

A checklist of the Acanthaceae collected in the "Sira mountains" of Peru

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Abstract

The identifications of all Peruvian Acanthaceae collected by Bruno Wallnöfer and other collectors in the Cerros del Sira are provided including nine new species (*Aphelandra encarnacionii*, *Justicia siraensis*, *Justicia wallnoeferi*, *Lepidagathis ipariaensis*, *Ruellia siraensis*, *Sanchezia fosteri*, *Sanchezia siraensis*, *Stenostephanus wallnoeferi* and *Suessenguthia wallnoeferi*).

Key words: Acanthaceae, *Aphelandra*, *Fittonia*, *Herpetacanthus*, *Justicia*, *Lepidagathis*, *Mendoncia*, *Pachystachys*, *Pulchranthus*, *Ruellia*, *Sanchezia*, *Stenostephanus*, *Suessenguthia*, taxonomy, new species, flora of South America, Peru.

Introduction

In the following listing the genera and species of Acanthaceae collected by Bruno Wallnöfer and others in Peru are arranged in alphabetical sequence. Vouchers for the cited collections are in the herbaria of the Field Museum of Natural History (F), the Missouri Botanical Garden (MO), the San Marcos University in Lima (USM), the U.S. National Herbarium (US), the Naturhistorisches Museum Wien (W), and the U.S. National Arboretum (NA).

The species

Aphelandra aurantiaca* (SCHEIDW.) LINDL. var. *aurantiaca (Fig.: photo on the cover and p. 190)

Peru, Huánuco, Prov. Pachitea, primary tall lowland rain forest, in part temporarily inundated by creeks from ca. 24 km SSE to ca. 20 km SE of Puerto Inca, hilly and plain land along valley of the Río Yuyapichis next to "Campamento Oro" (9°29' S, 74°50' W), 360 m; slightly woody herb 0.3 - 2 m, stems rooting on nodes when bend over, inflorescences dense, with 4 longitudinal edges, bracts sordid red-brown, flowers red, styli white; 30 May 1988, B. Wallnöfer 11-30588 [US, USM n.v., W].

***Aphelandra aurantiaca* (SCHEIDW.) LINDL. var. *nitens* (HOOK.) WASSH.**

Peru, Huánuco, Prov. Pachitea, southwestern slope of the Río Llulla Pichis [= Yuyapichis] watershed, on the ascent of Cerros del Sira (9°35' S, 74°51' W), Camp I (Huangana), ca. 250 m, 21 Jun. 1969, F. Wolfe 12131 [F n.v., NA, USM n.v.].

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Aphelandra caput-medusae LINDAU

Peru, Huánuco, Prov. Pachitea, southwestern slope of the Río Llulla Pichis [= Yuyapichis] watershed, on the ascent of Cerros del Sira (9°35' S, 74°51' W), Camp I (Huangana), ca. 250 m; herb, 30 cm, flowers white; 21 Jun. 1969, F. Wolfe 12128A [NA].

Aphelandra encarnacionii WASSH., sp.n. (Fig. 1)

Type: Peru, Dept. Madre de Dios, Prov. Tahuamanu, 4 km S of Iberia on road to Miraflores, along left bank of the Río Tahuamanu, 10 Jun. 1978, F. Encarnación 1175 [holotype: US, isotype: USM].

Diagnosis: Differt ab *Aphelandra caput-medusae* LINDAU bracteis viridi-purpureis, 10 mm longis et 3.5 - 4 mm latis, laeve rhomboideis longiscuspitatis, arista-dentatis, glabris vel laeve puberulis et corolla conspicue majori 22 - 25 mm longa, alba, postea viridiflavescente.

Stoloniferous herb 15 - 30 cm high; aerial stem erect, terete or subquadrangular, woody, moderately to densely pubescent; **leaves** long-petiolate, crowded near the base of the inflorescence; blades elliptic to ovate, 6.5 - 8 × 3 - 5 cm, glabrous or nearly so above, sparsely to moderately pubescent below, both surfaces provided with reticulate veinlets, apex acute, tip blunt, base attenuate, margin entire to crenulate; petioles 1.5 - 3.5 cm long, moderately pubescent, the trichomes appressed; leaves subtending the inflorescence usually reduced, more ovate and basally rounded than cauline leaves; **inflorescence** terminating main branches, spicate, spikes nearly terete or quadrangular, 2.5 - 4 cm long solitary, sessile, densely compacted, rachis moderately to densely pubescent; bracts closely imbricate, narrowly rhomboid, 10 × 3.5 - 4 mm (excluding reclining cusp), apically long-cuspidate, margin bearing 5 or more pairs of long awns on either side between the middle and base of cusp, awns 2 - 8 mm long, greenish-purple, glabrous or minutely puberulous without, especially on the lower half; bracteoles narrowly lanceolate, 10 - 11 × 1 - 1.5 mm, carinate, apically aristate, glabrous except keel with dense trichomes; **flowers** borne opposite or subopposite, strongly bilabiate; calyx 8 - 9 mm long, glabrous, lobes subequal, lanceolate, apically aristate, striate-nerved, posterior lobe 1.25 mm wide, anterior pair 0.8 mm wide, lateral pair somewhat shorter than the other lobes, 0.5 mm wide; corolla white becoming bright greenish-yellow, 22 - 25 mm long, papillate, tube 12 - 15 mm long, upper lip erect, narrowly ovate, 5 - 6 × 2 mm, bilobed, lobes lanceolate 1.5 mm long, lower lip spreading, 3-lobed, the lobes subequal, middle lobe lanceolate, 8 × 2 mm, apically minutely apiculate, lateral lobes narrowly ovate, 5 - 6 × 2 mm; stamens exserted 2 - 3 mm beyond mouth of the corolla tube, anthers 2 - 3 mm long, extending to 2 - 3 mm from tip of the upper lip; ovary glabrous except apically bearing a tuft, style filiform, not exceeding the anthers; **capsule** not seen. Flowering June to August.

Distribution and habitat: Primary lowland rainforest with some xeromorphic elements, partially low, partly disturbed by local agriculture and logging. Elevation 250 meters.

Epithet: This species is dedicated to my good friend and collecting partner, biologist Filomeno Encarnación.

