

A NEW SPECIES OF *AGALMYLA* (*GESNERIACEAE*) FROM SULAWESI

D. J. MIDDLETON & S. M. SCOTT

A new species of *Gesneriaceae* from Sulawesi, *Agalmyla hilliardiae* D.J.Middleton & S.Scott in *Agalmyla* sect. *Exannularia*, is described and illustrated.

Keywords. *Agalmyla*, *Gesneriaceae*, new species, Sulawesi.

INTRODUCTION

The genus *Agalmyla* Blume was revised fairly recently (Hilliard & Burt, 2002a, 2002b). Ninety-seven species were recognised of which 62 were newly described. On a 2002 expedition organised by the Royal Botanic Garden Edinburgh (RBGE) to the Indonesian island of Sulawesi a cutting of a sterile *Agalmyla* plant was collected and grown on at RBGE. This has now flowered and, as it is unaccounted for in Hilliard & Burt (2002a, 2002b), is described here as new. It is easily distinguished from the 12 other species (including one undescribed) in Sulawesi (enumerated by Mendum & Atkins, 2004) by its clusters of bright yellow flowers at the ends of long peduncles.

Agalmyla hilliardiae D.J.Middleton & S.Scott, *sp. nov.* Fig. 1, Map 1.

Intra *Agalmylam* sect. *Exannulariam* species affinitatum incertarum sed combinatione pedunculi longi, florum praecipue flavorum et staminum exsertorum cum pubescenti in filamentis glanduloso singularis. – Type: Cultivated specimen from the Royal Botanic Garden Edinburgh, accession number 20021209A, grown on from wild collection from Indonesia, Sulawesi, Gorontalo, Gunung Gambuta, 1465 m altitude, 0°40'N, 123°21'E, vouchered as *Middleton* 4214 (holo BO; iso E).

Epiphytic climber. *Stems* pale brown, 3–4 mm in diam., densely pilose, hairs 0.8–1.2 mm long, many of the hairs with a small glandular tip, many adventitious roots along stem. *Leaves* opposite, strongly anisophyllous; reduced leaves more or less sessile, 0.4–0.6 × 0.2–0.4 cm, elliptic, densely pubescent beneath; petiole of larger leaves 3–3.8 cm long, densely clad with gland-tipped hairs; blades of larger leaves oblong to elliptic, 9.5–12.5 × 1.5–1.8 cm, 5.3–8 times as long as wide, apex acute, base slightly decurrent into petiole, margin subentire to distantly and weakly dentate, 6–10 secondary veins on each side of midrib, obscure above, only weakly visible beneath, glabrous above, scattered appressed hairs beneath, more densely so on

