

A NEW SPECIES OF *RYTIDOSPERMA* (POACEAE: ARUNDINAE) IN NEW SOUTH WALES AND VICTORIA

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ABSTRACT

Linder, H.P. & Walsh N.G. A new species of *Rytidosperma* (Poaceae: Arundinae) in New South Wales and Victoria. *Muelleria* 8(3): 283–285 (1995). — A new subalpine species of *Rytidosperma* is described and illustrated. The features distinguishing it from its closest congeners *R. erianthum* and *R. tenuis* are outlined. The generic position of *Rytidosperma* with respect to *Danthonia* is briefly discussed.

INTRODUCTION

In the course of preparing an account of the Australian members of the tribe Arundinae for the *Flora of Australia* (HPL) and keys and descriptions of Victorian Poaceae (NW), the existence of a distinct, undescribed taxon became evident. Further descriptions, combinations and generic delimitations within the tribe, as well as a detailed justification of the proposed taxonomy, will appear in a larger work currently in preparation by HPL.

TAXONOMY

Rytidosperma oreophilum H.P.Linder & N.G.Walsh *sp. nov.*

R. eriantho (Lindl.) Connor & Edgar et *R. tenui* (Steud.) Connor & Edgar affinis; a *R. eriantho* setis lateralibus (ad 3.5 mm) lobis lateralibus brevioribus, non glumam superantibus, lemmatis dorsalibus saepe pilis dispersis; a *R. tenui* paleis obovatis latis, dorsalibus pilosis, lemmatis nitentibus differt.

TYPUS: ACT, Slopes of Mt Gingera, Bimberi Range, alt. 1700 m a.s.l., 24 Jan. 1962, *R. Pullen 3041* (HOLOTYPE: CANB; ISOTYPE: L, A, BO, K, MEL, NE, NSW).

Caespitose perennial, 15–25 mm diam. at ground level, 15–45 cm high. *Leaf lamina* to 15 cm long, 1.5–2 mm wide, expanded, flat when dry, with scattered tubercle-based hairs (these extending to sheaths); ligule minutely ciliate, c. 0.1 mm long; hairs at orifice of sheath to c. 2 mm long. *Inflorescence* a raceme or slender panicle with 1 or 2 branches, contracted (but open at anthesis), obliquely ovate, 15–60 mm long, 10–40 mm wide; pedicels villous; spikelets 4–20, 12–17 mm long, usually with 5 or 6 florets; glumes acute or acuminate, 12–17 mm long, 2.5–3 mm wide, slightly exceeding florets, green with broad, purple margins, or entirely purplish, 5-veined; body of lemma 2.4–3.7 mm long, with hairs in discrete tufts arranged in 2 complete transverse rows; upper row of hairs 0.5–1 mm below sinus, with hairs 2–6 mm long, c. equalling the flattened part of lateral lobes; lower row of hairs 1.2–2 mm long, ± reaching the upper row; lemma back between rows with scattered hairs, rarely quite glabrous between rows; lateral lobes of lemma 5.4–8.5 mm long (including setae of 2–3.3 mm); setae distinctly shorter than flattened portion of lobes; central awn 7.5–10 mm long, twisted in the basal 2.5–3.5 mm; palea obovate, 2.8–4.2 mm long, 1.2–1.8 mm wide, rounded at apex, slightly exceeding lemma sinus, glabrous except minute marginal cilia, and sometimes with slender tufts of hairs near the base. (Fig. 1)

REPRESENTATIVE SPECIMENS SEEN (24 specimens examined):

New South Wales (including ACT) — **Southern Tablelands**: Cabramurra Road, halfway between turnoff and Cabramurra, 25 Feb. 1955, *N.T. Burbidge 3908* (CANB); Mt Gingera, 17 Jan. 1958, *M.A. Gray 4478* (CANB); Blackfellows Gap, 24 Feb. 1959, *M.A. Gray 6346* (CANB); Lower N slope of Mt Gingera, Bimberi