Paratype: Peru, Dept. Huánuco, Prov. Pachitea, ca. 26 km S of Puerto Inca, next to the

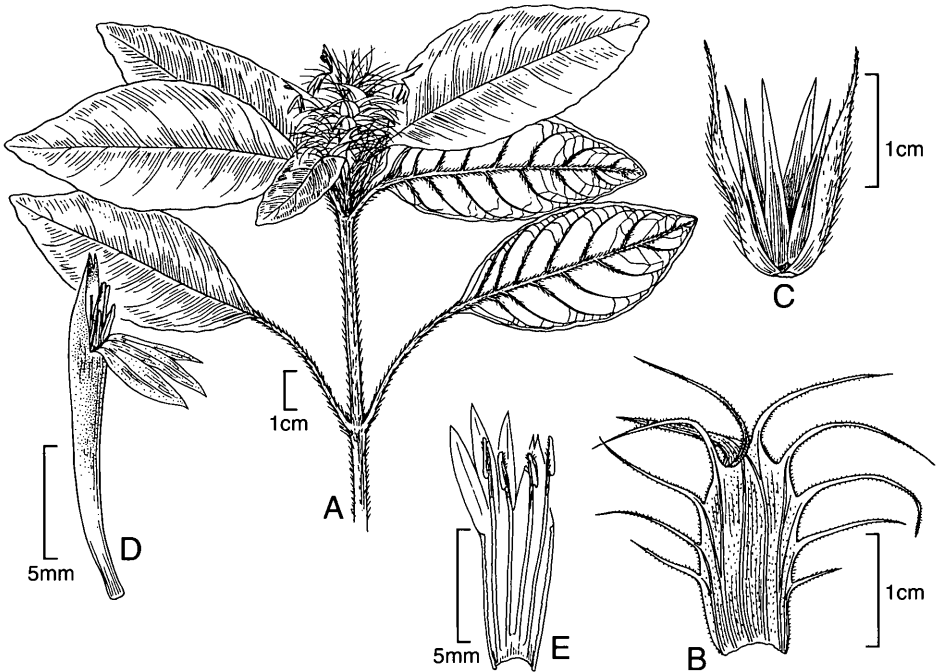


Fig. 1: *Aphelandra encarnacionii* WASSH. (from F. Encarnación 1175). A: habit; B: bract; C: bracteoles and calyx lobes; D: corolla; E: corolla expanded.

junction of the Río Pachitea and Río Yuyapichis, biological field station "Panguana" (9°37' S, 74°56' W), 260 m; flowers white; 29 Aug. 1988, G. Gottsberger & J. Döring G12-29888 [USM n.v., W].

***Aphelandra latibracteata* WASSH.**

Peru, Huánuco, Prov. Pachitea, primary tall lowland rain forest, in part temporarily inundated by creeks from ca. 24 km SSE to ca. 20 km SE of Puerto Inca, hilly and plain land along the valley of the Río Yuyapichis between the casa "Don Victor" (9°34' S, 74°53' W) and the "Campamento Oro" (9°29' S, 74°50' W), 300 - 360 m; slightly woody, herbaceous plant 1.5 - 2 m, stems friable, inflorescence bracts red, in 4 longitudinal rows, corolla carmine red, growing on sandy-muddy places along the river; 20 May 1988, B. Wallnöfer 16-20588 [US, USM n.v., W]; – southwestern slope of the Río Llualla Pichis [= Yuyapichis] watershed, on the ascent of Cerros del Sira (9°35' S, 74°51' W), Camp I (Huangana), ca. 250 m, 21 Jun. 1969, F. Wolfe 12109 [CONN n.v., F n.v., NA].

***Aphelandra maculata* (TAFALLA ex NEES) VOSS**

Peru, Huánuco, Prov. Pachitea, primary lowland rain forest with some xeromorphic elements, ca. 26 km S of Puerto Inca, next to the junction of the Río Pachitea and Río Yuyapichis, biological field station "Panguana" (9°37' S, 74°56' W), 260 m; herb, some individuals have green leaves and inflorescence bracts, other have brown-green leaves

and sordid light brown inflorescence bracts, leaves with broad, whitish-light green zones along veins, inflorescence bracts with darker veins, corolla yellow; 25 Nov. 1988, B. Wallnöfer 12-251188 [US, USM n.v., W].

***Fittonia albivenis* (LINDL. ex VEITCH) BRUMMITT; (*Verschaffeltii* group)**

Peru, Huánuco, Prov. Pachitea, primary tall lowland rain forest, small plots disturbed by local agriculture and logging, ca. 26 km S to ca. 24 km SSE of Puerto Inca, hilly country between the field station "Panguana" (9°37' S, 74°56' W) and the casa "Don Victor" (9°34' S, 74°53' W), N of the Río Yuyapichis, 260 - 400 m; herb, veins on adaxial leaf surfaces lilac, surrounded with a white area, tertiary veins white, inflorescences, bracts and calyces green, corolla tube green, apically slightly lilac tinged, corolla beige-yellowish within, lower limb with a yellow spot, fold between lateral and apical teeth inside sordid lilac, anthers beige-yellowish; 31 May 1988, B. Wallnöfer 14-31588 [US, USM n.v., W]; – southwestern slope of the Río Llulla Pichis [= Yuyapichis] watershed, on the ascent of Cerros del Sira (9°35' S, 74°51' W), Camp I (Huangana), ca. 250 m, 25 Jun. 1969, F. Wolfe 12167 [NA].

***Herpetacanthus rotundatus* (LINDAU) BREMEK.**

Peru, Huánuco, Prov. Pachitea, southwestern slope of the Río Llulla Pichis [= Yuyapichis] watershed, on the ascent of Cerros del Sira (9°35' S, 74°51' W), Camp I (Huangana), ca. 250 m; ascending herb, 0.75 m, flowers white with purple specks; 21 Jun. 1969, F. Wolfe 12110 [F n.v., NA].

***Justicia appendiculata* (RUIZ & PAV.) VAHL**

Peru, Huánuco, Prov. Pachitea, primary mountain rain forest, from ca. 20 - 24 km SE of Puerto Inca, crest of the mountain range going west to east from the "Campamento Oro" (9°29' S, 74°50' W) to the "Campamento Sira" (9°28' S, 74°47' W), 700 m; semishrub or herb 1.5 - 2 m, inflorescence axes gray-green, partially red-brown tinged, smallest ramifications light green, leaf-like inflorescence bracts yellowish-light brown, bracts and calyces yellow-green, corolla sordid reddish-brown, laterally with two greenish veins from base up to the junction of upper and lower limb, corolla tube basally yellow-green, lower limb reddish within, near throat with a reverse v-like design, composed of alternating reddish spots and yellowish stripes, filaments 2, greenish-yellow, anthers greenish, unsymmetric, styles whitish, stigmata slightly greenish, unripe capsules green, on flat sides light brown-whitish, with 1 - 2, flat, green-brown seeds per locule, growing in groups in humid depressions or small valleys; 31 Jul. 1988, B. Wallnöfer 117-31788 [US, USM n.v., W].

