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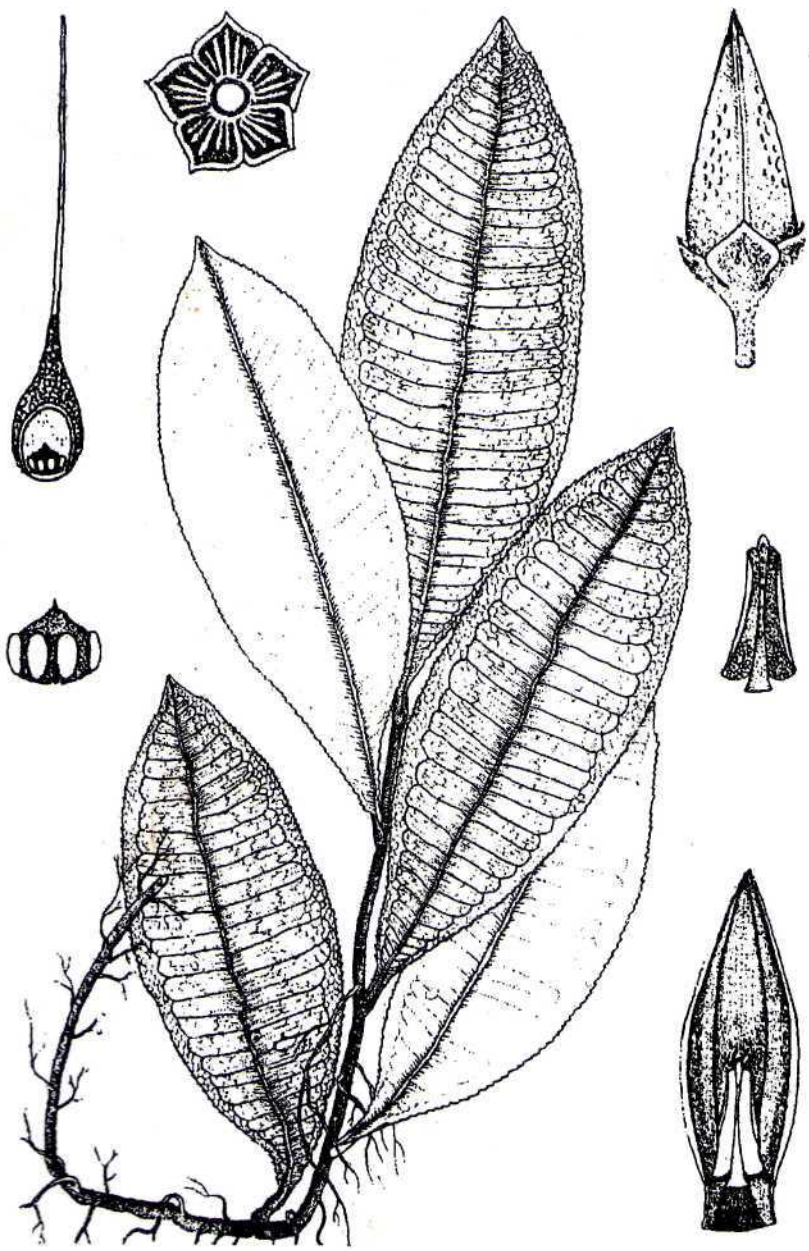

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FOUR NEW TAXA OF ASTERACEAE IN SUMATRA

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ABSTRACT
TJITROSOEDIRDJO, SRI S. 2002. Four new taxa of *Asteraceae* in Sumatra. *Reinwardtia* 12(1): 125–128. — Four new taxa of *Asteraceae* in Sumatra are described: *Prenanthes* L. (2 species), *Senecio* L. (1 species) and *Emilia sonchifolia* (L.) DC. (1 variety).

Keywords: *Prenanthes, Senecio, Emilia sonchifolia, Asteraceae,* Sumatra.

ABSTRAK
TJITROSOEDIRDJO, SRI S. 2002. Empat takson baru *Asteraceae* di Sumatra. *Reinwardtia* 12(1): 125–128. — Diusulkan 4 taxon baru *Asteraceae* Sumatera, yakni: dua jenis *Prenanthes* L., 1 jenis *Senecio* L. dan satu varietas *Emilia sonchifolia* (L.) DC.

Kata kunci: *Prenanthes, Senecio, Emilia sonchifolia, Asteraceae,* Sumatra.

