

A NEW SPECIES OF *DIPLYCOSIA* (ERICACEAE) FROM SOUTH KALIMANTAN, INDONESIA

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A new species, *Diplycosia kalimantanensis* P. Wilkie & Argent (Ericaceae), collected on an expedition to Gunung Besar in the Meratus mountains, South Kalimantan, is described and illustrated, and a conservation assessment provided.

Keywords. *Diplycosia*, Ericaceae, Indonesia, Kalimantan, new species.

INTRODUCTION

Diplycosia Blume (Ericaceae) has always been considered to have its main centre of diversity on the island of Borneo with 51 recorded species, nearly half the total number in the genus as a whole. Mount Kinabalu in Sabah (Malaysian Borneo) is the richest single location with at least 27 species, which is not surprising as it is not only the highest mountain in Borneo but by far the best collected (Beaman *et al.*, 2001). The Meratus mountains of South Kalimantan (Indonesian Borneo), by contrast, are of much lower altitude and have been infrequently visited by botanists although the area is recognised as one of floral distinctiveness (MacKinnon *et al.*, 1996). These mountains form an isolated group which has already yielded endemics such as *Rhododendron alborugosum* Argent & J. Dransf., *Adinandra meratusensis* Sugau and *Polyalthia myristica* I.M. Turner. The lowlands also host interesting endemics such as the palm *Salacca dransfieldiana* Moge. The number of new endemics described from this region suggests that it is quite likely that other undescribed species await discovery from this poorly explored part of Kalimantan.

This new species does not match any described *Diplycosia* species. It will not key out in Sleumer (1966–67). It keys relatively satisfactorily to the second lead of couplet 39 but then does not easily fit the leaf size criteria of couplet 41. Besides, no Bornean species are found beyond this point in the key. In Argent's key to Bornean *Diplycosia* (Argent, 1989, 2002), our material keys to *D. pseudorufescens* Sleumer but this species has stems with patent bristles and a fine patent under-pubescence. *Diplycosia pseudorufescens* also has the ovary 'densely greyish-pubescent' (Sleumer, 1966–67) and much smaller flowers with shorter styles.

TAXONOMIC TREATMENT

***Diplycosia kalimantanensis* P. Wilkie & Argent, sp. nov.**

This new species is superficially most similar to *Diplycosia pseudorufescens* Sleumer but is distinct in having: stems with appressed bristles without a fine patent under-pubescence; small leaves up to 26×14 mm, with only very slender faint lateral veins; flowers 1–2 per axil; the pedicels up to 5 mm long, with densely crisped hairs; the calyx without bristles; the corolla, ovary and style glabrous. – Type: Indonesia, South Kalimantan, Meratus Mts., Gunung Besar, c.2°40'S 155°45'E, c.1800 m, 20 x 1996, *Argent & Wilkie* 9670 (holo BO!; iso A!, E!, L!, SING!). **Fig. 1.**

Erect shrub to 2 m tall, branches rounded. Youngest *twigs* with moderately dense, appressed bristles, up to 2 mm long, without fine patent under-pubescence; lateral buds hemispherical but small and inconspicuous. *Leaf blade* leathery, $17\text{--}26 \times 10\text{--}14$ mm, elliptic, the base broadly tapering, the apex obtusely pointed, the terminal gland small, slightly protruding from the apex, margin entire, with bristles when young, narrowly revolute, when very young minutely glandular hairy above, these hairs disappearing without leaving any trace; appressed bristly below, the bristles quickly disappearing to leave a black punctate surface; mid-vein minutely impressed above, weakly raised beneath; the lateral veins slender, faint, if visible one or two per side arising above the base and then subpinnate, at first straight but distally curving upwards before disappearing before the margin, flat above, minutely raised beneath. *Petiole* $2\text{--}3 \times c.1$ mm, moderately densely appressed bristly, glabrescent. *Flowers* 1–2 per axil, scented. *Pedicels* at anthesis $3\text{--}5 \times c.1$ mm, densely covered in crisped hairs and with several minute bracts at the base; bracteoles $c.1 \times 1.5$ mm, semicircular, rough with a warty surface abaxially, glabrous adaxially, fringed with glandular hairs along the margin. *Calyx* tube $c.2 \times 3$ mm, glabrous, the lobes $c.2 \times 2$ mm, triangular, glabrous except for the ciliate margins and a few abaxial appressed hairs. *Corolla* (rehydrated) $c.8 \times 6$ mm, translucent white to pale pink, campanulate, glabrous inside and out, lobes 5, $c.2.5 \times 2.5$ mm, broadly triangular with broadly acute reflexed tips. *Stamens* 10, $c.8$ mm long, slightly protruding; filaments $c.5$ mm long, filamentous, sigmoid, white, glabrous; anthers $c.3$ mm long, only minutely echinulate, cells $c.1.8$ mm long, the tubules $c.1.4$ mm long, with very obliquely cut pores. *Disc* a series of small heart-shaped, glabrous lobes. *Ovary* $c.2$ mm in diameter, glabrous; style $c.5$ mm long, cylindrical, glabrous. *Fruit* not seen.

Distribution. Known only from the type locality.

Ecology. Terrestrial in open submontane shrubbery at c.1800 m. Flowering October.