***Justicia poeppigiana* (NEES) LINDAU**

Peru, Huánuco, Prov. Pachitea, primary mountain rain forest, from ca. 20 - 24 km SE of Puerto Inca, crest of the mountain range going west to east from the "Campamento Oro" (9°29' S, 74°50' W) to the "Campamento Sira" (9°28' S, 74°47' W) 650 m; semishrub 0.4 - 1 m, forming roots on stems, inflorescences green, calyces and corolla yellowish-green, corolla throat lighter, filaments and styles greenish, anthers brownish, capsules green; 31 Jul. 1988, B. Wallnöfer 115-31788 [US, USM n.v., W].

Justicia pyrrhostachya (LINDAU) WASSH.

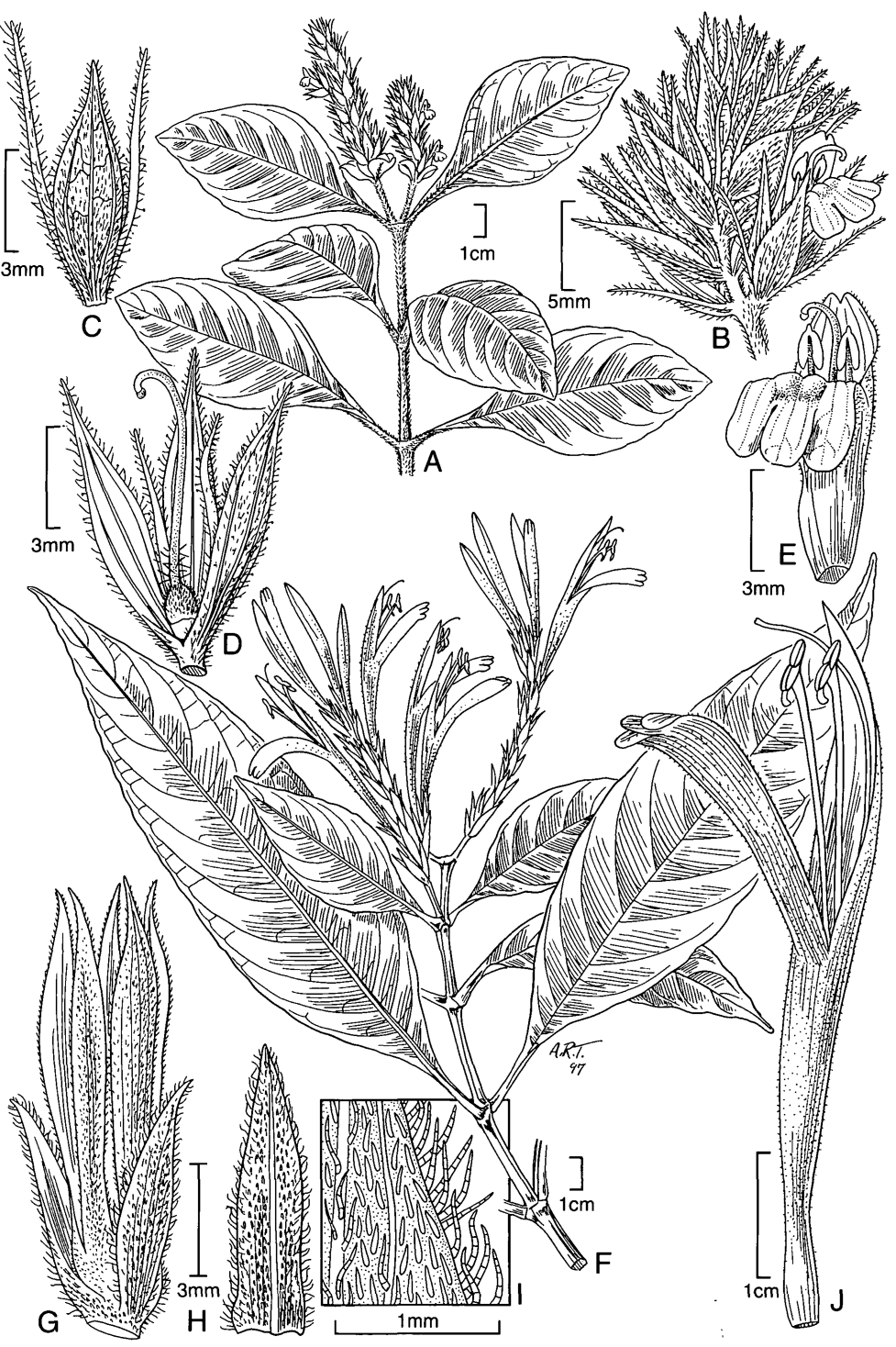
Peru, Huánuco, Prov. Pachitea, primary mountain forest from ca. 20 - 24 km SE of Puerto Inca, crest of mountain range going west to east from the "Campamento Oro" (9°29' S, 74°50' W) to the "Campamento Sira" (9°28' S, 74°47' W) and continuing to NNE to the beginning of the cloud forest next to the Campamento "Pato Rojo" (9°27' S, 74°46' W), ca. 800 m; liana climbing to 4 m, inflorescence axes green, bracts green, reddish tinged or ± red, and with red veins, corolla red, growing along a creek in a small valley; 20 Mar. 1988, B. Wallnöfer 15-20388 [US, USM n.v., W]; – same area: primary mountain rain forest, ca. 24 km SE of Puerto Inca, from the "Campamento Sira" (9°28' S, 74°47' W) SE down to the valley of the Río Negro, mountain crest and steep slopes to the river, 500 m; liana, inflorescence bracts red, during fructification reddish-green and spreading, inflorescences axes green, calyces whitish, with pink veins, corolla reddish-pink, with white trichomes, tube below whitish-green, with pink veins, filaments whitish, receptacles light green, ovaries green, styles whitish, unripe capsules light green, especially basally whitish-green; 11 Aug. 1988, W. Morawetz & B. Wallnöfer 110-11888 [US, USM n.v., W].

