

***Scaevola ballajupensis* (Goodeniaceae), a new species from the Jarrah forest of south-western Australia**

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Abstract

Sage, L.W. *Scaevola ballajupensis* (Goodeniaceae), a new species from the Jarrah forest of south-western Australia. *Nuytsia* 15(1): 123–126 (2002). The new species *Scaevola ballajupensis* L.W. Sage, from the south-western Australian Jarrah forest, is described and photographically illustrated. The species is known only from one locality on private property and therefore has a high conservation priority. An amendment to the key to *Scaevola* species in “Flora of Australia” is made to include the new taxon and a table showing how it differs from its closest relatives is provided.

Introduction

A new species of *Scaevola* L. (Goodeniaceae), recently discovered during a flora survey undertaken by members of the Bridgetown Regional Herbarium, is described. The species belongs to series *Globuliferae* Benth. of section *Xerocarpa* G. Don. It increases the number of named species recognised in the genus in south-western Australia to 47.

The new species has a high conservation priority as it is known only from one locality on private property in a region with only 7% of native bushland remaining (J. Dewing pers. comm.). Urgent surveys are needed to determine the full extent of the species and what measures need to be taken to ensure its future.

New species description

Scaevola ballajupensis L.W. Sage, *sp. nov.*

Scaevola lanceolato primo aspectu maxime simili sed habitu decumbenti foliis plerumque caulinis et latioribus differt.

Typus: Bridgetown area [precise locality withheld for conservation purposes], Western Australia, 30 September 2000, *L.W. Sage* 2381a, *H.S.R. Sage*, *J.L.J. Sage*, *M.R.W. Sage* & *J.M. Dewing* (*holo*: PERTH 05789338; *iso*: CANB, K, MEL, NSW).

Decumbent *perennial herb* to *c.* 15 cm high, spreading to *c.* 1 m wide, with long, white, simple, soft non-appressed hairs concentrated on the stems and new growth. *Leaves* with scattered hairs, mostly cauline, acute to apiculate, lobed to dentate, narrowly obovate or oblanceolate, 11–75 x 1–17 mm, tapering basally, stem clasping, thin, green. *Inflorescence* a loose, terminal spike; bracts leaf like, 11–43 mm; bracteoles almost immediate below ovary, hairy, 5–11 mm, linear. *Sepals* united into a tube terminated by a rim of teeth *c.* 0.3 mm long. *Corolla* white with brown markings in the throat, 7.0–11.5 mm, with very short simple, non-appressed hairs outside below and long simple, non-appressed hairs higher up on the lobes outside, bearded inside with long simple hairs and barbulae papillate apically; lobes *c.* 3 x *c.* 1 mm, wings *c.* 0.5 mm wide, entire. *Stamen filaments* linear, flattened, *c.* 2 mm long. *Anthers* *c.* 1 mm long. *Ovary* 2-locular, glabrous, *c.* 1 mm long. *Style* *c.* 5.0 mm long, with scattered simple hairs; indusium *c.* 1 mm long, mostly glabrous with some scattered hairs and bristles on both lips. *Fruit* rugose, glabrous, ellipsoid to obovoid, *c.* 3 mm long. *Seeds* not seen. (Figure 1)

Other specimens examined. WESTERN AUSTRALIA [precise locality withheld]: Bridgetown area, 20 Oct. 1999, *J. Dewing, N. Kuser & J. Mead* 892; Bridgetown area, 30 Sep. 2000, *L.W. Sage* 2381b, *H.S.R. Sage, J.L.J. Sage, M.R.W. Sage & J.M. Dewing*.

Distribution. Known only from one locality on private property near Bridgetown in the Jarrah Forest interim biogeographic region (Thackaway & Cresswell 1995) of Western Australia. (Figure 2)

Habitat. *Eucalyptus marginata/Corymbia calophylla* woodland, shrubs to *c.* 1 m and dwarf shrubs to 0.5 m. Found in brown sandy gravel with some laterite and granite outcropping nearby.

Phenology. Collected in flower in September and October.

Conservation status. Conservation Codes for Western Australia Flora: Priority One. Currently known from only one location on private property that is potentially under the threat of development. This population was estimated by the author to comprise approximately 100 plants. Urgent surveys are required to determine the full extent of this species and to ensure that it is protected or represented on the conservation estate.

Etymology. Named for Ballajup Rock, the local name for a granite outcrop near the only known occurrence of the species.

Notes. This species has been under the informal name *Scaevola* sp. Ballajup Rock (*J. Dewing, N. Kuser & J. Mead* 892). *Scaevola ballajupensis* belongs to series *Globuliferae* of section *Xerocarpa* and is most closely related to *S. anchusifolia* Benth., *S. lanceolata* Benth. and *S. virgata* Carolin. Characters separating *S. ballajupensis* from these three species are shown in Table 1. It is readily distinguished from *S. lanceolata* and *S. virgata* by its loose inflorescence and from *S. anchusifolia* by its linear bracteoles and its smaller corolla that is white with brown markings in the throat.

