# Caesia viscida, a new species of Anthericaceae (Liliaceae s. lat.) from south-western Australia

## G.J. Keighery

Department of Conservation and Land Management, Western Australian Wildlife Research Centre, P.O. Box 51, Wanneroo, Western Australia 6065

#### Abstract

Keighery, G.J. Caesia viscida, a new species of Anthericaceae (Liliaceae s. lat.) from south-western Australia. Nuytsia 7(2): 133-135 (1990). Caesia viscida Keighery is described and illustrated.

### Introduction

During the biological survey of Cape Arid, an unusual species of *Caesia* was located in *Banksia speciosa* shrublands. This species did not match any collections held in Perth, nor did it correspond to any described in the review by Henderson (1987). It is described here as a new species, *Caesia viscida*.

#### **Taxonomy**

Caesia viscida G.J. Keighery, sp. nov. (Figure 1)

Planta caespitosa, radicibus tuberibus gracilis dauciformis. Foliis erectus cannaliculatus viscidus, 15-30 cm longus, laminois 5-6 mm latis. Inflorescentia brevis, 6-10 cm longis, effusus. Perianthum segmentum album internum, externum brunneolus pallidus.

Typus: Tagon Bay Road, 33° 51' S, 123° 00' E, Cape Arid National Park, Western Australia, 23 November 1988, G.J. Keighery & J.J. Alford 2010 (holo: PERTH; iso: MEL, K).

Caespitose, perennial *herb* to 300 x 300 mm wide, from a shortly branched rhizome, with 6-20 flowering shoots produced annually. *Rhizome* covered by dense brown fibres (breakdown products of the persistent leaf sheaths). *Roots* white, tuberous below rhizome to c. 5 mm diameter, becoming slender at depth, to 170 mm long, annually renewed. *Leaves* erect, glabrous, viscid; lamina 150-300 x 5-6 mm, channelled, with 6-8 prominent veins; margin entire; apex acute to long pungent.

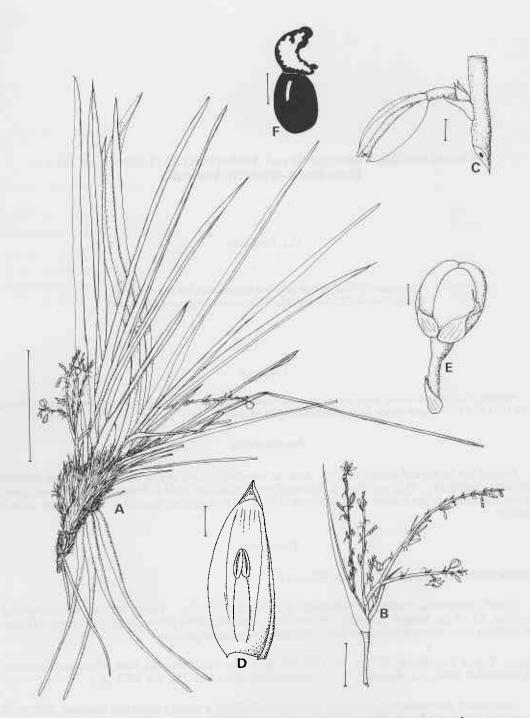


Figure 1. Caesia viscida. A - Habit. B - Inflorescence. C - Flower in bud showing bracteoles. D - Anther. E - Fruit. F - Seed. Drawn from GJ. Keighery & JJ. Alford 2010. Scale bars A = 10 cm; B = 1 cm; C, D, E, F = 1 mm.

Inflorescence short, 60-100 mm long, spreading, axis white, 10-15 mm enclosed in leaf sheaths, then green, branches 3-6, to 60 mm long. Lowest bract (below branches) leaflike, 60-80 mm long, viscid. Basal bracts on inflorescence branches linear-subulate, to 15 mm long, scarious, brown. Upper bracts on inflorescence branches in clusters of 1-3, subtending flowers, linear-ovate, 2-3 mm long, scarious; apex long pungent. Bracteoles scarious, linear ovate, 1.5-2.0 mm long, 1-2 per flower. Peduncles 2-4 mm long, decurved, slender. Outer 3 perianth segments narrowly elliptic, 4-6 mm long, brown-green outside, white inside; apex acute, thickened, brown. Inner 3 perianth segments narrowly elliptic, 4-6 mm long; apex obtuse, white. Staminal filaments flattened; outer whorl 2-2.5 mm long; inner whorl c. 1.5 mm long. Anthers yellow, dehiscing introrsely by slits. Ovary green, angular, c. 1 mm long. Style white, c. 1.5 mm long, obscurely lobed. Capsule 3-lobed, usually 1-2-celled by abortion, 4-5 mm long, green when mature. Seed c. 1.5 mm wide; testa very shiny, black; aril large, fleshy, white with a black margin.

Distribution. Currently known only from the type locality.

Habitat. Caesia viscida grows in Banksia speciosa shrubland on low dunes. The soils are deep aeolian sands, grey in the A horizon but white at depth.

Flowering period. Plants at the type locality were in full flower in late November.

Conservation status. The species is currently known only from the type locality which is within Cape Arid National Park. Similar vegetation also occurs in the adjacent Nuytsland Nature Reserve and nearby Cape Le Grande National Park. Searches of these areas may reveal further populations.

#### Discussion

The viscid leaves and abbreviated inflorescence (which presents the flowers almost at ground level) clearly separates this species from all other *Caesia* species. The dauciform, tuberous roots are also unique in Western Australian *Caesia* species. *Caesia viscida* shares the dense fibrous covering of the rhizome with *Caesia rigidifolia* F. Muell., and is probably most closely related to this species.

#### Reference

Henderson, R.J.F. (1987). Caesia R. Br. In George, A.S. (ed.) "Flora of Australia", vol. 45, pp. 281-288. (Australian Government Publishing Service: Canberra.)