Justicia siraensis WASSH., sp.n. (Fig. 2 F - J, 9 D)

Type: Peru, Dept. Huánuco, Prov. Pachitea, from ca. 24 km SSE to ca. 20 km SE of Puerto Inca, hilly and flat land along the valley of the Río Yuyapichis between the casa "Don Victor" (9°34' S, 74°53' W) and the "Campamento Oro" (9°29' S, 74°50' W), 300 - 360 m; semishrub of 0.3 - 0.8 m, calyces green, corolla red, filaments and styli whitish, anthers red, pollen whitish; 15 Jul. 1988, B. Wallnöfer 14-15788 [holotype: W, isotypes: US, USM n.v.].

Diagnosis: Differt a *Justicia rauhii* WASSH. foliis parvis 10 - 20 cm longis, 3.5 - 6.5 cm latis, oblongis vel paulum ovatis; petiolis 5 - 10 mm longis; calyce glabro vel paulum puberulo et corolla magna, rubra, 45 - 55 mm longa.

Shrub or subshrub 0.3 - 2 m; stems subquadrangular, glabrous below, the upper portion minutely puberulous in decussate lines, the trichomes sordid, appressed; **leaves** short-petioled, blades 10 - 20 × 3.5 - 6.5 cm, oblong to narrowly ovate, glabrous or nearly so both above and below, drying a lighter green, the cystoliths numerous and rather prominent under a lens, to 0.3 mm long, apex acute to short-acuminate, attenuate at base, firm, margin entire or shallowly crenulate; petiole 5 - 10 mm long, glabrous, lower portion suberose; leaves subtending inflorescence reduced and narrower than cauline leaves; **inflorescence** consisting of 1 - 3 terminal quadrifarious, short-pedunculate spikes 5 - 10 cm long and 1 - 1.2 cm wide excluding flowers, densely flowered, the peduncles 10 - 20 mm long, minutely puberulous in decussate lines, the rachis densely puberulous; bracts subtending the flowers narrowly lanceolate 6.5 - 9 × 2 mm, apically acute, margin entire, green ciliolate, ribbed, glabrous, with cystoliths prominent under a lens; bracteoles narrowly lanceolate 5.5 - 6.5 × 1 - 1.5 mm, apically acute to acuminate, puberulous and ciliate; **flowers** borne opposite or subopposite, strongly bilabiate; calyx 9 - 10 mm long, glabrous or minutely puberulous, green, lobes narrowly lanceolate, subequal, 0.75 - 1 mm wide, minutely ciliolate; corolla red, 45 - 55 mm long, papillate, tube subcylindric, erect and slightly curved, 25 - 30 mm long, 2 mm wide at base, narrowed at 5 mm above base to 1 mm, thence gradually enlarged to 5 mm at mouth, the upper lip erect, 18 - 20 × 6 mm,



minutely bilobed, the lobes 0.25 mm long and wide, rounded, the lower lip shortly 3-lobed, the lobes subequal, ovate, the middle lobe $2 \times 1.25 - 2$ mm, the lateral lobes 1.5×1.25 mm, all rounded and cucullate at apex; stamens barely reaching the tip of the upper corolla lip, filaments flat, whitish, anthers superposed, red, 1.5 - 2 mm long, caudate at base, the tails whitish, pollen whitish; **capsule** not seen. Flowering July.

Distribution and habitat: Primary tall lowland rainforest, in part temporarily inundated by creeks; riverside vegetation and small logging areas. This species is known from the type locality and from three other collections.

Paratypes: Peru, Dept. Huánuco, Prov. Pachitea, Dtto. Honoria, Bosque Nacional de Iporia, campamento Miel de Abeya, 300 - 400 m, 19 Jul. 1927, J. Schunke V. 2123 [US]; – Dept. San Martín, Juan Jui, Alto Rio Huallaga, 400 - 800 m, Jan. 1936, G. Klug 4202 [US]; – Dept. San Martín, Prov. Mariscal Cáceres, Dtto. Campanilla, Cochihuañusca, right bank of Río Huallaga, 21 Aug. 1970, J. Schunke V. 4285 [US].

***Justicia wallnoeferi* WASSH., sp.n.** (Fig. 3, 9 C)

Type: Peru, Dept. Huánuco, Prov. Pachitea, from ca. 20 km to 24 km SE of Puerto Inca, crest of the mountain range going west to east from the "Campamento Oro" (9°29' S, 74°50' W) to the "Campamento Sira" (9°28' S, 74°47' W), 670 m; herb of 0.15 - 0.4 m, inflorescence axes, calyces and flower buds green, corolla tube and upper limb light greenish, lower limb lilac, near throat with a reverse v-like design of white stripes, filaments two, greenish, anthers yellow-green, styles whitish-green, stigmata whitish, fruits green, 4-seeded, seeds brown, flat; 31 Jul. 1988, B. Wallnöfer 118-31788 [holotype: W, isotypes: US, USM n.v.].

Diagnosis: Differt a *Justicia yungensis* WASSH. & J.R.I.WOOD foliis ellipticis vel auguste ovatis; inflorescentiis et axillaribus et terminalibus, paniculatis brevioribus 6 - 11 cm longis; bracteis, bracteolis et calycibus dense glanduloso-puberulescentibus; corolla brevior, 11 - 14 mm longa, tubo pallide viridulo et staminibus exsertis.

Perennial herb 0.15 - 4 m; stems at first decumbent and rooting, then erect, gray, scabrous, trichomes in decussate lines, nodes somewhat swollen; **leaves** shortly petiolate, blades 9 - 15 $\times$ 2.8 - 5.5 cm, elliptic to narrowly ovate, glabrous or nearly so on both surfaces, drying a lighter green below, the cystoliths numerous and minute, especially below, apex acute to short acuminate, attenuate at base, thin, membranous, margin entire; petiole 2 - 5 mm long, minutely scabrous; **inflorescence** a narrow, open axillary and terminal panicle 6 - 11 cm long, rachis and branches green, densely glandular-pilose; **flowers** in opposite pairs but on each pair not fully developed; bracts triangular to subulate, ca. 2 mm long, densely glandular-pilose; bracteoles linear, ca. 1 mm long, very shortly puberulent; calyx green, 2 - 3 mm long, very shortly glandular-puberulent, subequally 5-lobed, lobes narrowly linear-lanceolate; corolla pubescent without, 11 - 15 mm long, tube light greenish, cylindrical 7 - 8 $\times$ 1 - 1.2 mm, slightly widened at mouth, lower lip ca. 5 mm long, lilac, near throat with a reverse v-like design of white stripes,

Fig. 2: A - E: *Lepidagathis ipariaensis* WASSH. (from J. Schunke V. 2866). A: habit; B: portion of inflorescence; C: bract and bracteoles; D: calyx lobes and pistil; E: corolla, anther thecae and pistil. – F - J: *Justicia siraensis* WASSH. (from J. Schunke V. 2123). F: habit; G: bracteoles and calyx segments; H: bract; I: enlargement of bract indumentum; J: corolla.