The *Asteraceae* of Sumatra were revised as part of a PhD dissertation at the Bogor Agricultural University, Bogor, Indonesia. There are 133 species of 74 genera belonging to 11 tribes. Four new taxa were discovered, three species and one variety: 2 species of *Prenanthes* L. (out of 4 occuring in Sumatera), 1 species of *Senecio* L. (out of 2) and 1 variety of *Emilia sonchifolia* (L.) DC. (out of 3 varieties)

1. Prenanthes steenisii Tjitrosoedirdjo, *sp. nov.* – Fig. 1

Folia basi rosulata. Petioli 5–15 cm longi. Lamina in petiolo alato angustata, sagittata vel hastata vel ovato-rhomboidea. Inflorescentiae terminales paniculatae. Involucri squamae 2–vel 3–seriatae. Corolla lilacina ad alba, c. 11 mm longa. Achenia apice breviter prolongato, c. 1–2 mm longo. – Typus: Sumatra, Mount Kemiri,, alt. 2900–3300 m, *van Steenis* 9603 (BO–Holo; L–Iso)

Herbs, 0.7–0.9 m tall. Basal leaves polymorphous, base sagittate, acute, hastate or ovate-rhomboid, 4–9 by 2–4.5 cm, margin den-ticulate, apex acute; petiole winged, 5–15 cm long. Upper leaves alternate, smaller and lanceolate, petiole c. 2.5 cm, blade c. 3 by 0.5–0.75 cm. Heads ligulate, terminal, pedunculate, combined into panicles, nodding, cylindric, 1.5–2 cm by c. 2 mm. Receptacle flat, naked. Corolla 5–dentate at the apex, c. 11 mm long, lilac to white. Involucre dirty green. Phyllaries 2– or 3–seriate, herbaceous, outer phyllaries oblong, c. 4 mm long, the inner linear lanceolate, c. 12 mm long. Achenes obovate to elliptic, flat, gradually narrowing toward the apex, shortly prolonged into a disc, c. 1–2 mm long; pappus c. 1.2 mm long.

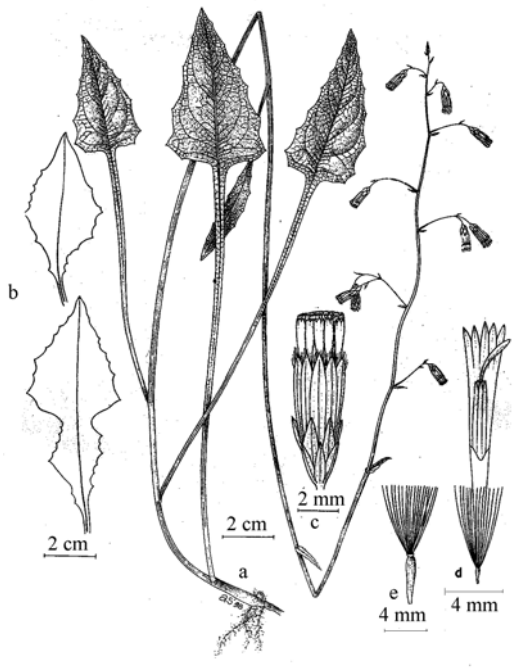

Fig. 1. *Prenanthes steenisii* Tjitrosoedirdjo. a. habit; b. leaf variations; c. head; d. flower; e. achene; a, c, d and e, after *van Steenis* 9603 (BO); b. after *de Wilde* & *de Wilde-Duyfjes* 16301(L).

DISTRIBUTION. Endemic to mountainous areas of Aceh (Mount Kemiri and Mount Leuser).

HABITAT. In shaded mossy places along a streamline, in thickets, 2900–3314 m altitude.

NOTES. The specimens were previously identified by Koster as *Lactuca* sp., though the apex of the achenes is not filiform, as it is usually found in *Lactuca*, but only shortly prolonged. Jeffrey annotated on the specimen of *van Steenis* 6516 (L, K) that the species appears to be closest to *L. rostrata* (Blume) Kuntze of an Asian group of species which are probably neither *Lactuca* nor *Prenanthes.* This was probably the basis for van Steenis's remark in *Mountain Flora of Java* (1972) that *L. rostrata* might occur in Sumatra.

SPECIMENS EXAMINED: *van Steenis* 9603 (BO–Holo, L–Iso); *van Steenis* 6516 (L, K); *de Wilde & de Wilde-Duyfjes* 16301 (BO, KEP, L)

2. Prenanthes sumatrana Tjitrosoedirdjo, *sp. nov.* – Fig. 2

Perennis subscandens. Lamina basi sensim in petiolo attenuata. Petiolus 0.8–2 cm longus. Folia basalia ovato-elliptica. Capitula paniculata terminali racemifera amplem disposita. Involucrum cylindraceum, squamis intimis elongatis, 0.9–1.2 cm longis, exterioribus gradatim brevioribus. Achenia c. 1 mm longa. –Typus: *de Wilde & de Wilde-Duyfjes* 16282 (BO–Holo; L–Iso).

