

***Goodenia katabudjar* (Goodeniaceae), a new species from
south-west Western Australia**

R.J. Cranfield and L.W. Sage

Western Australian Herbarium, Department of Conservation and Land Management, Locked Bag 104,
Bentley Delivery Centre, Western Australia 6983

Abstract

Cranfield, R.J. and Sage, L.W. *Goodenia katabudjar* (Goodeniaceae), a new species from south-west Western Australia. Nuytsia 11 (3): 297-299 (1997). A new species of *Goodenia* (Goodeniaceae) endemic to the Darling District, South West Botanical Province, *G. katabudjar* Cranfield & Sage, is described and illustrated. A key to the species considered to be similar to *G. katabudjar* is provided and the differences between these are briefly noted.

Introduction

A specimen collected late 1996 during a survey conducted by the authors was recognized as an unknown species of *Goodenia* Sm. (Goodeniaceae). Detailed examination found the species to be related to *Goodenia leptoclada* Benth. but with significant differences warranting its recognition as a new species.

Taxonomy

Goodenia katabudjar Cranfield & Sage, *sp. nov.*

Goodenia leptocladae Benth. affinis sed foliis basalibus carentibus, sepalis longioribus, ovulis 8-10, differt.

Typus: Near Wandering [precise locality withheld], Western Australia, 13 December 1996, L.W. Sage 955 (*holo*: PERTH04550137; *iso*: AD, CANB, K, MEL, NSW, US).

Perennial sub-shrub to 20 cm high, open, hirsute, branchlets simple or occasionally branched. *Leaves* alternate, ascending, subsessile; lamina ovate, 7-26 x 2-11 mm, entire, sericeous; apex obtuse. *Inflorescence* axillary to terminal, pedunculate, 1-flowered. *Pedicels* 2-7 mm long, glabrous; bracteoles 2 opposite, oblanceolate, 5-10 x 0.5-1.5 mm, hirsute, apex obtuse. *Flowers* pedicellate, bilabiate, 5-lobed, blue to pink (occasionally white), 12-16 x 8-14 mm. *Sepals* 5, free, linear, 5.5-7 x 0.5-0.75 mm, sericeous,

green, apex obtuse. *Corolla wings* flat, entire, 1.5-2 mm wide. *Stamens* 5, free; filaments linear, 3.2-3.5 x 0.5 mm; anthers basifixed, lanceolate, 1.3-1.4 x 0.4-0.5 mm, apiculate, longitudinally dehiscent. *Ovary* ovoid, 2.5-3.0 x 2 mm, ribbed; ovules 8-10, 0.6-0.7 x 0.4-0.5 mm. *Style* filiform, c. 6.5 x 0.7 mm; indusium 1.5-1.6 x 2.2-2.5 mm, hirsute. *Fruit* a subglobular carcerulus (Spjut 1994), c. 3 x 3 mm. *Seeds* 10, ovate, flat, body c. 1.7 x 1.1 mm, wing c. 0.2 mm wide, brown. (Figure 1)

Other specimens examined. WESTERN AUSTRALIA: Wandering area [precise locality withheld], 5 Dec. 1996, R. Davies 1685 (PERTH); 13 Dec. 1996, L. W. Sage 969 (PERTH).

Distribution. Known only from the type location and one other nearby population within the same proximity.

Habitat. Occurs in upland areas of open Wandoo woodland, near the margin of Jarrah woodlands.

Conservation status. This species is known from only two populations within the same reserve, both containing not more than a few hundred plants. Listed under CALM Conservation Codes for Western Australian Flora as Priority 2 (Poorly Known Taxa).

Etymology. The specific epithet is derived from the Nyoongar aboriginal dialect, *kata* meaning hill and *budjar* meaning ground. Referring to the low growth habit of the species and its association with hillside habitats.