3-lobed, the lobes subequal, upper lip ca. 6 mm long, light greenish, hooded, minutely notched; stamens exerted ca. 6 mm beyond mouth of corolla tube, filaments greenish, anther thecae yellow-green, parallel to one another, ca. 1 mm long, dorsally pubescent; style and stigma whitish; **capsule** green, 15 mm long, oblong, slightly swollen around the seeds and with a long basal stipe, glandular-puberulent, 4-seeded; seeds lenticular, brown, flat, 2.5 - 3 mm long and wide, papillose. Flowering July.

Distribution and habitat: Primary mountain rainforest, having some species and features of the lowland rainforest. Elevation 480 - 670 m. Species is known from the type locality and two other collections.

Paratypes: Peru, Dept. San Martín, Prov. Mariscal Cáceres, Dto. Campanilla, Río Sión, SE of Caserío de Sión, 2 Oct. 1969, J. Schunke V. 3464 [US]; – San Martín, Prov. Mariscal Cáceres, Dto. Tocache Nuevo, Quebrada de Challuayacu, 480 - 500 m, 1 Feb. 1979, J. Schunke V. 10743 [US].

Justicia sp. [det. Wasshausen 1982; this collection added here by B. Wallnöfer]

Peru, Dept. Huánuco, Prov. Pachitea, "at Camp 2, ca. 860 m" [= between "Campamento Sira" (9°28' S, 74°47' W) and the Campamento "Pato Rojo" (9°27' S, 74°46' W), ca. 24 km SE of Puerto Inca], 7 Jul. 1969, F. Wolfe 12260 [F n.v., NA, USM n.v.].

Lepidagathis ipariaensis WASSH., sp.n. (Fig. 2, A - E)

Type: Peru, Huánuco, Prov. Pachitea, Dto. Puerto Inca, Bosque Nacional de Iparia, along Río Pachitea, in open campo, 8 km from Puerto Inca, 500 - 600 m, 12 Dec. 1968, J. Schunke V. 2866 [holotype: US, isotype: F].

Diagnosis: Differt a *Lepidagathis lanceolata* (NEES) WASSH. staminibus 2; foliis ellipticis vel obovatis; corolla longiora, 8 - 10 mm longa et bracteis viridibus late lanceolatis.

Erect to decumbent herb, 5 - 35 cm; stems subquadrangular, densely and retrorsely puberulous, trichomes sordid, appressed to 1 mm long; **leaves** shortly-petiolate, 6 - 8 × 2.5 - 3.5 cm, elliptic to obovate, glabrous above, minutely pubescent on mid and lateral veins below, greenish-white, drying a lighter green below, cystoliths numerous and rather inconspicuous under a lens, apex acute to short-acuminate, attenuate at base, firm, margin entire or shallowly crenulate; petioles 2 - 5 mm long; densely appressed puberulous; leaves subtending inflorescence reduced, narrower than cauline leaves; **inflorescence** consisting of 1 - 3 terminal, ascending, sessile to short-pedunculate, decussate spikes 3 - 6 cm long and 0.8 - 1 cm wide; densely flowered, peduncles 7 - 10 mm long, densely puberulous, trichomes sordid, appressed-ascending, rachis not or hardly visible, densely puberulous, cymes usually 3-flowered, sessile; bracts subtending flowers green, broadly lanceolate, 6 - 6.5 × 1.2 mm, apically acuminate, distinctly 3-ribbed or -veined, sparingly puberulous, trichomes both glandular and eglandular, margin entire, ciliolate; bracteoles linear, 8 × 0.3 mm, pubescent with both glandular and eglandular trichomes, margin ciliolate; **flowers** subsessile, borne opposite or subopposite; calyx green, 8 - 10 mm long, deeply segmented, segments 5, anterior segments and posterior segment lanceolate, 8 - 8.5 × 1.5 mm, all narrowed to a slender tip, delicately 3-nerved, lateral segments reduced, linear, 6 - 7 × 0.5 mm, with 1 longitudinal vein, surface of all segments hirtellous, trichomes ascending, inner surface glabrous, corolla white or pale violet, pale yel-

