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THE *GESNERIACEAE* OF SULAWESI IV: TWO NEW SPECIES OF *AESCHYNANTHUS*

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Two new species of *Aeschynanthus* (*Gesneriaceae*) from Sulawesi, *A. citrinus* and *A. sojolianus*, are described.

Keywords. Aeschynanthus, *Gesneriaceae*, new species, Sulawesi, taxonomy.

INTRODUCTION

There are relatively few species of *Aeschynanthus* described from Sulawesi in Indonesia, especially when one compares it with other large islands in the Malesian archipelago such as Borneo and New Guinea. It is likely, however, that this is largely an artefact of insufficient collecting and that many more species will be described once further collections are made and once living collections come into flower (Mendum & Atkins, 2004). Continuing on from an earlier paper (Mendum, 2004), the following two new species are here described.

Aeschynanthus citrinus Mendum & S.Scott, **sp. nov. Fig. 1.**
A duobus tantis aliis speciebus *Aeschynanthi* flores luteos habentibus corolla citrina (haud intensiore flava vel lutea) et characteribus etiam sequentibus differt: ab *A. flavida* (species e territorio Sarawak insulae Borneo) calyce glabro (haud piloso) majore lobis longioribus patentibusque (in *A. flava* lobis brevissimis paulo incurvis) distincta, ab *A. chrysantho* (species sumatrana) calycis lobis multo brevioribus rotundatisque (haud ut in *A. chrysantho* longissimis lineari-lanceolatis acutisque) facile distinguitur. – Type: Indonesia, North Sulawesi, Gorontalo Province, Bogani Nani Wartabone National Park, c.0°32′N, 123°22′E, route along Sungai Olama to Gunung Gambuta, near track in forest, 700 m, 9 iv 2002, *Mendum, Atkins, Newman, Hendrian & Sofyan* 41 (holo E; iso BO, E).

Stems pendulous and trailing to 3 m, purple when very young, becoming bright green then grey with age, glabrous, rooting from some nodes; internodes to 14×0.4 cm. *Leaves* opposite, blade glabrous, glossy, mid to dark green above, much paler below, 10×5.4 cm, narrowly to broadly ovate, to broadly elliptic, tip shortly acuminate, base rounded to acute, margins entire, midvein impressed above and prominent below, other veins faintly visible; petiole slender, 0.9–2.2 cm, glabrous, green flushed purplish towards base. *Inflorescences* single- or pair-flowered towards

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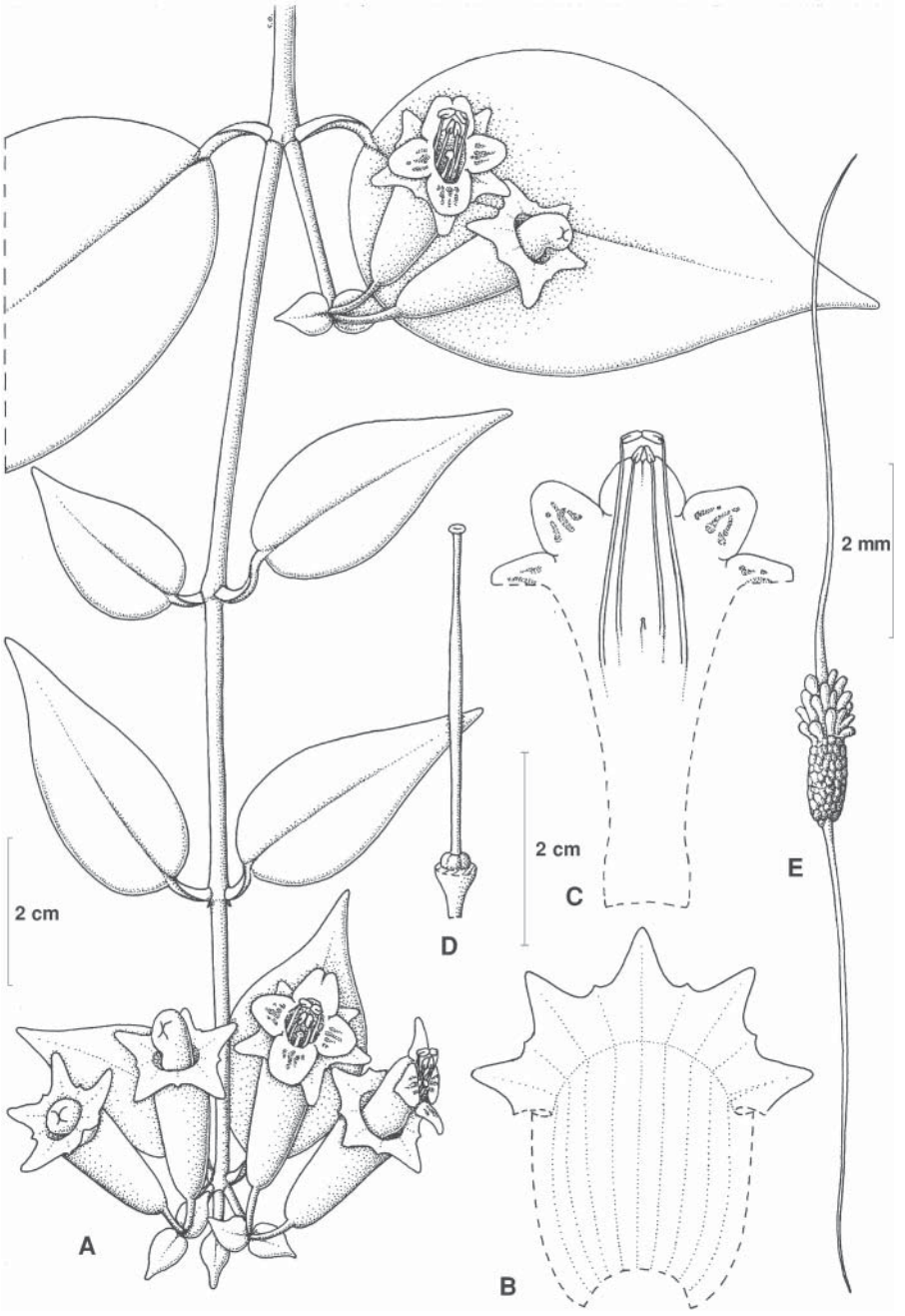