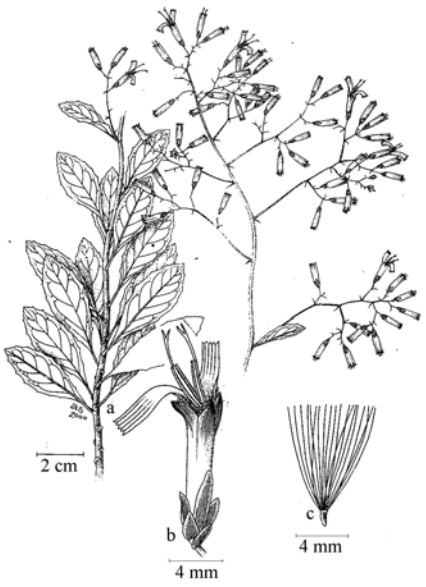

Fig. 2. *Prenanthes sumatrana* Tjitrosoedirdjo. a. habit; b. head; c. achene with pappus; all after *de Wilde & de Wilde-Duyfjes* 16282 (BO)

Subscandent perennials. Stems glabrous, woody at base, slender, 0.5–0.7 m tall. Leaves alternate, crowded at base. Blade ovate elliptic, 3–6 by 1–2 cm, base gradually attenuate into the petiole c. 0.2–2 cm long, margin serrate, apex acute, upper leaves sessile, narrow. Panicle lax, ample. Flower lilac, 1.2–1.5 by 0.2 cm. Heads numerous, small, slender, pendulous. Involucre cylindrical, purplish green with two bracteoles at the base. Phyllaries linear-lanceolate, 2– or 3–seriate, inner ones longer, linear-lan-ceolate, 0.9–1.2 cm long, outer ones oblong. Achene c. 1 mm long, pappus up to 1.2 mm long.

DISTRIBUTION. Endemic in Aceh (Mount Bendahara and Mount Leuser.

HABITAT. Edge of mossy forest, montane shrubs, 3200 m altitude.

SPECIMENS EXAMINED: *de Wilde & de Wilde-Duyfjes*: 13289 (L), 15232 (BO), 15233 (BO), 16282 (BO–Holo, L–Iso), 16338 (BO).

3. Senecio dewildeorum Tjitrosoedirdjo, *sp. nov.* – Fig. 3

Perennes, basi purpurea arachneosa, stolonifera. Caulis erectus, solitarius, 20–75 cm longus. Lamina basi sensim in petiolo 1.7–3.7 cm longo, attenuata. Folia oblanceolata vel elliptica, subtus tomentosa, 4–7 cm longa, 0.5–2 cm lata, superiora sessilia, amplexicaulia, oblongo-elliptica vel lanceolata, subtus purpurea, 3.5–6 cm longa, c. 0.5 cm lata. Capitula pedunculata, 0.8–1 cm longa, 1.2–1.5 lata. Flores radii ligulati, tridentata. Flores tubulosi, numerosi, flavi. Achenia cylindrica c. 2 mm longa, pappus albus c. 6 mm longus. – Typus: *de Wilde & de Wilde Duyfjes* 16174 (L–Holo; BO–Iso). Aceh, climbing Mount Leuser west top, from Penosan via Pucuk Angasan c. 25 km south–west of Blang Kejeren

Perennial herbs, stoloniferous, rooting at the decumbent nodes, 0.2–0.6 m tall. Stem solitary, purplish-red arachnoid at the base. Basal leaves petioled, crowded, oblanceolate to elliptic, 4–7 by 0.5–2 cm, densely white tomentose beneath, base tapering to the petiole, margin dentate, apex acute. Petioles 1.7–7 cm long. Stem leaves smaller, sessile, amplexicaul, elliptic oblong to oblanceolate, 3.5–6 by 0.4–0.5 cm, purplish beneath. Peduncled 1.2 cm long, bracteate, bearing 2–4 linear bracteoles. Heads erect then ascending, 0.8–1.1 by 1.2–1.3 cm, radiate. Involucre broadly campanulate, 8–10 by 11–15 mm. Ray flowers female, 8–10, corolla 3–denticulate, 0.8–1 cm long. Disk flowers campanulate, 5–lobed, limb shorter than the tube, 5–6 mm long. Anthers c. 9

mm. Style arms c. 7 mm, apex without a central appendage of fused papillae. Achenes cylindric, 2 mm long; pappus white, c. 6 mm long.