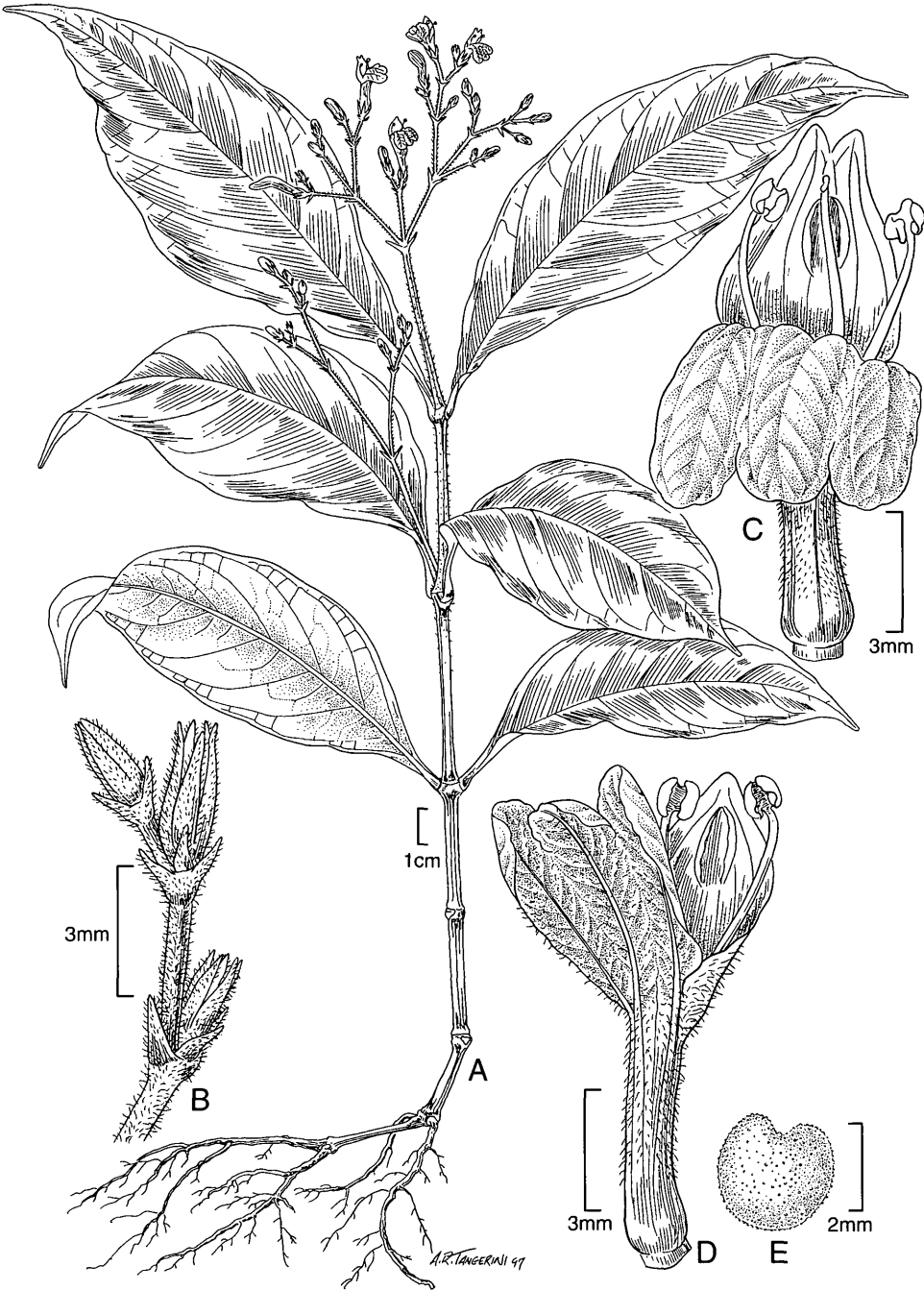


Fig. 3: *Justicia wallnoeferi* WASSH. (from B. Wallnöfer 118-31788). A: habit; B: portion of inflorescence; C: corolla, stamens and pistil; D: corolla and stamens; E: seed.

low in bud, 8 - 10 mm long, strongly bilabiate, glabrous except upper and lower lip, these minutely and sparingly puberulous both within and without, $\pm$ spreading, tube 8 mm long, 1 mm broad at base, slightly narrowed at 3 mm above base and gradually enlarged to 2.5 mm at throat, upper lip erect, 3×3 mm, minutely bilobed at tip, lower lip $\pm$ spreading, 3-lobed, about 3×3.5 mm, lobes 1.75×1.5 mm; stamens 2, barely reaching tip of upper corolla lip, filaments flat, another thecae parallel, 1.5 mm long, unappendaged at base; style 8 - 8.5 mm long, exceeding stamens; **capsule** not seen. Flowering May to December.

Distribution and habitat: Found in a region called "bosque seco tropical", at elevations between 135 and 650 meters.

Paratypes: Peru, Dept. Loreto, Santa Rosa, lower Río Huallaga below Yurimaguas, 1 - 5 Sep. 1929, E. P. Killip & A. C. Smith 28874 [US]; – San Martin, Prov. Mariscal Cáceres, Dtto. Tocache Nuevo, Quebrada de Huaquisha (right bank of Río Huallaga), 17 May 1970, J. Schunke V. 3982 [F, US]; – Quebrada de Almendras (right bank of Río Huallaga), 28 Sep. 1970, J. Schunke V. 4464 [F, US]; – Quebrada de Cañuto, vicinity of Chacra del Sr. Victor Acévoló, 500 m, 10 Aug. 1980, J. Schunke V. 12117 [US]; – 520 m, 4 Jan. 1979, J. Schunke V. 10668 [MO, US]; – 600 - 650 m, 2 Nov. 1975, J. Schunke V. 8652 [US]; – San Martin, Prov. Mariscal Cáceres, Dtto. Campanilla, Murga (left side of Río Huallaga) to the west, 16 Jul. 1970, J. Schunke V. 4124 [F, US].

Mendoncia aspera (RUIZ & PAV.) NEES

Peru, Huánuco, Prov. Pachitea, primary mountain rain forest, from ca. 20 - 24 km SE of Puerto Inca, crest of the mountain range going west to east from the "Campamento Oro" ($9^{\circ}29'$ S, $74^{\circ}50'$ W) to the "Campamento Sira" ($9^{\circ}28'$ S, $74^{\circ}47'$ W) and continuing to NNE to the beginning of the cloud forest at 1050 m, next to the Campamento "Pato Rojo" ($9^{\circ}27'$ S, $74^{\circ}46'$ W), 800 m; liana to 6 m, bracteoles green, corolla carmine-red, unripe fruits green; 27 Jun. 1988, B. Wallnöfer 13-27688 [US, USM n.v., W]; – same locality: liana climbing to 20 m, drupe blackish-violet with green bracteoles; 26 Aug. 1988, W. Morawetz & B. Wallnöfer 17-26888 [US, USM n.v., W].

Mendoncia hoffmannseggiana NEES

Peru, Huánuco, Prov. Pachitea, primary cloud forest covered with many mosses, lichens, ferns and vascular epiphytes, ca. 24 km SE to ca. 26 ESE of Puerto Inca, from the beginning of the mountain rain forest next to the "Campamento Pato Rojo" ($9^{\circ}27'$ S, $74^{\circ}46'$ W) along the mountain crest to the beginning of the elfin forest after the "Campamento Peligroso", 1400 m; liana with red flowers, filaments white, anthers beige, drupes greenish-black, red tinged, fruit pulp gelatinous, transparent and whitish, seeds covered with a black-violet partially separable tissue, growing in an area devastated by large wind gaps; 26 Mar. 1988, B. Wallnöfer 17-26388 [US, USM n.v., W]; – same area, "Camp 4, ca. 1565 m", 28 Jul. 1969, F. Wolfe 12420 [CONN n.v., NA].