FIG. 1. *Aeschynanthus citrinus* Mendum & S.Scott. A, habit; B, calyx (cut ventrally); C, corolla (cut ventrally); D, gynoecium; E, seed. From *Mendum et al.* 41 (E).

and at tips of branches. *Peduncle* (0.5–)1.5–3.6 cm, glabrous. *Bracts* and bracteoles broadly ovate with acute tip, 1–1.4 × 0.8–1 cm, glossy pale green, glabrous. *Pedicel* c.1 cm, pale green, glabrous. *Calyx* of a tube and short spreading lobes, 2.6–4.3 cm long, pale lemon yellow, slightly greenish towards base, becoming more orange with age, lobes sometimes flushed very pale peach internally; tube 80–85% of total length, 5-angled and slightly ribbed, glabrous externally and internally, quite thick-textured and slightly waxy in appearance; lobes spreading, somewhat irregular, bluntly triangular, 0.9–1.1 × 1.3–1.5 cm, with very few ciliate hairs. *Corolla* 5.1 cm long, translucent yellow where enclosed by calyx and shading to lemon yellow with faint pinkish lines marking insertion of stamens, margins of lobes flushed pink and with faint darker dots and lines in centres of lower three lobes; internally tube pale yellow, lobes pale yellow with broad pink margins, lower three each with three dark red broken lines; upper lobes c.7.5 × 6 mm (central sinus 4.5 mm), rounded oblong; lateral and lower lobes c.8 × 6 mm, rounded; lower three lobes spreading and all with sparse fringing hairs; corolla externally glabrous, internally with thickened patches of tissue and papillae at lobe sinuses, papillae on floor of throat down as far as stamen insertion. *Filaments* cream, slightly exserted, inserted in upper part of tube, swollen at attachment to anther, glabrous, anticous pair 25 mm long, posticous pair 17 mm long. *Anthers* ovate, purplish, both pairs c.2.5 × 1 mm; staminode 9 mm long. *Disc* conical, c.1 × 2 mm, slightly lobed. *Stipe* c.1.5 cm, glabrous; ovary with sessile glands; style c.0.8 cm, glandular hairy; stigma peltate, c.2 mm in diameter. *Capsule* to 25 cm long. *Seed* c.0.8 mm, strongly papillose with spiral orientation; hilar appendage including 'bubbles' c.4 mm, apical appendage c.4 mm.

Ecology. Epiphyte in submontane mossy forest; 700–960 m.

Etymology. Named for the lemon yellow colour of the calyx and corolla.

