

## A new species of *Guichenotia* (Sterculiaceae) from south western Australia

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### Abstract

Keighery, Gregory, J. A new species of *Guichenotia* (Sterculiaceae) from south western Australia. *Nuytsia* 8(3): 319-321 (1992). A new species of *Guichenotia* is described: *G. alba* Keighery confined to heathland between Cataby and Three Springs north of Perth. A key to all species is included.

### Introduction

*Guichenotia* J. Gay (Sterculiaceae) is a small genus of 7 species, all of which are confined to south western Australia. The genus is distinguished from the 7 other genera of the tribe Lasiopetalae by having leafy stipules (giving the leaves a whorl like appearance) and the sepals being prominently ribbed after flowering. Members of the genus also have distinctive pendant "bell like" flowers. Members of the genus are widely cultivated in Australia (Wrigley and Fagg 1979) and to a limited extent overseas. This distinctive taxon was segregated from the widespread *Guichenotia sarotes*, when the author sorted into single taxa the taxonomically poorly known groups recorded for the Mount Lesueur report. This species was listed in the subsequent report (Griffin *et al.* 1990) as *Guichenotia* sp. (*E.A. Griffin* 858). The purpose of this paper is to provide a valid name for this taxon.

### Key to species of *Guichenotia*

- 1. Petals absent ..... *G. apetala*
- 1. Petals present ..... 2
  - 2. Style glabrous in upper half ..... 3
    - 3. Stipules considerably smaller than leaves ..... *G. angustifolia*
    - 3. Stipules considerably larger than leaves ..... 4
      - 4. Raceme of 4-8 flowers, calyx c. 1 cm long ..... *G. ledifolia*
      - 4. Raceme of 1-3 flowers, calyx, 2-3 cm long ..... *G. macrantha*

2. Style stellate-tomentose in upper half ..... 5  
 5. Stipules leaf like, but smaller than leaves, calyx large, 10-15 cm long ..... 6  
 5. Stipules small or absent, cordate, calyx small, 5-6 cm long ..... *G. micrantha*  
 6. Flowers white; spreading (often almost prostrate) multi-stemmed shrub ..... *G. alba*  
 6. Flowers pink; single-stemmed, erect shrub ..... *G. sarotes*

***Guichenotia alba* Keighery sp. nov. (Figure 1)**

*Guichenotia alba* Keighery; a *G. sarotes* flores alba decolor brunneolus, laxi-multi caulis e basi ramosae statim dignoscenda.

*Typus*: 5 kilometres south of Cataby, at the intersection of Mimmegarra road and the Brand Highway, Western Australia (30°45'S 115°30'E), 10 July 1988, *G.J. Keighery* 10270 (holo: PERTH; iso: CANB).

A slender lax few-branched *shrub*, multi-stemmed from a woody rootstock, stems to 40 cm long, plant to 10 cm tall. Young branches densely stellate-tomentose, becoming glabrous with age. *Leaves* alternate, petiole c. 0.5 mm long, lamina (9) 13-22 mm long with revolute margins, densely stellate-tomentose when young becoming glabrous and reticulately veined above. *Stipules* leaf-like, approximately 1/2-2/3 length of the leaves. *Racemes* simple, loose, in upper axils, 1-2 flowered, pedicel 6-9 mm, recurved, peduncle 3-6 mm, both densely stellate-tomentose. *Bracts* and *bracteoles* linear-obovate, apex acute. *Calyx* campanulate, white outside, pale green inside, lobes 11-13 cm long, with 3 central veins outside reticulate veined, stellate hairs on the veins, apex acute. *Petals* small and scale-like. *Stamens* 2-2.5 mm long, red-brown purple, apex pore area white. *Ovary* 1-1.5 mm long, covered with red glandular hairs. *Style* ± 2 mm long, with a ring of stellate hairs below stigma. *Fruit* crustaceous, loculi are seeded, 4-5 mm diameter. *Seeds* pale brown, smooth, strophiolate, ± 4 mm long.

*Other specimens examined*. WESTERN AUSTRALIA: Cockleshell Gully, *W.E. Blackall* 3554 (PERTH); Cockleshell Gully, *W.E. Blackall* 3619 (PERTH); Three Springs, *W.E. Blackall* 4390 (PERTH); Diamond of the Desert Spring, *C.A. Gardner* 9103 (PERTH); Cockleshell Gully to Lake Logue, *C.A. Gardner* 9382 (PERTH); One kilometre west of Brand Highway on Mimmegarra Road, *R. Hnatiuk* 1465 (PERTH); 3.5 kilometres east of Lake Indoon, *E.A. Griffin* 858 (PERTH).

*Distribution*. Restricted to the northern heathlands of southern Western Australia, between Three Springs and Cataby.

