

Stylidium lateriticola (Stylidiaceae), a new species from the Perth Region, Western Australia

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Abstract

Kenneally, Kevin F. *Stylidium lateriticola* (Stylidiaceae), a new species from the Perth Region, Western Australia. Nuytsia 8(2): 231-235 (1992). A new species of *Stylidium* (Stylidiaceae) endemic to the Perth Region, namely *S. lateriticola* Kenneally is described and illustrated.

Introduction

The genus *Stylidium* Sw. ex Willd. is best developed in the south-west of Western Australia where over 140 species occur. Most species flower during the spring months (September-November). A rarely collected summer flowering species was brought to my attention by Gwen Abbot and Joanna Seabrook. This undescribed species is endemic to the Perth Region (as defined by Marchant & Perry 1981) and is confined to areas of massive hardcap laterite of the Darling Range. It was referred to as *Stylidium* sp. A in the "Flora of the Perth Region" (Marchant *et al.* 1987).

Taxonomy

Stylidium lateriticola Kenneally, sp. nov. (Figures 1-3)

Stylidium bulbiferi affinis a qua imprimis differt habito magis fruticoso, erecto, scapis pilis simplicibus et pilis glandulosis ornatis, inflorescentia paniculata multiflora, ovulis paucis, chromosomatum numero $n = 11$ (in *S. bulbifero* $n = 14$).

Typus: Termination of Moola Road, 2 km past intersection with Thomas Road, Helena Valley, 30 km E of Perth on Darling Scarp, (31° 55'S 116° 06'E), 3 January 1984, K.F. Kenneally 8864 (holo: PERTH; iso: CANB, K, MEL, NSW, PERTH).

Stoloniferous, erect, bushy perennial herb to 0.4 m high with 2 or 3 ascending branches arising from apical rosettes. *Leaves* scattered and clustered into apical rosettes, linear to plano-convex, 5-15 x 0.5-1 mm, spreading, usually obtuse. *Inflorescence* a narrow panicle; peduncle 10-40 mm long, pilose with white, simple or glandular hairs; floral axis 15-30 mm long, glandular-pilose; pedicels slender, c. 1 mm long. *Hypanthium* narrowly ellipsoid to narrowly cylindric, 2.5-4 mm long, densely glandular-hairy;