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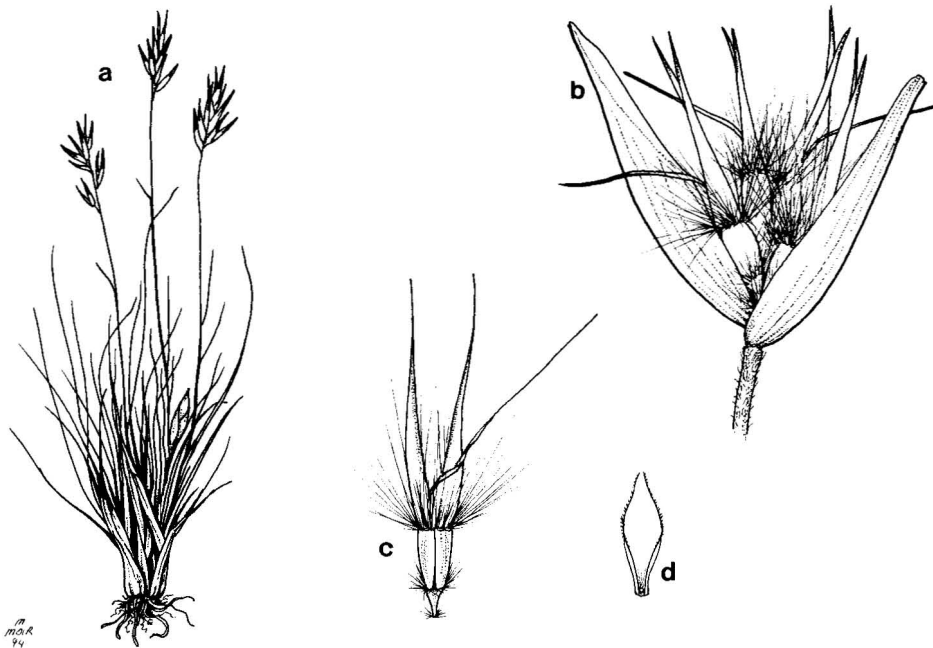


Fig. 1. *Rytidosperma oreophilum*. a — habit $\times 0.5$. b — spikelet $\times 4$. c — lemma, dorsal view $\times 4$. d — palea, ventral view $\times 4$. all from *Albrecht 1553* (MEL).

Range. 10 Jan. 1961, *R. Pullen 2550* (CANB); Mt Bimberi, near summit, 17 Mar. 1960, *M.A. Gray 5101* (CANB).

Victoria — Feathertop Razorback, Jan. 1955, *A. Costin s.n.* (CANB); Bogong High Plains, Feb. 1955, *A. Costin s.n.* (CANB); The Razorback, between Mts Feathertop and Hotham, 1 Feb. 1969, *L. Craven 1518* (CANB); 1 km west of Mt Macleod on Buffalo Plateau, 26 Jan. 198, *N.G. Walsh 761* (MEL); Mt Bogong, Feb. 1923, *A.J. Tadgell s.n.* (MEL); Nunniong Plains Rd. between W7 and Horse Flat, 19 Jan. 1971, *A.C. Beauglehole 36266* (MEL, NSW); On track below Snowy Range Airfield and Mt Reynard, 28 Jan. 1984, *D.E. Albrecht 145* (MEL, BRI); The Bluff, 26 Jan. 1985, *D.E. Albrecht 1553* (MEL).

DISTRIBUTION AND CONSERVATION STATUS

Occurs patchily along the Great Dividing Range and nearby mountains from Mt Gingera (c. 35 km south-west of Canberra) southward to the Snowy Range (c. 65 km north of Heyfield) in Victoria. It is locally common, and not considered threatened. Most of its habitat is contained within the Alpine National Park.

HABITAT

Rytidosperma oreophilum grows in grassland, open heathland or as scattered plants on rock outcrops (granite, basalt or sandstone/mudstone parent material) at or above c. 1600 m altitude.

ETYMOLOGY

The epithet is derived from Greek, meaning 'mountain-loving', from the species' habitat preference.

DISCUSSION

Specimens agreeing with *R. oreophilum* were regarded by Vickery (1956) as a form of *Danthonia eriantha* Lindl. (= *Rytidosperma erianthum* (Lindl.) Connor & Edgar) and most subsequent authors (e.g. Burbidge & Gray 1970, Willis 1970) appear to have

followed Vickery's assessment. Walsh (1994) regarded *R. oreophilum* as an alpine form of *Danthonia tenuior* Steud. (= *Rytidosperma tenuis* (Steud.) Connor & Edgar). Indeed, the northern populations show a stronger superficial resemblance to *R. erianthum*, whereas southern populations are closer to *R. tenuis*. It is possible that *R. oreophilum* is of hybrid origin between these two species. It is distinguished from *R. erianthum* by the setae on the lateral lobes of the lemma being much shorter than the flattened part of the lobes, always included within the glumes, the lemma often with scattered hairs between the two rows of hair-tufts, and the more compact ovate inflorescence. From *R. tenuis* it is recognized by the broader, obovate palea that is glabrous abaxially, and by the compact ovate (c.f. linear) inflorescence. In exposed conditions on rock outcrops, plants of *R. oreophilum* may resemble *R. alpicola* (Vickery) Connor & Edgar, a specialist in such habitats. *R. alpicola* is readily distinguished by the thicker, broader leaves, and the long, narrow palea that clearly exceeds the lemma sinus and approaches the level of the setiform part of the lateral lobes.

The placement of the new species in *Rytidosperma* rather than a more widely circumscribed concept of *Danthonia* follows a review of the Arundineae by one of us (HPL), in which at least some of the segregate genera commonly included in *Danthonia* are clearly distinct (see also Zotov 1963, Blake 1972, Connor & Edgar 1979, Clayton & Renvoize 1986), and will be recognized in the forthcoming treatment for the *Flora of Australia*.

ACKNOWLEDGEMENTS

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