

***Brachyloma nguba* (Epacridaceae), a new species from the south-west of Western Australia**

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Abstract

Cranfield, R.J. *Brachyloma nguba* (Epacridaceae), a new species from the south-west of Western Australia. *Nuytsia* 12 (2): 179-183(1998). A new species endemic to the South West Botanical Province of Western Australia, *Brachyloma nguba* Cranfield, is described, illustrated and mapped. A key to the Western Australian species of *Brachyloma* (Epacridaceae) is provided.

Introduction

A specimen of *Brachyloma* (Epacridaceae) collected by the author in March 1997 east of Hyden was found to be different from the two known Western Australian species, *Brachyloma preissii* Sond. and *B. concolor* F. Muell. ex Benth. Detailed examination showed the material to be a new species. A subsequent search of herbarium records (PERTH) provided evidence that this sample was a third collection of this species from the same area.

Methods

All the material examined in this study is held at PERTH. Two or three flowers were measured from each of the three collections of the new species and the same number of flowers from selected sheets representing the other two Western Australian species. Measurements of leaves were made to encompass a range of sizes but exclude the extremes resulting from age and growth variations.

Taxonomy

Diagnostic characters for Western Australian species of *Brachyloma* are given in Table 1. The shorter pedicels, calyx lobes and style and the truncate hypogynous disc separate the new species from the other two species, *Brachyloma concolor* and *Brachyloma preissii*.

It also appears from the table that *B. nguba* is distinguished by its smaller leaves and revolute leaf margins, but the table excludes a few atypically small-leaved specimens of uncertain taxonomic status

that would partially bridge this apparent gap between the new and old species. Both *Brachyloma preissii* and *Brachyloma concolor* appear to contain several entities that require further investigation but are currently known from very little material. These include a small-leaved variant Sonder (1845) described as *Brachyloma preissii* var. *brevifolium* Sond. More collections are needed to further elucidate the taxonomy of this complex species group.

Table 1. Characters distinguishing Western Australian species of *Brachyloma*.

Character	<i>B. nguba</i>	<i>B. preissi</i>	<i>B. concolor</i>
leaf			
length (mm)	2.0–3.0	8.0–17.0	5.0–13.0
width (mm)	0.9–1.0	3.0–4.0	2.5–4.0
petiole length (mm)	0.4–0.6	1.0–1.6	0.5–1.0
section	revolute	flat-convex	flat-concave
apex	acute-apiculate	acute-apiculate	apiculate
flower			
pedicel length (mm)	0.2–0.3	1.5–2.0	1.0–1.5
sepal length (mm)	0.5–1.0	1.0–3.5	1.0–1.5
style length (mm)	0.2–0.25	1.5–2.0	1.0–1.5
hypogynous disc	truncate	shallowly 5-lobed	prominently 5-lobed
ovary locules	3, 4	4, 5	5

Key to Western Australian species of *Brachyloma*

1. Leaves concave, concolorous. Style 1.5–2.0 mm long. Disc prominently 5-lobed **B. concolor**
1. Leaves flat to revolute, discolorous. Style 0.2–1.5 mm long. Disc shallowly 5-lobed to truncate
 2. Leaves usually 8–17 x 3–4 mm. Style 1–1.5 mm long. Disc shallowly 5-lobed **B. preissii**
 2. Leaves usually 2–3 x c. 0.9 mm. Style 0.2–0.25 mm long. Disc truncate **B. nguba**

Brachyloma nguba Cranfield, *sp. nov.*

Brachylomi preissii similis sed foliis minoribus ad margines recurvis, stylo c. 0.25 mm (v. 1–1.5 mm) brevivore differt.

Typus: 50 km east-north-east of Hyden (32° 24' 45", 119° 23' 29"), Western Australia, 7 April 1997, R.J. Cranfield 11181 (*holo*: PERTH 04671724; *iso*: CANB).