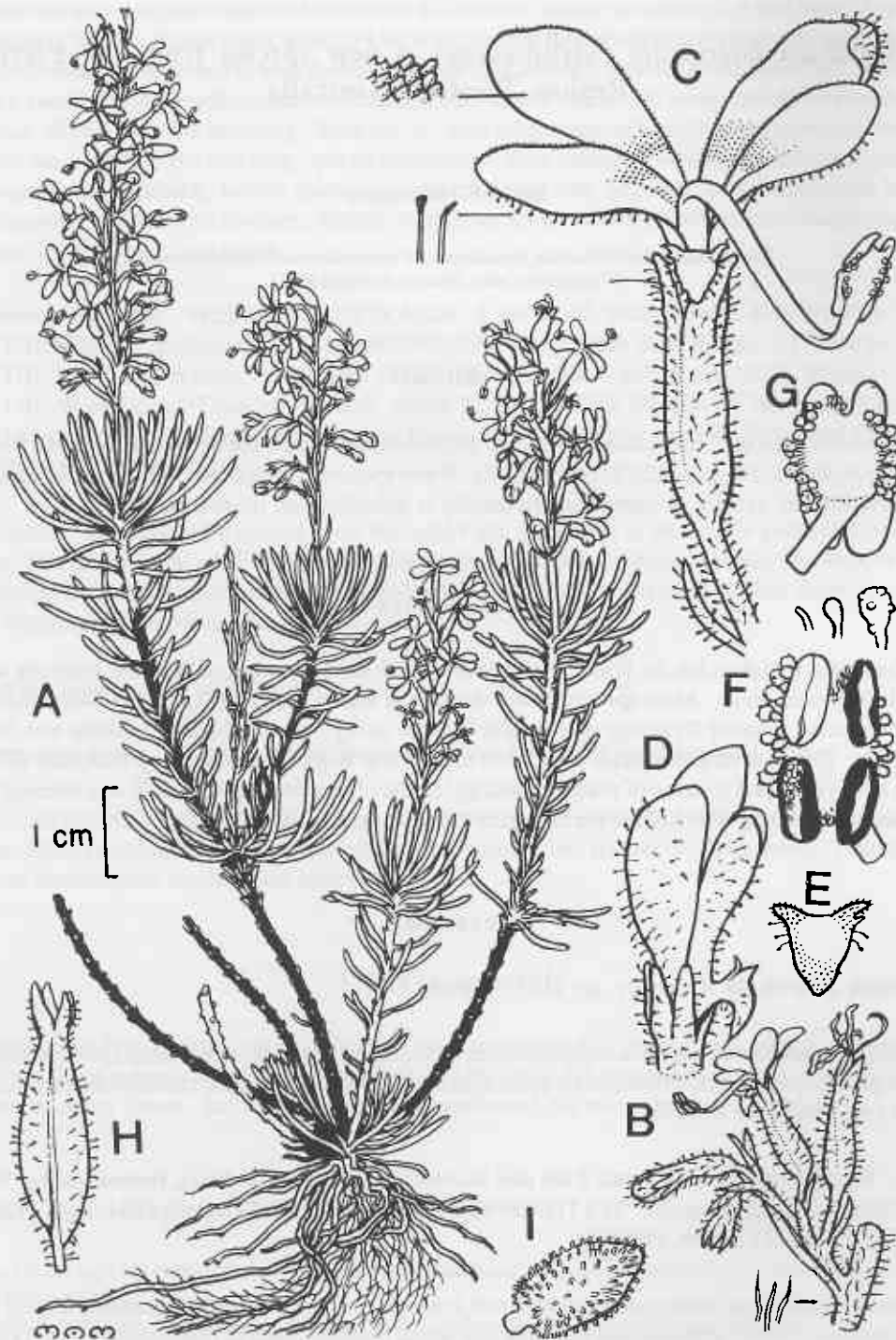


Figure 1. *Stylidium lateriticola*. A - flowering plant, B - part of inflorescence, C - flower, D - lateral view of flowers showing labellum, E - labellum, F - column (dorsal view), G - column (ventral view), H - capsule, I - seed. Drawn from the type.

calyx lobes free, narrowly triangular, c. 1 mm long, acute. *Corolla* pink, with 2 deep pink bands in the throat, occasionally all white, 5-7 mm long; lobes almost equal, paired laterally, sparsely glandular-pilose outside and minutely papillose inside; *labellum* deltoid with small lateral appendages; throat usually bare. *Capsule* narrowly ellipsoid, c. 5 mm long. *Seeds* 2 to 3, ellipsoid c. 1 mm long, light brown, papillate. *Chromosome number* $n = 11$ (S.H. James, pers. comm.).

Other specimens examined. WESTERN AUSTRALIA: Corner Gale Road and Jindong-Treeton Road, S of Busselton, 15 January 1986, A.H. Burbidge 3965 (PERTH, CANB); Sabina Road, 3.1 km NE of Ridge Road, Whicher Range, 16 January 1986, A.H. Burbidge 3967 (PERTH, MEL); 20 km N of Boddington, Bannister Hill, 22 January, 1979, M.D. Crisp 5398 (CANB, NSW, PERTH); Swan View, December 1923, C.A. Gardner 785 (PERTH); Mt Cooke, 45 km S of Perth, February 1972, S.H. James 72.2/1 (PERTH); Mt Wells Tower Site, Dwellingup, February 1989, J.L. Robson 327 (PERTH); Diefer Road, Helena River catchment, 18 March 1984, Joanna Seabrook s.n. (PERTH); Termination Moola Road, Glen Forrest, December 1981, Joanna Seabrook s.n. (K, PERTH); Brookton Shire, 31 December 1981, K.J. Wallace 921 (PERTH).