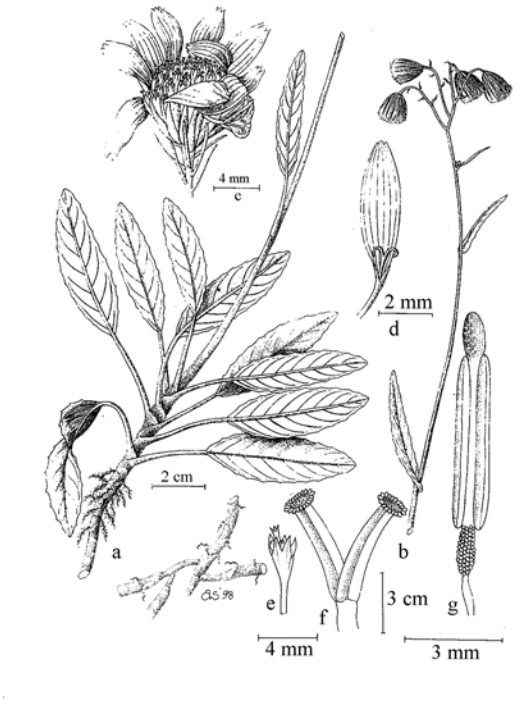

Fig. 3. *Senecio dewildeorum* Tjitrosoedirdjo a. habit; b. flowers; c. head; d. ray flower; disk flower; f. style-arms; g. anther; all after *de Wilde* & *de Wilde-Duyfjes* 16174, (L).

DISTRIBUTION. Endemic to mountainous areas of Aceh.

HABITAT. Mountain shrubs, 2750–3150 m altitude.

SPECIMENS EXAMINED. *de Wilde & de Wilde-Duyfjes* 16026 (BO, KEP, L), 16174 (BO, KEP, L), 16198 (BO, KEP, L), 16271 (BO, KEP, L).

4. Emilia sonchifolia var. **lanceolata** Tjitrosoedirdjo, *var. nov.* – Fig. 4

Folia alterna, sessilia vel subsessilia, lanceolata, marginibus dentatis. Phyllaries quam floribus lilacini 0.25—0.5-plo breviora. – Typus: *Bünnemeÿer* 8964 (BO), Mount Kerinci, West Sumatera.

Herbs, 0.6–0.8 m tall. Stem glabrous. Leaves alternate, sessile or subsessile, lanceolate, 7–9 by c. 1.5 cm, margin dentate. Heads corymbose, base of the pedicel with a bracteole. Phyllaries 0.25–0.5 as long as the flowers. Corolla 1 cm long, lilac, lobes shorter than the tube. Achene 3 mm long, with 5 or 6 prominent pilose ribs, with c. 3 glabrous ribs in between them, pappus 12–14 mm long.

DISTRIBUTION. Endemic to Sumatra.

HABITAT. In mountain bush.

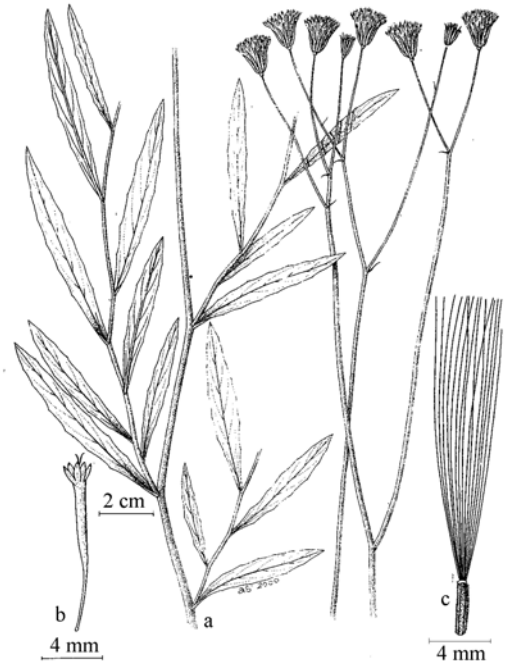

Figure 4. *Emilia sonchifolia* (L.) DC. var. *lanceolata* Tjitrosoedirdjo. a. habit; b. head; c achene with pappus; all after *Bünnemeijer* 8964 (BO).

NOTES. This specimen was previously identified by van Steenis in 1930 as *Gynura sarmentosa* (Blume) DC. In this treatment the specimen is included in *Emilia* since the specimen is bractless at the base of the involucre which is not a typical character of *Gynura* and also the flowers is lilac, not yellow as in *Gynura.*

In Sumatra there are 3 varieties of *Emilia sonchifolia.* Key to the varieties of *Emilia sonchifolia* found in Sumatera as follows:

1a. Leaves sessile or subsessile, margin entire, subentire; or dentate ---------- 2
b. Leaves petiolate margin; lyrate or lobed, lobes of the lower part acute ---------- a. var. *sonchifolia*
2a. Phyllaries as long as flowers. Leaves lanceolate or narrowly oblong-obovate, 2.5–6.5 cm by 1–3 cm; margin entire, sub-entire, or dentate ---------- b. var. *sagittata*
b. Phyllaries 0.25–0.5 times as long as flowers. Leaves lanceolate, 7–9 cm by 1.5 cm; margin dentate ---------- c. var. *lanceolata*

SPECIMENS EXAMINED. *Bünnemeÿer* 8964 (BO). Known only from the type specimen.

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