Shrub to 40 cm high. *Branchlets* hispid. *Leaves* alternate, terminally clustered on short branchlets, erect; petiole 0.4–0.6 x 0.1–0.2 mm, hispid; lamina narrowly elliptic, 2.0–3.0 x 0.9–1.0 mm, sparsely scabrid adaxially, hispid abaxially, with numerous prominent veins; margins recurved; apex acute with a short mucro. *Inflorescence* of solitary axillary flowers in terminal leaf clusters. *Pedicels* 0.2–0.3 mm long; bracteoles 3, sessile, imbricate, 0.5–1 mm long, margin fringed, apex acute; bracts

2, 1.5–2 mm long, margin ciliate, apex obtuse. *Sepals* 5, imbricate, ovate, 0.5–1 x 0.5–1.0 mm, green; margin fringed; apex obtuse. *Corolla* red; tube urceolate, 3–4.5 x 1.5–2 mm, throat constricted below lobes; internal reflexed scales 0.25 x 0.4 mm, with long hairs on apex; lobes 5, spreading, broadly triangular, 1.5–2 x c. 1.5 mm, acute and apex reflexed. *Stamens* 5; anther linear, 1–1.25 x c. 0.25 mm, longitudinally dehiscent. *Hypogynous disc* truncate, c. 0.25 mm wide. *Ovary* ovoid, glabrous, c. 1.1 x 0.9–1.0 mm, 3- or 4-locular; ovules 1 per loculus, white, c. 0.45 x 0.15 mm, ellipsoid; style 0.20–0.25 mm long. *Fruit* not seen. (Figure 1)