Mendoncia lindavii RUSBY

Peru, Huánuco, Prov. Pachitea, primary mountain rain forest, ca. 24 km SE of Puerto Inca, from the "Campamento Sira" ($9^{\circ}28'$ S, $74^{\circ}47'$ W) SE down the valley of the Río Negro, 500 m; liana with dark red flowers, pollinated by hummingbirds, bracteoles

green, trichomes brown, drupes dark violet; 2 Dec. 1987, B. Wallnöfer & R Fernandez 110-21287 [US, USM n.v., W].

***Pachystachys fosteri* WASSH.**

Peru, Huánuco, Prov. Pachitea, Puerto Inca. 2 - 5 km E of town (9°18' S, 74°57' W), along stream, 250 - 300 m; pole shrub, 2 - 3 m, flowers scarlet; 11 Sep. 1982, R. B. Foster 8686 [MO, US].

***Pachystachys schunkei* WASSH. (Fig. 9 F)**

Peru, Huánuco, Prov. Pachitea, primary tall lowland rain forest, small plots disturbed by local agriculture and logging, hilly country between the field station "Panguana" (9°37' S, 74°56' W) and the casa "Don Victor" (9°34' S, 74°53' W), N of the Río Yuyapichis, vicinity of casa "Don Victor", 300 m; shrub 1 - 2 m, wood friable, calyces green, corolla, filaments and styli red, anthers red-brown, inside gray-green; 14 Jul. 1988, B. Wallnöfer 15-14788 [US, USM n.v., W].

***Pachystachys spicata* (RUIZ & PAV.) WASSH.**

Peru, Dept. Huánuco, Prov. Pachitea, ca. 26 km S of Puerto Inca, next to the junction of the Río Pachitea and Río Yuyapichis, biological field station "Panguana" (9°37' S, 74°56' W), 260 m; shrub 4 m, flowers red; 30 Aug. 1988, G. Gottsberger & J. Döring G14-30888 [USM n.v., W].

***Pulchranthus adenostachyus* (LINDAU) V.M.BAUM, REVEAL & NOWICKE**

Peru, Huánuco, Prov. Pachitea, primary tall lowland rain forest, small plots disturbed by local agriculture and logging, ca. 26 km S to ca. 24 km SSE of Puerto Inca, hilly country between the field station "Panguana" (9°37' S, 74°56' W) and the casa "Don Victor" (9°34' S, 74°53' W), N of the Río Yuyapichis, 260 - 400 m; subshrub 0.3 - 1.5 m, calyces green, with white glands, corolla tube and proximal part of teeth white, distal part of teeth pale lilac-pink-bluish, towards apex of teeth and especially on lower limb with dark lilac dots, lower limb in the middle whitish-yellowish, filaments and styli white, anthers whitish, later on light brown, unripe capsules green; 13 Jul. 1988, B. Wallnöfer 21-13788 [US, USM n.v., W]; – "Casa Koepke, ca. 175 m" [= biological field station "Panguana", ca. 26 km S of Puerto Inca, next to the junction of the Río Pachitea and the Río Yuyapichis (= Lullapichis), 260 m, ca. 9°37' S, 74°56' W], 15 Jul. 1969, T. R. Dudley 12524 [NA].

***Ruellia proxima* LINDAU**

Peru, Huánuco, Prov. Pachitea, primary tall lowland rain forest, in part temporarily inundated by creeks, from ca. 24 km SSE to ca. 20 km SE of Puerto Inca, hilly and plain land along the valley of the Río Yuyapichis between the casa "Don Victor" (9°34' S, 74°53' W) and the "Campamento Oro" (9°29' S, 74°50' W), 300 - 360 m; unbranched, erect herb 0.6 - 1 m, calyces green, partially reddish-brown, corolla yellowish-green, with white trichomes on throat, filaments white, anthers beige, pollen white, styli and stigmata white, ovaries green, with two red, longitudinal, opposed stripes; 5 Jun. 1988, B. Wallnöfer 13-5688 [US, USM n.v., W].

***Ruellia puri* (NEES) MART. ex B.D.JACKS.**

Peru, Huánuco, Prov. Pachitea, primary mountain rain forest, ca. 24 km SE of Puerto Inca, from the "Campamento Sira" (9°28' S, 74°47' W) SE down the valley of the Río Negro, 500 m; herb 0.3 - 1 m, calyces light green, later on with spreading teeth, corolla lilac, tube sordid brown-lilac, at base white, styli white; 21 Apr. 1988, B. Wallnöfer 16-21488 [US, USM n.v., W].

***Ruellia siraensis* WASSH., sp.n. (Fig. 4)**

Type: Peru, Dept. Huánuco, Prov. Pachitea, ca. 26 km S to ca. 24 km SSE of Puerto Inca, hilly country between the field station "Panguana" (9°37' S, 74°56' W) and the casa "Don Victor" (9°34' S, 74°53' W), N of the Río Yuyapichis, 260 - 400 m, 23 Aug. 1988, G. Gottsberger & J. Döring G19-23888 [holotype: W, isotype: USM n.v.].

Diagnosis: Differt a *Ruellia dolichosiphon* WASSH. & J.R.I.WOOD foliis majoribus 20 - 23 cm longis, 5 - 5.5 cm latis, oblongis vel ellipticis; lobis calycis lineari-lanceolatis, 23 - 27 mm longis, 1.5 - 2 mm latis et corolla majore, 53 - 60 mm longa, atrococcinea, tubo extus subglabro.

