

SHORT COMMUNICATION

**Synonymisation of three Western Australian taxa within *Ptilotus*
(Amaranthaceae)**

Ptilotus gomphrenoides F.Muell. ex Benth. is a variable species found in the Pilbara, Gascoyne, Carnarvon and Murchison bioregions of Western Australia. It currently comprises three varieties, var. *gomphrenoides*, var. *conglomeratus* (Farmer) Benl and var. *roseo-albus* (Farmer) Benl. The two latter taxa, having been formerly assigned to *P. roseo-albus* Farmer (Farmer 1905), were combined into *P. gomphrenoides* by Benl (1962), who remarked that *P. roseo-albus* could not be sustained as a distinct species and that the features Farmer used to characterise it, such as narrower and shortly pedunculate spikes and a denser indumentum on the exterior surface of the outer tepals, were common characteristics of *P. gomphrenoides*.

Benl separated the three varieties of *P. gomphrenoides* according to the degree of stem branching, whether the spikes were solitary or clustered, and spike length. These characters, however, do not withstand scrutiny with the increased number of collections now available for study. The degree of branching merges imperceptibly between all three varieties. Whether the spikes are mostly solitary or clustered varies greatly between specimens and even on individual specimens. Spike length is rarely a useful character in *Ptilotus* R.Br., as the spikes are indeterminate and their length is dependent upon environmental and seasonal factors. Recognition of var. *conglomeratus* and var. *roseo-albus*, both of which are known from only a small number of collections scattered across the range of *P. gomphrenoides*, serves to confuse the taxonomy of *Ptilotus*. We do not regard them as representing distinct lineages, but rather variation already included within *P. gomphrenoides* var. *gomphrenoides*. We therefore choose to synonymise both varieties under *P. gomphrenoides*.

Ptilotus gomphrenoides F.Muell. ex Benth., *Fl. Austral.* 5: 244 (1870). Type: ‘Hamersley Range, N.W. coast, F. Gregory’s Expedition’, *F. Mueller s.n.* (*syn*: K 000357029 image!, MEL 2281815 image!).

Ptilotus gomphrenoides var. *roseo-albus* (Farmer) Benl, *Mitt. Bot. Staatssamml. München* 4: 277 (1962), *syn. nov.* *Ptilotus roseo-albus* Farmer var. *roseo-albus*, *Bull. Herb. Boissier sér. 2*, 5: 1090 (1905). Type: ‘N.-W. Division, W. Australia, E. Clement, 1897’ [between the Ashburton and De Grey rivers, Western Australia, 1897, *E. Clement s.n.*] (*syn*: K 000357024 image!, K 000357025 image!, K 000357026 image!, K 000357027 image!).

Ptilotus gomphrenoides var. *conglomeratus* (Farmer) Benl, *Mitt. Bot. Staatssamml. München* 4: 278 (1962), *syn. nov.* *Ptilotus roseo-albus* var. *conglomeratus* Farmer, *Bull. Herb. Boissier, sér. 2*, 5: 1090 (1905). Type: ‘N.-W. Division, W. Australia, E. Clement, 1897’ [between the Ashburton and De Grey rivers, Western Australia, 1897, *E. Clement s.n.*] (*holo*: K 000357028 image!).

Ptilotus* sp. Kennedy Range (A.P. Brown 4276) = *Ptilotus polakii F.Muell. subsp. *polakii*

Voucher specimen. WESTERN AUSTRALIA: 28.9 km W of Mount Sandiman Homestead, adj. N end of Kennedy Range National Park, 27 June 2006, *A.P. Brown 4276* (PERTH!).

Notes. *Ptilotus* sp. Kennedy Range is known only from two specimens at PERTH, the voucher and a second collection from nearby (PERTH 04151321). The precise collection locality of the voucher specimen was inaccessible in 2011 during recollection attempts; however, a collection was made from c. 350 m away in the same habitat. This specimen (PERTH 08321086) was later identified as *P. polakii*, but could not be placed in either subsp. *polakii* or subsp. *juxtus* Lally, because of its intermediate characters. *Ptilotus polakii* subsp. *juxtus* differs from the typical subspecies in the following characters: tepal apices glabrous in uppermost 1–2 mm (vs 3–5 mm), bracts conspicuously shorter than the bracteoles (vs \pm equal in length), and tepals shorter than 13 mm long (vs up to 18 mm long) (Lally 2009).

We have compared the two specimens of *P. sp.* Kennedy Range to all material of *P. polakii* housed at PERTH and conclude that they differ only in their densely hairy ovaries. The presence or absence of hairs on the ovary can be diagnostic for species of *Ptilotus*, although infraspecific variation exists in some taxa; the ovaries of *P. polakii* are usually glabrous but may have a few scattered hairs. As such, we do not think this character alone is sufficient for the recognition of *P. sp.* Kennedy Range as distinct from *P. polakii*, and recommend *P. sp.* Kennedy Range be removed from Western Australia's vascular plant census (Western Australian Herbarium 1998–). The two specimens currently filed under this name have bracts c. equal in length to the bracteoles, and tepals 14.5–16.5 mm long that are glabrous at the apices for 3–7 mm length, and will be included in *P. polakii* subsp. *polakii*.

Ptilotus sp. Kennedy Range is currently listed as a Priority Two taxon under Department of Parks and Wildlife Conservation Codes for Western Australian Flora (Jones 2015). As this name is being removed from the state's vascular plant census, this listing is no longer warranted.

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