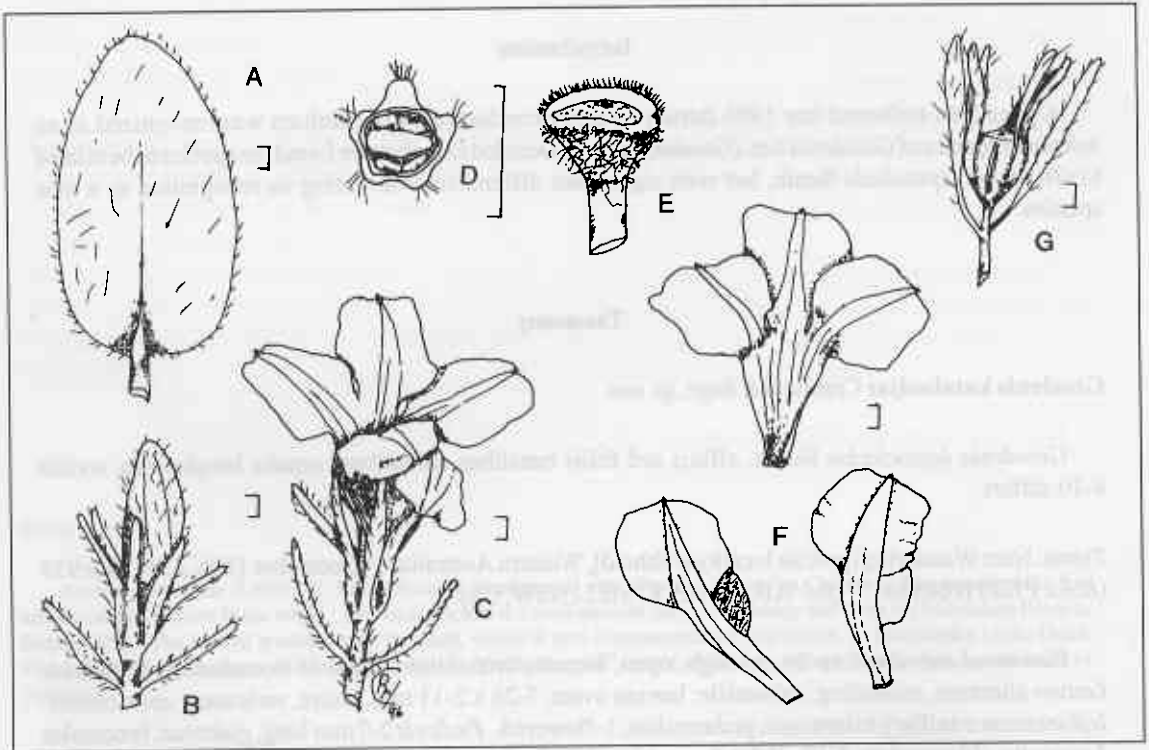


Figure 1. *Goodenia katabudjar* A - leaf; B - flower bud; C - flower; D - ovary; E - indusium; F - lower and upper petals; G - fruit. Drawn from L. W. Sage 955. Scale bars = 0.65 mm.

Affinities. *Goodenia katabudjar* is closely allied to *G. leptoclada* Benth. and to a lesser degree *G. eatoniana* F. Muell. *G. eatoniana* is a glabrous, glaucous sub-shrub, while *G. katabudjar* has hirsute stems and sericeous leaves. Characters separating *G. katabudjar* and *G. leptoclada* are shown in Table 1.

Table 1. Characters distinguishing *Goodenia katabudjar* from *G. leptoclada*.

Character	<i>G. katabudjar</i>	<i>G. leptoclada</i>
basal leaves	absent	present
leaf margins	entire	mostly dentate
peduncle length	2-7mm	1-5mm
sepal length	5.5-7.0mm	c. 3.0mm
ovule number	8-10	4-5
fruit diameter	c. 3 mm	c. 2mm
distribution	central forest area	extreme south-west

Amendment to key

The *Goodenia* key in the "Flora of Australia" (Carolin 1992: 151), should be altered to read from couplet 19 in Group 1:

- 19 Corolla glabrous outside ***G. eatoniana***
 19: Corolla hairy outside
 19a Sepal length c. 3.0 mm; basal leaves present ***G. leptoclada***
 19a: Sepal length 5.5-7.0 mm; basal leaves absent ***G. katabudjar***

Acknowledgements

We are grateful to Paul Wilson for the Latin diagnosis.

References

- Carolin, R.C. (1992). *Goodenia*. In: "Flora of Australia." Vol. 35. pp. 147-280. (Austral. Govt. Publishing Service: Canberra.)
 Spjut, R.W. (1994). A systematic treatment of fruit types. Mem. New York Bot. Gard. 70: 1-182.