Scaevola ballajupensis and *S. virgata* have similar habitat preferences for rocky hills or outcrops (as well as plains for *S. virgata*). *S. lanceolata* occurs mostly on water-gaining areas, road sides or water courses and *S. anchusifolia* occurs mostly in coastal areas on sand dunes or limestone ridges.



Figure 1. Photograph of *Scaevola ballajupensis* taken by Jenny Dewing.

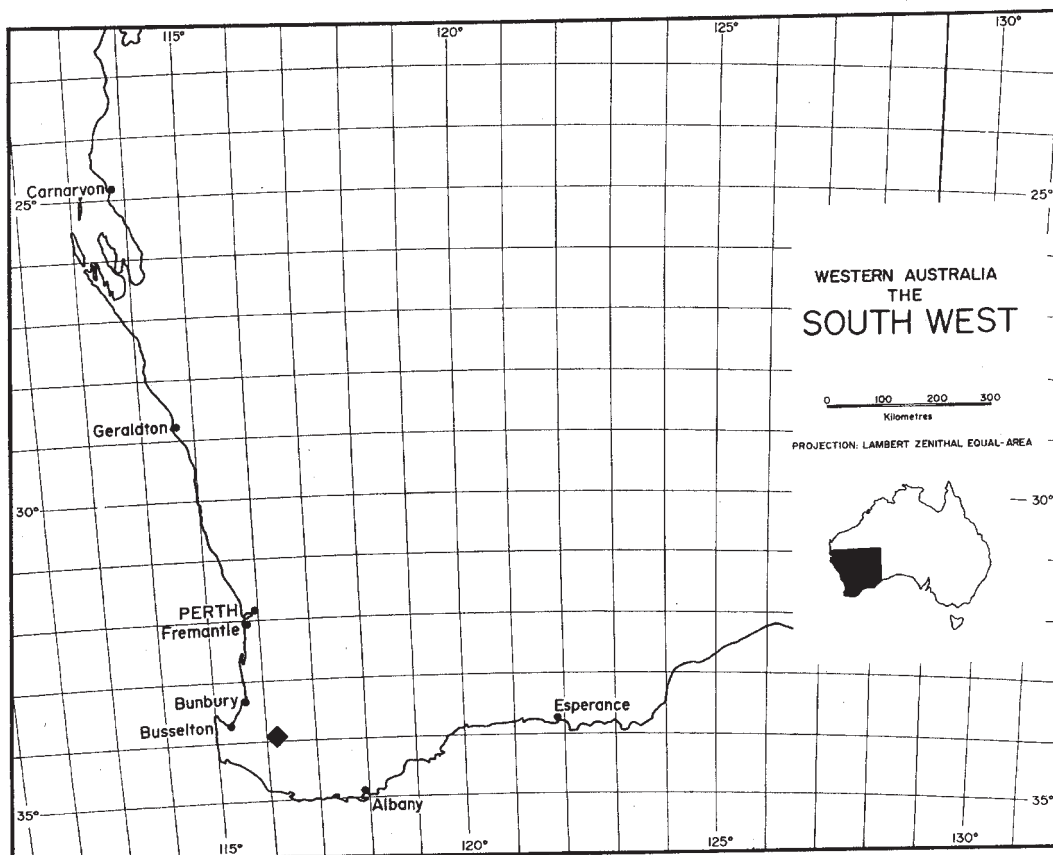


Figure 2. Distribution map of *Scaevola ballajupensis*.

Table 1. Characters distinguishing *Scaevola ballajupensis* from *S. anchusifolia*, *S. lanceolata* and *S. virgata*.

Character	<i>S. ballajupensis</i>	<i>S. lanceolata</i>	<i>S. virgata</i>	<i>S. anchusifolia</i>
habit	decumbent	erect	erect to spreading	decumbent
inflorescence	loose, terminal spikes	terminal, scapose spikes	dense terminal, scapose spikes	loose, terminal spikes
bract apex	acute to acuminate	acute	very acuminate	acuminate
bracteoles	linear	linear-lanceolate	narrowly lanceolate	triangular
sepal lobes	tooth-like, c. 0.3 mm long	tooth-like, to 2 mm long	sinuate, c. 0.3 mm long	well developed, to 1 mm long
corolla length	7–11.5 mm	7–15 mm	5–8 mm	10–22 mm
corolla colour	white with brown markings	white to pale blue with brownish markings	white to pale blue	pale blue

Amendment to the “Flora of Australia” key

The *Scaevola* key in the “Flora of Australia” (Carolin 1992: 86–92) should be altered to read from couplet 11 in Group 4 as follows:

- 11 Plant prostrate or decumbent
 12 Fruit dry (Western Australia)
 12a Corolla with golden hairs outside **S. repens**
 12a Corolla with white hairs outside **S. ballajupensis**

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References

- Carolin, R.C. (1992). *Scaevola*. In: “Flora of Australia.” Vol. 35, pp. 86–92. (Australian Government Publishing Service: Canberra.)
 Thackway, R. & Cresswell, I.D. (1995). An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program, version 4. (Australian Nature Conservation Agency: Canberra).