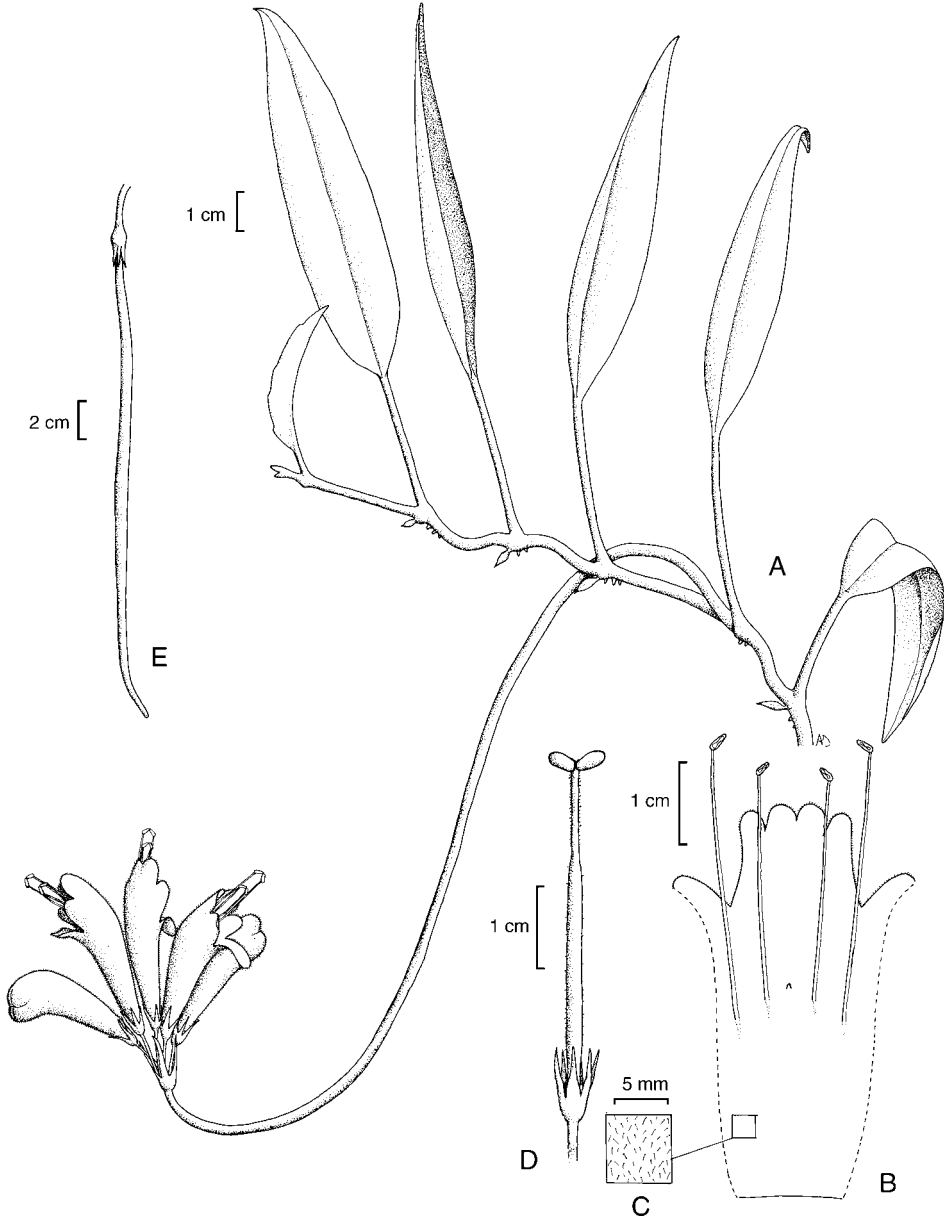


FIG. 1. *Agalmyla hilliardiae* D.J.Middleton & S.Scott. A, habit (few flowers removed from inflorescence); B, flower dissection; C, close-up of hairs in corolla tube; D, pistil and calyx; E, immature fruit and calyx.

midrib, occasionally gland-tipped. *Inflorescence* axillary, long pedunculate, 7–10-flowered; peduncle pale brown, 20–31 cm long, moderately covered in a mixture of hairs, varying greatly in length, and sessile glands; bracts green, oblong, c. 7×1.5 mm;



MAP 1. Distribution of *Agalmyla hilliardiae* D.J.Middleton & S.Scott.

pedicels dark red, 7–11 mm long, densely covered in a mixture of hairs, varying in length, and sessile glands. *Flowers* strongly protandrous. *Calyx* green, tube 1 mm long, lobes subequal, narrowly triangular, $4.5\text{--}6 \times 0.8\text{--}1$ mm, apex acute, with eglandular hairs of varying lengths all over outside. *Corolla* 38–40 mm long, dark orange at base outside, gradually turning to bright yellow in upper half, bright yellow on lobes outside and inside, yellow inside tube, covered in minute eglandular hairs outside, minutely glandular pubescent all over inside, slightly arcuate, mouth strongly oblique; upper lobes ovate, 3×2.3 mm, apex rounded, sinus between upper lobes 2 mm; lateral lobes unequally deltoid, 2 mm long, 7.5 mm wide, reflexed; lower lobe oblong, 8.3×2.7 mm, apex rounded. *Stamens* 4, exerted for up to 8 mm from corolla, filaments yellow, glandular pubescent, anthers yellow, pairs of anthers cohering lightly at tips by very small apiculi; anticus filaments inserted at 20 mm from corolla base, filaments 30 mm long, anthers 2.3×1.5 mm; posticus filaments inserted at 24 mm from corolla base, filaments 25 mm long, anthers 1.5×1.4 mm; staminode 1.8 mm long. *Disk* 1.8 mm long, 5-crenate. *Gynoecium* c.45 mm long when mature, greenish-yellow; stipe c.8 mm long, densely eglandular pubescent; ovary c.23 mm long, densely eglandular pubescent with occasional glandular hairs; style c.14 mm long, densely glandular pubescent with occasional eglandular hairs; stigmatic lobes each c. 3.2×2.8 mm. *Fruit* a long narrow capsule, 19–22 cm long, 1.5–2 mm

wide, glabrous. *Seed* with an appendage at each end; grain $1\text{--}1.2 \times 0.2$ mm; appendages 2.2–2.5 mm long.

Distribution. Sulawesi (Gorontalo province). Known only from the type collection.

Habitat and ecology. Reported as growing on a fallen tree near to boggy area on wide ridge in a semi open and windy position in primary forest at 1465 m altitude.

Proposed IUCN conservation assessment. VU A2(c). The forest where this species has been collected, although still rather extensive, has been, and continues to be, subject to some logging pressure.

Etymology. This species is named in honour of Olive Hilliard, one of the authors of the revision of the genus.

Agalmyla hilliardiae belongs to *Agalmyla* sect. *Exannularia* Hilliard & B.L.Burt, a section characterised by the lack of an annulus of hairs in the corolla tube. This is the only section of the genus to occur on Sulawesi. *Agalmyla hilliardiae* would not key out using the key to the species of this section in Hilliard & Burt (2002a) as it has characters from both sides of couplet 5. Its affinities are obscure as all other species with exserted stamens and filaments with glandular hairs have inflorescences on very short peduncles, e.g. *A. remotidentata* Hilliard & B.L.Burt.

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