

Stylidium fimbriatum (Stylidiaceae), a new tropical species of triggerplant from the Kimberley, Western Australia

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Abstract

Lowrie, A. and Kenneally, K.F. *Stylidium fimbriatum* (Stylidiaceae), a new tropical species of triggerplant from the Kimberley, Western Australia. Nuytsia 10(3): 425-427 (1996). A new species of *Stylidium* (Stylidiaceae) from the Kimberley region of Western Australia, *S. fimbriatum* Lowrie & Kenneally, is described and illustrated.

Introduction

A new species of tropical triggerplant, *Stylidium fimbriatum*, apparently endemic to the Kimberley region of Western Australia, is described and illustrated. It bears flowers with distinctive, fimbriate, beard-like throat appendages. This unusual feature has not been reported in any other known tropical *Stylidium* species.

The term gynostemium used by Armbruster *et al.* (1994) to describe the mobile column of *Stylidium* has been adopted by us.

Taxonomy

Stylidium fimbriatum Lowrie & Kenneally, sp. nov. (Figure 1)

Stylidio dunlopiano affinis a qua differt faucis appendicibus fimbriatis et omni specibus tropicis.

Typus: Peter Lacy's camp, 73 km WNW of Mount Elizabeth homestead, Kimberley, (16°00' 125° 20') Western Australia, August 1993, M.D. Barrett 230 (*holo*: PERTH 04171837; *iso*: MEL).

Annual herb to 30 cm high. *Leaves* in a basal rosette, petiolate, up to 10 mm long, c. 0.6 mm wide, lamina glabrous, oblanceolate, 5-20 mm long, 2-7 mm wide, margins hyaline. *Inflorescence* of many racemes, glabrous. *Bracts* subulate, 1-2 mm long. *Hypanthium* sessile, linear, 25-50 mm long, 0.6-0.7 mm diam. at anthesis, a little glandular at apex, the remainder with a few scattered sessile

