

SHORT COMMUNICATION

A new and rare species of *Ptilotus* (Amaranthaceae) from the Yalgoo bioregion, Western Australia

Ptilotus andersonii R.W.Davis, *sp. nov.*

Type: Burnerbinmah Station, Western Australia [precise locality withheld for conservation reasons], 13 September 1996, S. Patrick 2787 (*holo*: PERTH 05068517).

Ptilotus sp. Burnerbinmah (S. Patrick 2787), Western Australian Herbarium, in *FloraBase*, <http://florabase.dpaw.wa.gov.au/> [accessed 23 June 2015].

Prostrate perennial *herbs* to 5 cm high. *Stems* terete, slightly ribbed, with dense, spreading, verticillate hairs to 2.5 mm long. *Basal leaves* spatulate to oblanceolate, 30–45 mm long, 3–10 mm wide, with sparse, spreading, verticillate hairs to 1.5 mm long; apex rounded or sometimes mucronate. *Cauline leaves* alternate, flat, oblanceolate, obovate to elliptical, with sparse to dense, spreading, verticillate hairs to 2 mm long; apex mucronate. *Inflorescences* spiciform, terminal, solitary or more commonly in loose panicles, pink, ovoid, 10–20 mm long, 15–23 mm diam. *Bracts* brown, 6–7 mm long, lanceolate to narrowly ovate, with sparse, verticillate hairs; midrib obscure. *Bracteoles* light brown becoming translucent towards margins, 5.8–6.3 mm long, broadly ovate, with sparse, verticillate hairs; midrib obvious. *Flowers* pedicellate, incurved. *Outer tepals* green becoming pink towards the apex, narrowly oblanceolate, concave, flattening towards the apex, 8–10 mm long; outer surface hairy except at the apex with dense, spreading, verticillate hairs to 2.5 mm long; inner surface glabrous; apex broad, rounded to slightly mucronate, serrate. *Inner tepals* green becoming pink towards the apex, narrowly oblanceolate, concave, 7–9.5 mm long; outer surface hairy except at the apex with dense, spreading, verticillate hairs to 2.3 mm long; inner surface glabrous except for a basal tuft of hairs on the margins; apex slightly concave, attenuate, serrate. *Staminal cup* symmetrical, 1.1–1.4 mm long, glabrous. *Stamens* 2; filaments glabrous, incurved, dilating slightly towards base, 3.5–4.2 mm long; *anthers* 0.5–0.7 mm long. *Staminodes* 3, < 0.5 mm long. *Ovary* obconical, slightly gibbose, 1.4–1.6 mm long, 0.6–0.7 mm wide, glabrous; *stipe* flattened, 0.4–0.6 mm long; *style* curved, eccentrically fixed to ovary, 2.8–3.1 mm long. *Seeds* not observed.

Distribution and habitat. Currently only known from Burnerbinmah Station, in the Yalgoo bioregion of Western Australia, where it is found in open *Eucalyptus* woodland on brown calcareous loam soils.

Conservation status. Recently listed as Priority One under Department of Parks and Wildlife Conservation Codes for Western Australian Flora, as *P. sp.* Burnerbinmah (S. Patrick 2787) (Western Australian Herbarium 1998–). There have been several attempts by the author in good seasons to rediscover the only known population of *P. andersonii* on Burnerbinmah Station but these searches have been unsuccessful. Burnerbinmah Station is currently recognised as Unallocated Crown Land (UCL) and is managed by the Department of Parks and Wildlife.

Phenology. The single collection of this species was made in September and is flowering only.

Etymology. *Ptilotus andersonii* is named after Don Anderson, then owner, now caretaker, of Burnerbinmah Station. Don has been an innovative farmer and pastoralist who has shown great consideration to the environment and bushland on his property. Although lodged under a Sue Patrick collecting number, the specimen was collected by Don (S. Patrick pers. comm.).

Notes. *Ptilotus andersonii* is superficially similar to *P. holosericeus* (Moq.) F.Muell., but differs in having two fertile stamens, persistently hairy leaves, and dark brown bracts; *P. holosericeus* has three fertile stamens, largely glabrous leaves, and translucent bracts.

Material of *P. sp.* Burnerbinmah was sent to Tim Hammer (Old Dominion University, Virginia) for inclusion in a molecular study of *Ptilotus* R.Br. based on ITS nrDNA and *matK* cpDNA. However, possibly because of the age of the material, only *matK* could be sequenced, and therefore this taxon was excluded from the published analysis (Hammer *et al.* 2015). The *matK* result, however, provided a strong indication that *P. sp.* Burnerbinmah was a good species which fitted within *Ptilotus* clade D (T. Hammer pers. comm.).

Acknowledgements

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References

- Hammer, T., Davis, R.W. & Thiele, K. (2015). *A molecular framework phylogeny for Ptilotus (Amaranthaceae): Evidence for rapid diversification of an arid Australian genus.* *Taxon* 64(2): 272–285.
- Western Australian Herbarium (1998–). *FloraBase—the Western Australian Flora.* Department of Parks and Wildlife. <http://florabase.dpaw.wa.gov.au/> [accessed 23 June 2015].

Robert W. Davis

Western Australian Herbarium, Department of Parks and Wildlife,
Locked Bag 104, Bentley Delivery Centre, Western Australia 6983
Email: Robert.Davis@dpaw.wa.gov.au