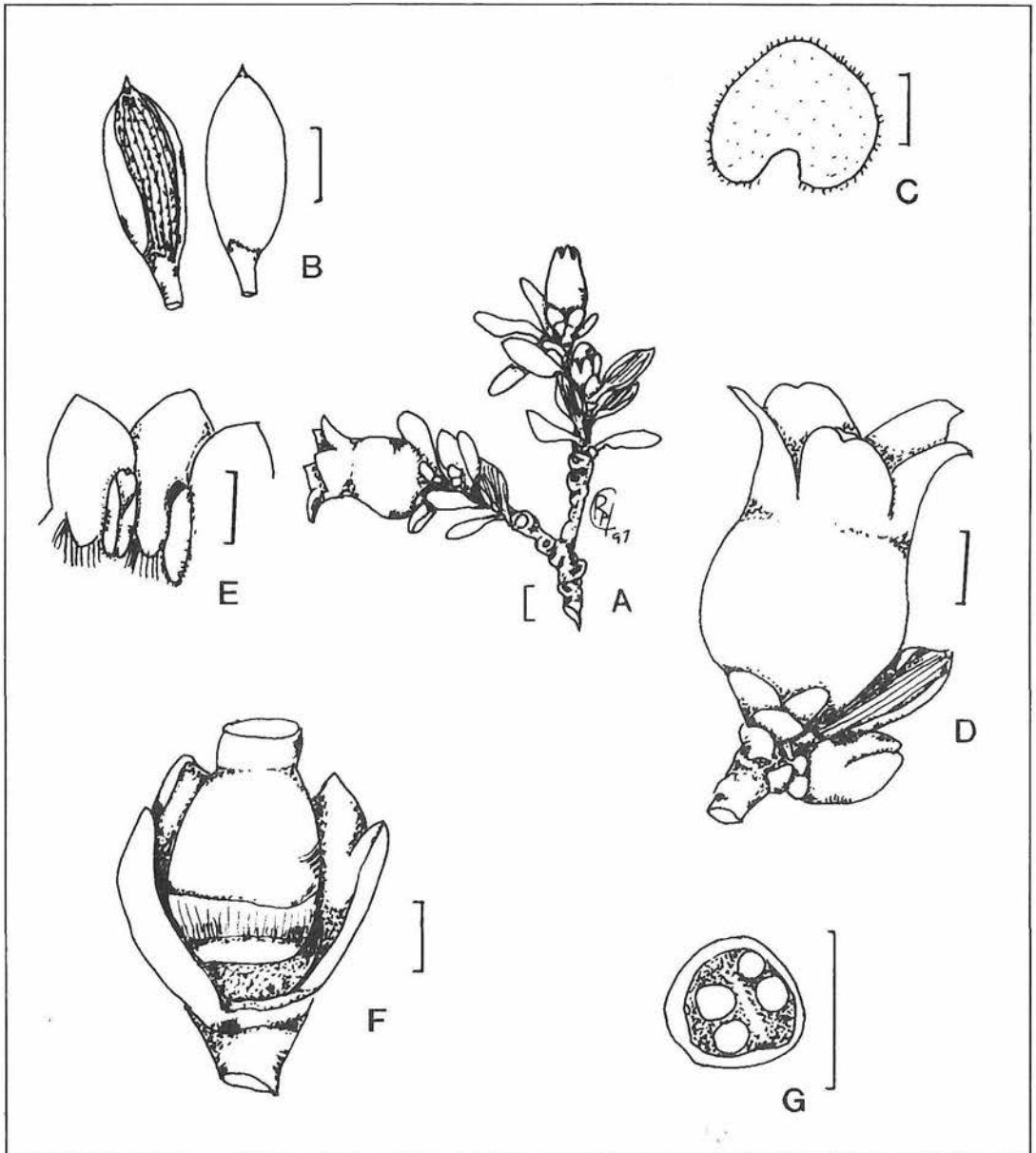


Figure 1. *Brachyloma nguba*. A – branchlet, B – leaf, C – bract, D – flower, E – anthers and lobes, F – ovary and style, G – cross-section of ovary. Scale bars = 1 mm. Drawn from the holotype.

Other specimens examined. WESTERN AUSTRALIA: 39 km E of Pingaring, May 1969, A.S. George 9339 (PERTH); 64 km E of Hyden, June 1966, Smith & Kessell 11 (PERTH).

Distribution. Endemic to the Roe Botanical District in the South West Botanical Province of Western Australia. This species is known from three collections, two from the type area and the remaining one from Pingaring, all locations being within the eastern wheatbelt. (Figure 2)

Habitat. Open mallee woodland–mallee scrub over white to brown sandy clay.

Flowering time. April to May.

Conservation status. CALM Conservation Code for Western Australian Flora: Priority One. This species is known from three collections, two from the type area and the third from Pingaring.

Etymology. The specific epithet is from the Nyoongar aboriginal word *nguba* for blood, referring to the small bright red flowers (Bindon & Chadwick 1992).

Notes. *Brachyloma nguba* is related to *Brachyloma preissii*, differing in having many leaf and floral characters greatly reduced in size, particularly style length, and in its truncate disc.

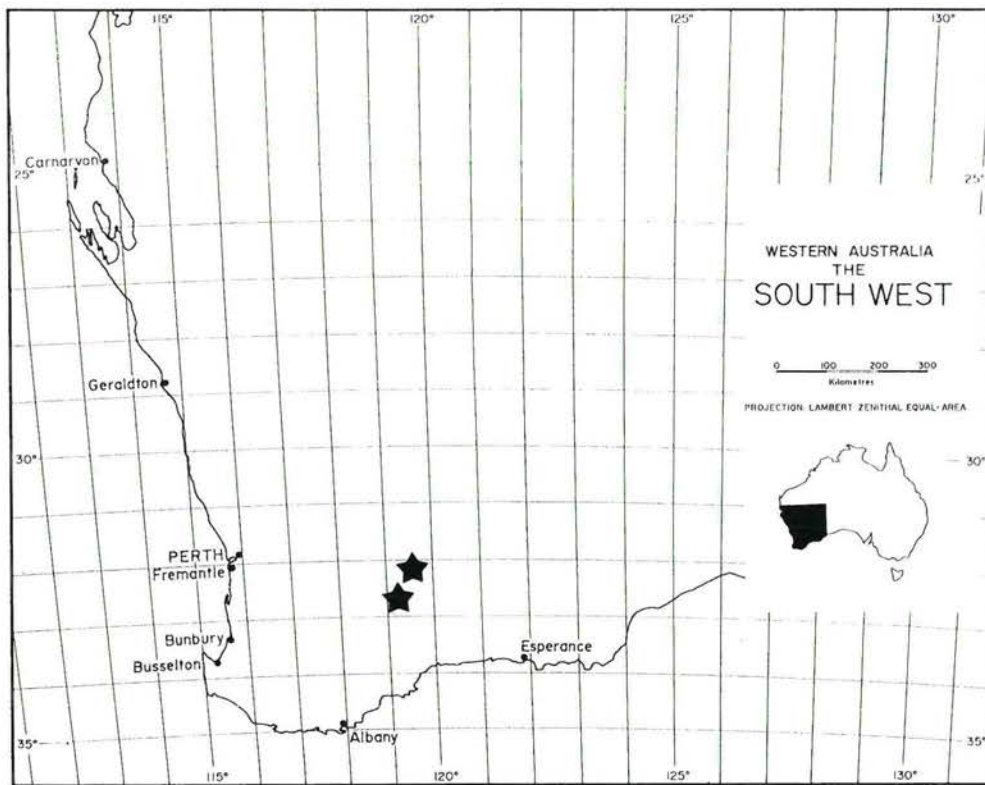


Figure 2. Distribution of *Brachyloma nguba*.

Acknowledgements

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References

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