Distribution. Occurs in the Darling Range between the Helena Valley and Mt Cooke. Extends south to Dwellingup and east to Brookton.

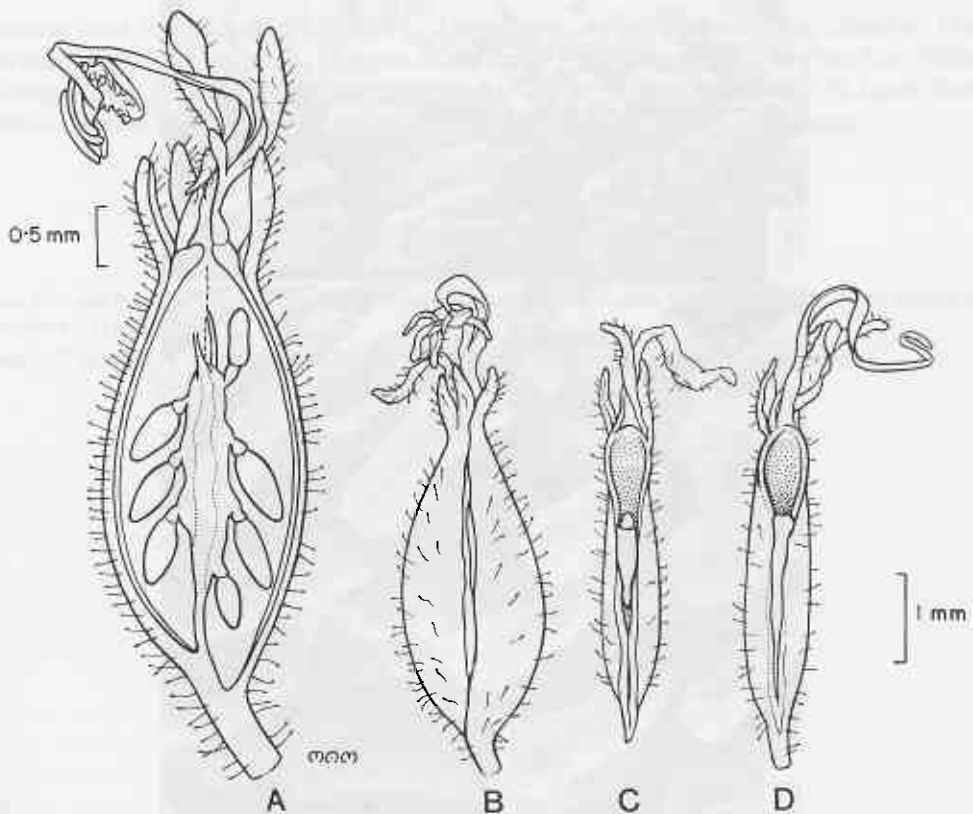


Figure 2. *Styliidium lateriticola*. A - capsule showing placentation, B - D - mature capsule showing splitting into 2 valves (C & D) parallel to the dissepiment (shown as a dotted line in A). Drawn from the type.