*Habitat*. *Guichenotia alba* grows in low open heath usually on sandy clay or duplex soils in depressions which are winter wet.

*Flowering time*. July to August. Mature fruits in November.

*Conservation status*. Not considered rare or endangered, but surveys are needed to determine this species occurrence in reserves in the region.

*Affinities*. This species is closely related to *G. sarotes* (under which the collections were previously placed), but can be immediately distinguished (when alive) by the white not pink flowers.

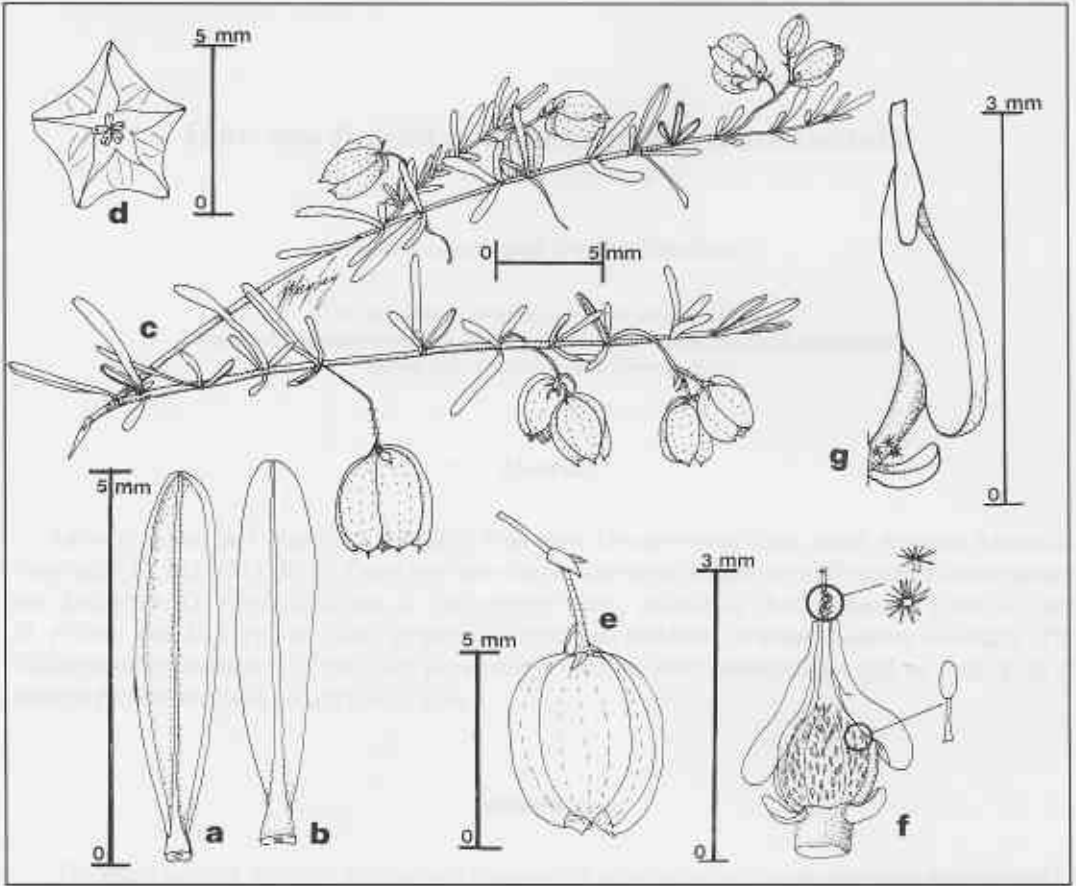


Figure 1. *Guichenotia alba* Keighery a - abaxial leaf surface, b - adaxial surface, c - habit, d - flower from below, e - flower, f - detail of flower with calyx removed, g - anther. Drawn from the type.

Additionally it differs in being an open, spreading (often almost prostrate) multi-stemmed shrub whereas *G. sarotes* is a single-stemmed erect shrub to 1.5 metres tall.

*Etymology.* The species name refers to the pale white flowers, which are unique for the genus.

### Acknowledgements

The distinctiveness of this taxon was first recognised after it was collected during the *Banksia* sandplain survey by the W.A. Wildflower Society.

### References

Griffin, E.A., Hopper, S.D. and Hopkins, A.J.M. (1990). "Flora" *In* Nature Conservation, Landscape and Recreation values of the Lesueur area. Eds Burbidge, A.A., Hopper, S.D. and Van Leeuwin, S. E.P.A. Bulletin 424. pp. 39-70.

Wrigley, J.W. and Fagg, M. (1979). Australian Native Plants. (Collins, Sydney.)