Conservation status. Least Concern. This species is only known from two collections both from the same mountain. Under IUCN guidelines (IUCN, 2014) this is considered a single location. Criteria A and C cannot be used as no information on population reduction or size and decline of population is available. Criterion B (geographic range – EOO or AOO) although qualifying on the single locality (a) cannot be used as

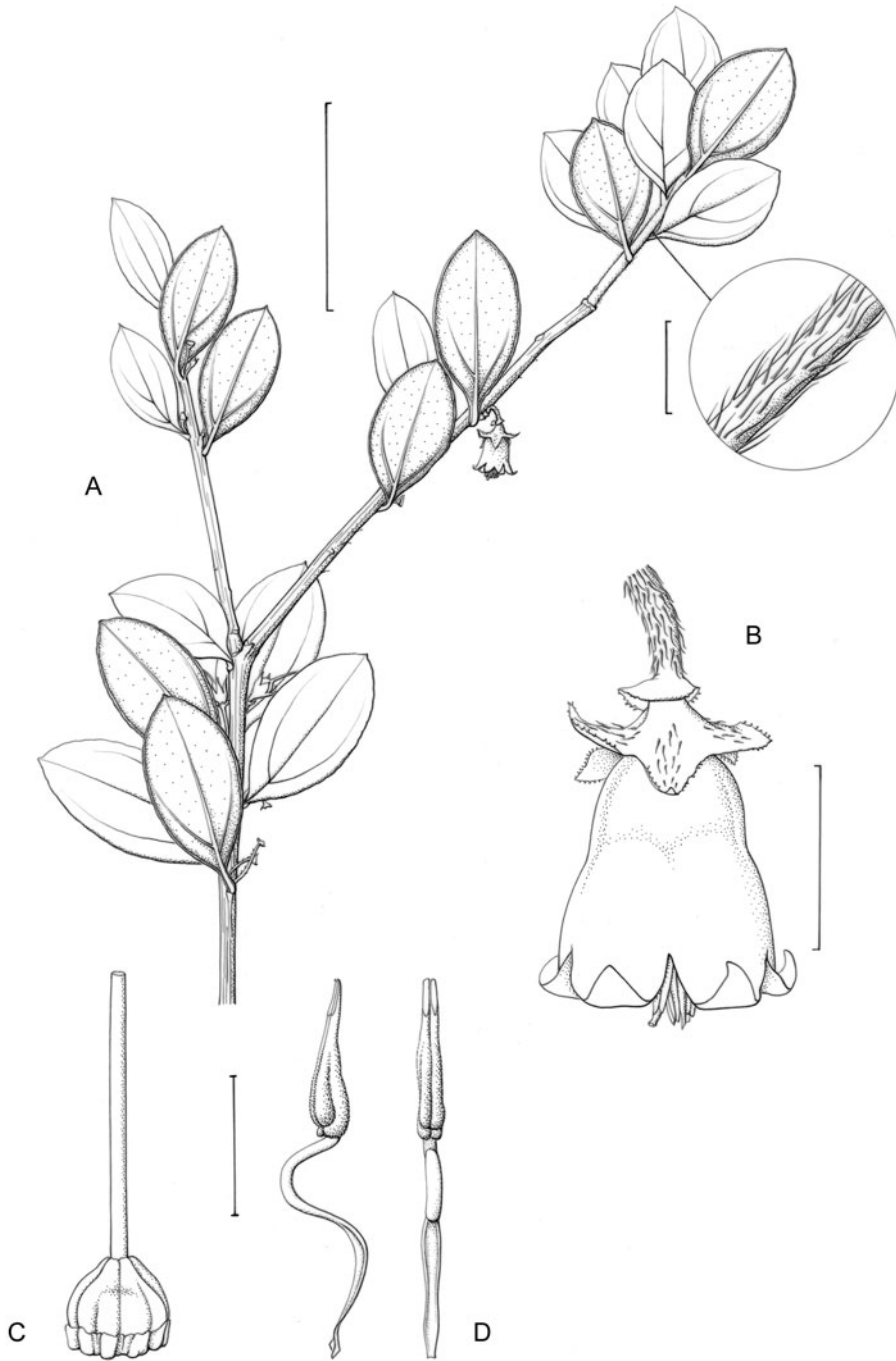


FIG. 1. *Diplycosia kalimantanensis* P. Wilkie & Argent. A, habit with inset to show stem indumentum; B, flower; C, pistil; D, stamens, front and side views. Scale bars: A = 3 cm; B = 5 mm; A-inset, C & D = 2.5 mm.

it fails on (b) and (c) due to lack of threats or evidence of fluctuations. Using Criterion D (very small or restricted population) is difficult considering the lack of evidence regarding the number of individuals and the lack of a plausible future threat. Thus the category of Least Concern has been assigned as the species is reported to be common around the summit area, is found in a remote location, there is no particular threat and there have been few botanical collections from the area and it is likely that future collections will find new populations.

Etymology. From Kalimantan, the location of the type.

Notes. The flowers were reported to be scented which is the first record of any species of *Diplycosia* having fragrant flowers.

Additional specimen. INDONESIA. South Kalimantan: Gunung Besar, 18 ii 1979, *Gen. Murata, Masahiro Kato & Yohannis Moge* B-3469 (BO!, E!).

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