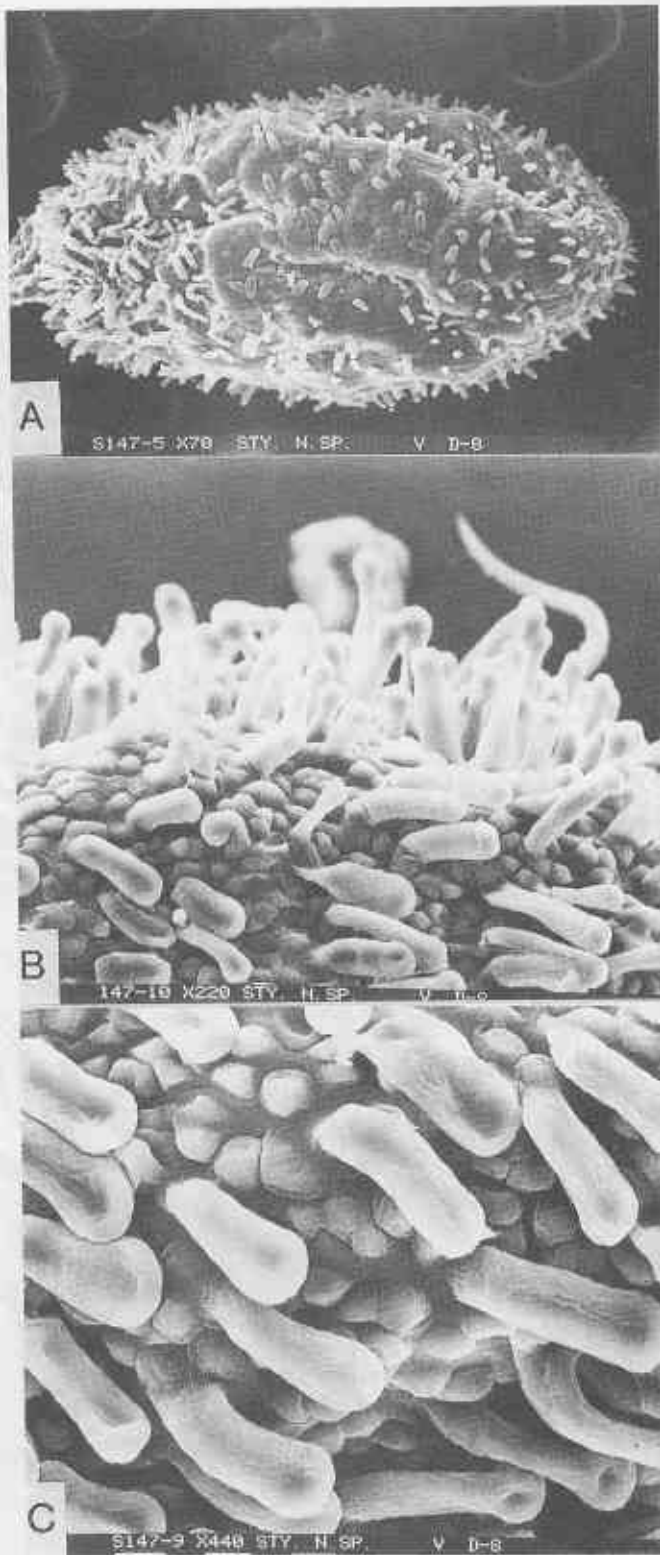


Figure 3. SEM photos of a seed showing clavellate papillae. From the type.

Ecology. The species occurs on massive hardcap laterite, often on the edge of breakaways. The associated vegetation is Jarrah (*Eucalyptus marginata*)/Marri (*Eucalyptus calophylla*) low open forest with a dense understorey of *Banksia grandis*.

Flowering period. December through to January.

Etymology. The specific epithet alludes to the preference of this species for skeletal soil over massive hardcap laterite.

Discussion

Styliidium lateriticola differs from its closest relative *Styliidium bulbiferum* by its more shrubby, erect habit, the presence of simple pilose and glandular hairy scapes and the many-flowered panicle inflorescence, low ovule number, summer flowering pattern and different chromosome number ($n = 11$ in *S. lateriticola* and $n = 14$ in *S. bulbiferum*).

Acknowledgements

I wish to thank Joanna Seabrook and Gwen Abbott for drawing this species to my attention. I thank Paul Wilson for the latin diagnosis, Margaret Menadue for the illustrations and Dr John Kuo (Electron Microscopy Centre, University of Western Australia) for the SEM photographs. Dr S.H. James, Botany Department, University of Western Australia kindly provided the chromosome counts.

References

- Marchant, N.G. and Perry, G. (1981) "A checklist of vascular plants of the Perth Region, Western Australia." West. Austral. Herb. Res. Notes 5: 111-134.
- Marchant, N.G. *et al.* (1987). "Flora of the Perth Region". Western Australian Herbarium, Perth, Western Australia.