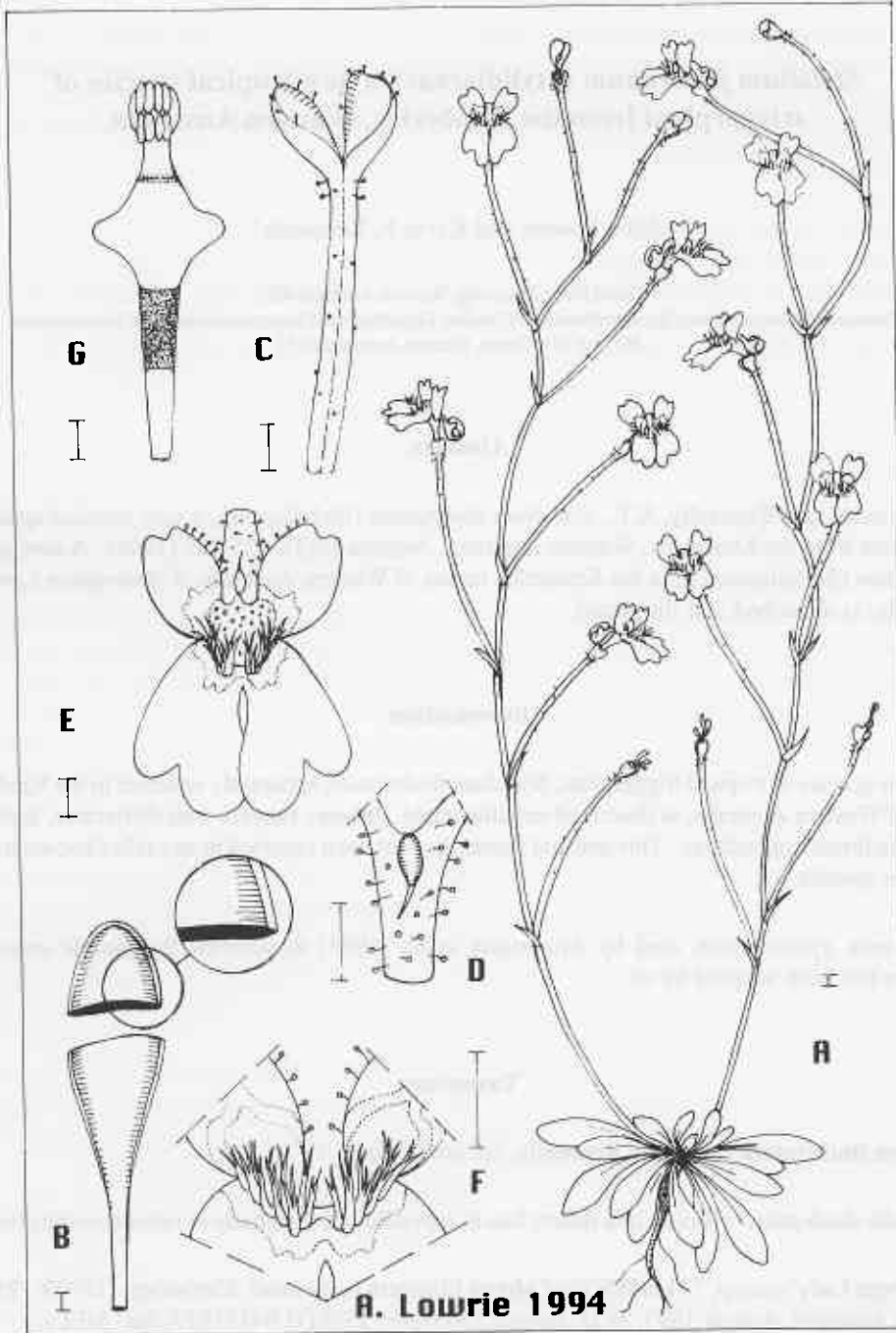


Figure 1. *Styliidium fimbriatum* A - flowering plant, B - leaf, C - hypanthium showing fusion of sepals into two lobes, D - corolla tube showing labellum on sinus, E - corolla, F - corolla showing fimbriate throat appendages, G - adaxial view of column and anthers showing hinged portion (dotted) immediately below anthers and the sensitive torosus (stippled). Scale bar = 1 mm.

glands. *Sepals* fused together to form 2 lobes, 1.5-2 mm long. *Corolla* lobes pink, vertically paired, abaxial surface a little glandular; anterior lobes elliptic, c. 3.5 mm long, c. 2 mm wide, apex emarginate; posterior lobes obovate, c. 5.5 mm long, c. 2.5 mm wide, apex 2-lobed. *Corolla throat* yellow, covered with sessile glands, bordered by a white margin; throat appendages yellow, fimbriate, c. 1.5 mm long, erect, attached to the base of the posterior lobes near the rim of the throat. *Labellum* oblanceolate, c. 0.6 mm long, c. 0.2 mm wide, apical point c. 0.4 mm long, attached to the base of the corolla tube sinus. *Gynostemium* strap-like, c. 10 mm long, hinged below the anthers, with a dilated cunabulum bearing folded and erect lateral wings that shroud the anthers in the set position above the sensitive torosus. *Capsule* linear, similar in size and shape to the hypanthium at anthesis. *Seeds* pale orange, c. 0.2 mm long.

Other specimens examined. WESTERN AUSTRALIA: Bachsten Creek, 3 August 1994, K. Coate 328 (PERTH); July 1994, M. Hancock 14 (PERTH).

Distribution. Gardner Botanical District, Northern Botanical Province (Beard 1980), restricted to the Bachsten Creek area on the southern boundary of the Prince Regent River Nature Reserve.

Ecology. In seasonally wet herbfields on sandy soils adjacent to creeks.

Flowering period. July-August.

Conservation status. CALM Conservation Codes for Western Australian Flora: Priority One - Poorly Known Taxa. This species is currently known from the one locality. Further collecting in this area may provide other localities.

Etymology. The specific epithet alludes to the fimbriate throat appendages.

Discussion

The nearest relative to *Stylidium fimbriatum* is *S. dunlopianum* Carlquist because of its similar leafy rosette, inflorescence, linear hypanthium and capsule, gynostemium and sepals fused into 2 lobes. *S. fimbriatum* is differentiated from *S. dunlopianum* and all other known tropical triggerplant species by the prominent fimbriate throat appendages.

Acknowledgements

We wish to thank Mathew and Russell Barrett of Beverley Springs Station for bringing this species to our attention and Kevin Coate and Mary Hancock for collecting additional material from the same locality. We thank Paul Wilson for his assistance with the latin diagnosis.

References

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