This species is so far known only from Gunung Gambuta, where it occurs fairly frequently as a vigorous, pendulous epiphyte; it proved difficult to bring into cultivation, however. *Aeschynanthus citrinus* is instantly recognizable by the calyx which is so far unique for the genus in both its pale lemon yellow colour and large irregular spreading lobes, and by the lemon yellow corolla with pink-edged lobes. Clear yellow is an uncommon colour for the genus although greenish yellow is slightly more frequent; by far the majority of species have red or orange flowers.

Additional specimens examined. INDONESIA. North Sulawesi, Gorontalo Province, Bogani Nani Wartabone National Park, c.0°32′N, 123°22′E, route along Sungai Olama to Gunung Gambuta, 960 m, 10 iv 2002, *Mendum, Atkins, Newman, Hendrian & Sofyan* 51 (holo E; iso BO, E); in bright sunny conditions by river, 720 m, 9 iv 2002, *Scott* 02-39; RBGE cult. 20021189; on tree over waterfall, 850 m, 9 iv 2002, *Scott* 02-43; RBGE cult. 20021191.

Aeschynanthus sojolianus Mendum & L.E.R.Galloway, **sp. nov. Fig. 2.**
Species nova ab aliis speciebus *Aeschynanthi* sectionis *Polytrichii* corolla majuscula colore intense rubro differt. *A. arfakensis* e Nova Guinea corollas minores pallide

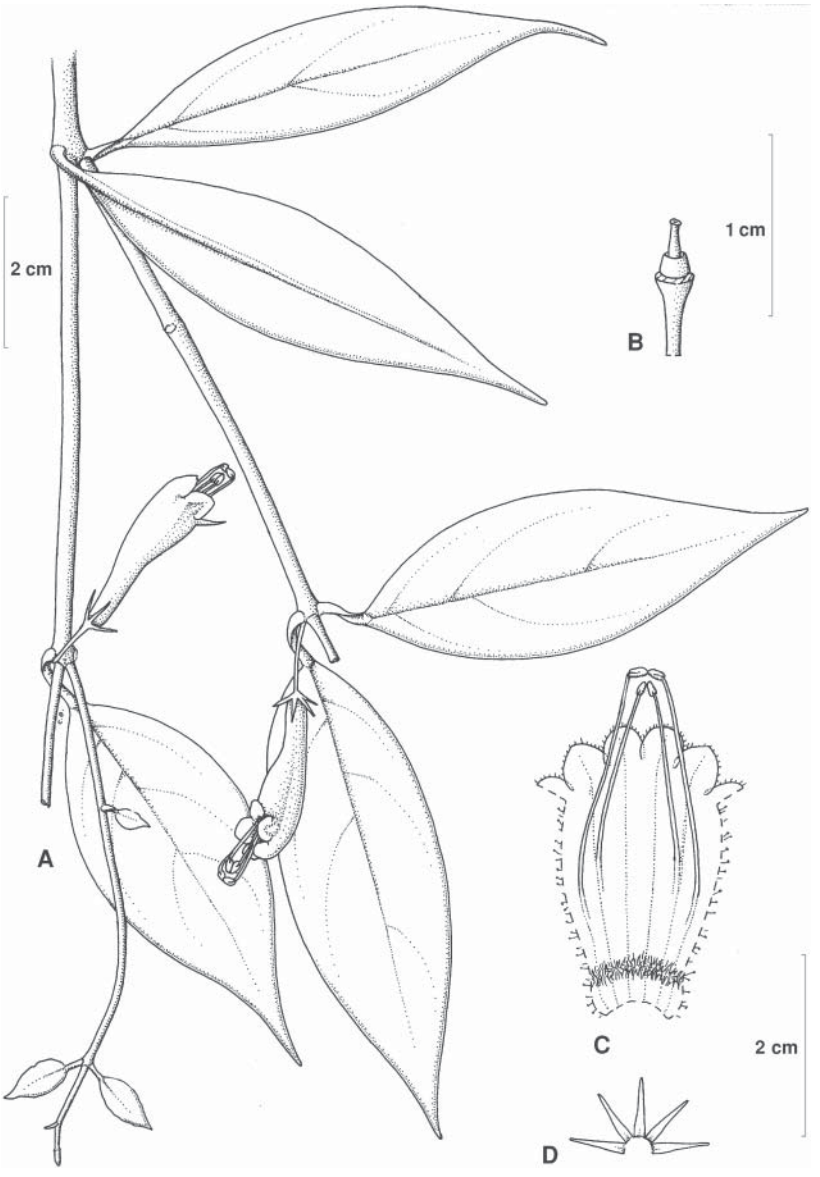

FIG. 2. *Aeschynanthus sojolianus* Mendum & L.E.R.Galloway. A, habit; B, calyx (cut ventrally); C, corolla (cut ventrally); D, gynoecium. From RBGE cult. 20000512.

aurantiacas distaliter rubropurpureas tinctas habet, ceterae corollas flavescentes vel viridescentes habent. – Type: Indonesia, Central Sulawesi, Gunung Sojol, c.0°40′N, 120°10′E, epiphyte in submontane ridge forest, 1500 m, 26 ii 2000, *Mendum, Argent & Hendrian* 00171 (holo BO).

