habit, more open, interrupted, though not very dense, lanceolate panicle, which is in turn shortly-branched throughout; and also by the leaf-blade which is densely to weakly, and always minutely, scabrid.

FLOWERING

October–February

FRUITING

December–May

PROPAGATION TECHNIQUE

Easy from fresh seed and rooted pieces but short-lived. A very attractive grass, with does best in a sunny aspect overlying damp soil.

THREATS

Not threatened but rather uncommon and sporadic in its distribution.

ETYMOLOGY

koeleria: Named after George Ludwig Koeler (1765–1807), 18th century German botanist. Author of a work on the grasses of Germany and France, *Descriptio graminum in Gallia et Germania* (1802).

drucei: Named after Anthony (Tony) Peter Druce, one of New Zealand's most respected field botanist (1920–1999).

NEW ZEALAND BOTANICAL HISTORY

For a brief biography of A. P. (Tony) Druce, the person after whom this plant is named, see this article in Te Ara - The Encyclopedia of New Zealand. Hundreds of Tony's famed plant lists can be found here and back-issues of regional Botanical Society Journals to which he contributed can be accessed here.

ATTRIBUTION

Description modified from Edgar and Connor (2000).

REFERENCES AND FURTHER READING

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

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/koeleria-drucei/>