Stems stiff and arching downwards, green heavily mottled deep purple and with scattered sessile glands when young, becoming red-brown and glabrous with age; internodes to 5.5 × 0.3 cm. *Leaves* opposite, blade thin leathery to thick and fleshy, deep glossy green above, paler sometimes purple-mottled below especially on the midvein, sparsely dotted on both surfaces with minute glands, (1.8–)6.5–9.7 × (0.7–) 1.2–2.7 cm, broadly lanceolate to elliptic, apex acute to acuminate, base acute to cuneate, margins entire, midvein impressed above and prominent below, other veins not visible; petiole 3–6 mm, stout, green with rare minute white hairs. *Inflorescence* single-flowered in leaf axils towards tips of stems. *Peduncle* minute, up to 1 mm. *Bracts* and bracteoles very narrowly triangular, 1–2 mm long, purple with sessile glands and white eglandular hairs towards apex. *Pedicel* c.11 mm, pale green sometimes purple-flushed, slightly ribbed and abruptly swollen at apex, glabrous or with sessile glands and minute hairs mainly at base. *Calyx* divided to base, pale to lime green, lobes 5–7 × 2 mm, slightly uneven with dorsal lobe the smallest, linear to narrowly triangular becoming almost terete in upper 1/3, with scattered sessile and shortly stalked subsessile glands and occasional minute eglandular hairs. *Corolla* 2.9–3 cm long, broad-based then narrowing slightly before flaring and curving gently to throat, quite thick-textured especially towards base; externally deep yellow at base for 7–8 mm, shading to deep scarlet where tube begins to widen and with faint dark lines down centres of lobes extending onto tube, lobe margins slightly more orange, internally lower 2/3 of tube yellow then shading to scarlet, lobes scarlet with faint darker veining; upper lobes c.3.5 × 4 mm, rounded (central sinus 2.5 mm); lateral lobes 5 × 5.5 mm, rounded; lower lobe 6 × 5 mm, rounded oblong; lateral and lower lobes only slightly spreading; corolla externally with fairly dense patent red glandular hairs, internally 5 mm above base of corolla tube with five tufts of thick hard fleshy upward-pointing transparent yellow hairs shading to red apically and tipped with minute glands, apical cell sometimes branched; and with papillae at base of lower three lobes extending onto floor of throat as far as insertion of stamens; copious nectar. *Filaments* exserted, inserted about halfway up tube, cream and papillose in lower half, purple-red and glandular hairy where exserted, not swollen at attachment to anther, anticous pair c.23 mm, posticous pair c.16 mm. *Anthers* oblong, both pairs 2 × 1.5 mm; pollen yellow; staminode c.1 mm. *Disc* yellow-green, c.2 × 3 mm, unlobed. *Stipe* very short, c.1–2 mm; ovary pale green with sessile glands; style 26 mm, dark pink to red with dense patent pink to red glandular hairs; stigma dark pink to red, peltate, slightly shield-shaped, c.2.5 mm in diameter, minutely papillose. *Fruit* unknown.

Ecology. Epiphyte in submontane ridge forest; 1500 m.

Etymology. Named after Gunung Sojol where it was discovered.

Although fruit and seed characters are not known in this species, *A. sojolianus* belongs to a small group of *Aeschynanthus* with many hairs at the hilar end of the seed. Members have rather dull greenish, yellowish or orange flowers so

A. sojolianus is unusual in the vivid colour of the corolla. All members of this group have long exserted stamens, and a very long style when compared with other groups.

Additional specimens examined. INDONESIA. Central Sulawesi, Gunung Sojol, c.0°40′S, 120°10′E, *Mendum, Argent & Hendrian* 00171 (holo BO); RBGE cult. 20000491, grown from *Smith & Galloway* SULSG 97; RBGE cult. 20000512, grown from cuttings of *Smith & Galloway* SULSG 115, herbarium specimen of cultivated plant collected as *Middleton* 3222 (E).

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