Herb, 0.6 - 1 m tall; stem terete, densely white-pilose, the trichomes erect, 2 - 3 mm long; **leaves** long-petiolate, blades 20 - 33 × 5 - 5.5 cm, oblong to elliptic, acute to acuminate, base gradually narrowed and then attenuate onto the petiole, glabrous both above and below, cystoliths small, obscure, margin slightly undulate, both surfaces provided with reticulate veinlets; petiole terete, 2 - 2.5 cm long, glabrous; **inflorescence** terminating main branch, consisting of short, terminal and axillary racemes; pedicels 4 - 8 mm long, glandular pilose; bracts at base of pedicle 5 - 7 × 1 - 1.5 mm, subulate to oblong, rounded, glabrous to sparingly puberulous; bracteoles 9 - 10 × 2.8 - 3.3 mm, narrowly spatulate or oblanceolate, rounded or weakly acute at apex, sparingly pilose; **flowers** regular; calyx much longer than the bracts, subequally 5-lobed to just above the base, lobes green, 23 - 27 × 1.5 - 2 mm, linear-lanceolate, acute, one slightly larger than the others, densely pilose especially on margin and midrib, a few trichomes noticeably larger than the others; corolla funnel-shaped, the tube glabrous, slightly curved, 53 - 60 mm long, 2.5 - 3.5 mm wide at base, then slightly narrowed to 2 mm after ca. 4 mm, before widening gradually to 10 mm at mouth, carmine-red, the tube whitish, partially light brownish, the lobes 20 × 14 - 16 mm, broadly ovate, acute, subglabrous without; stamens exserted ca. 10 mm above mouth of corolla; filaments 12 and 6.5 mm long respectively, glabrous; anthers 4 - 4.5 mm long, glabrous; style 55 mm long, pubescent; ovary puberulous; **capsule** 18 - 20 mm long, 5 - 7 mm wide, narrowly obovoid, minutely glandular puberulous; seeds lenticular, ca. 4 mm long and wide, flattened, tomentose, the margins white. Flowering June, July, September.

Distribution and habitat: Primary forest on un-inundated outcrops and low hills and small ravines, 250 - 400 m elevation. Closely allied in a complex with two other species, *Ruellia glischrocalyx* LINDAU from Peru and *R. dolichosiphon* WASSH. & J.R.I.WOOD from Bolivia. All are distinguished by their densely white-pilose indumentum, their much longer than the bracts and bracteoles calyx segments and their long, funnel-shaped corollas.

Paratypes: Peru, Dept. Huánuco, Prov. Pachitea, Sira mountains and adjacent lowland, from ca. 24 km SSE to ca. 20 km SE of Puerto Inca, between the casa "Don Victor"



Fig. 4: *Ruellia siraensis* WASSH. (from B. Wallnöfer 18-5688). A: habit; B: bracteoles and calyx lobes; C: corolla; D: corolla expanded; E: calyx lobes, capsule and seeds.

(9°34' S, 74°53' W) and the "Campamento Oro" (9°29' S, 74°50' W), 300 - 360 m; herb of 0.6 - 1 m, calyces green, with white trichomes, corolla carmine-red, tube whitish, partially light brownish; 5 Jun. 1988, B. Wallnöfer 18-5688 [US, USM n.v., W]; – Dept. Pasco, Oxapampa, Pichis Valley near Paiyil, 10 km down river from Puerto Bermúdez, E side of river across from big bend with large island, 10°15' S, 74°55' W, 300 m, 23 Sep. 1982, R. Foster 8872 [US]; – Dept. Ucayali, Prov. de Purus, Distrito Purus, Río Curanja, vicinity of Columbiana, 10°04' S, 71°06' W, 325 m, 14 Jul. 1998, J. Graham 578 [US].

***Ruellia tarapotana* LINDAU**

Peru, Huánuco, Prov. Pachitea, primary mountain rain forest, ca. 20 - 24 km SE of Puerto Inca, crest of the mountain range going west to east from the "Campamento Oro" (9°29' S, 74°50' W) to the "Campamento Sira" (9°28' S, 74°47' W), 520 m; subshrub 0.3 - 0.8 m, stems prostrate-ascending, forming stilt roots and lateral shoots, calyces light green, corolla blue, styles later on brownish; 31 Jul. 1988, B. Wallnöfer 14-31788 [US, USM n.v., W]; – southwestern slope of the Río Llulla Pichis [= Yuyapichis] watershed, on the ascent of Cerros del Sira (9°35' S, 74°51' W), Camp I (Huangana), ca. 250 m, 21 Jun. 1969, F. Wolfe 12127 [F n.v., NA, USM n.v.].

***Sanchezia fosteri* WASSH., sp.n. (Fig. 5)**

Type: Peru, Dept. Huánuco, Prov. Pachitea, Puerto Inca. 2 - 5 km E of town, (9°18' S, 74°57' W), 250 - 300 m, 11 Sep. 1982, R. B. Foster 8695 [holotype: US].

Diagnosis: Ab affini *Sanchezia xantha* LEONARD & L.B.SM. superiori numero florum 5 - 8, aggregatis in bractearum externis axillis; corolla scarlatina vel rubro-aurantiaca, breviora, 35 - 40 mm longa, lobis apicalibus inaequaliter emarginatis et staminibus inclusis sub anthesi distincta.

Herb or shrub 1 - 2 m; younger stems terete or subquadrangular, minutely puberulous, older stems terete, glabrate, inconspicuously lenticellate; **leaves** long-petiolate; blades large, elliptic to narrowly obovate, 35 - 42 × 14 - 15 cm, glabrous and minutely mucronate or both surfaces, lighter green, apex acuminate, base obtuse, margin undulate, inconspicuously crenulate; petioles 5 - 6 cm long, glabrous, canaliculate; **inflorescence** spicate, the flowers 5 - 8, sessile, crowded in the axils of the bracts and forming fascicles 1.5 - 2 cm in diam., peduncles green, 5 cm long, internodes short, 1 - 2 cm long; bracts free to base, broadly ovate, shorter than the calyx lobes, 10 - 14 × 10 - 11 mm, red to orange, apically obtuse to retuse, abaxial surface glabrous and densely verrucose, margin ciliolate; bracteoles and secondary bracteoles narrowly elliptic to elliptic to obovate-elliptic, 8 - 12 × 4 - 6 mm; **flowers** regular; calyx red, 9 - 12 mm long, lobes broadly elliptic to narrowly ovate, equal in length, 3 - 5 mm wide, apically retuse to rounded, abaxially glabrous; corolla scarlet to orange-red, 35 - 40 mm long, externally glabrous, tube yellowish within, 30 - 38 mm long, smooth not banded, 2.5 mm wide at base, slightly curved and gradually expanded to 5 mm at throat, limb 5 - 6 mm in diam., lobes 2 - 2.5 × 2.5 - 3 mm, erect, apically unequally emarginate; stamens pale yellow, 35 - 37 mm long, included, filaments apically geniculate, villous, anthers 5 - 5.5 mm long, basal appendages pointed, to 1 mm long, pubescent; staminodes equal, 10 mm long included in corolla tube; ovary glabrous, nitid, style whitish-yellow, apically orange, 50 - 55 mm

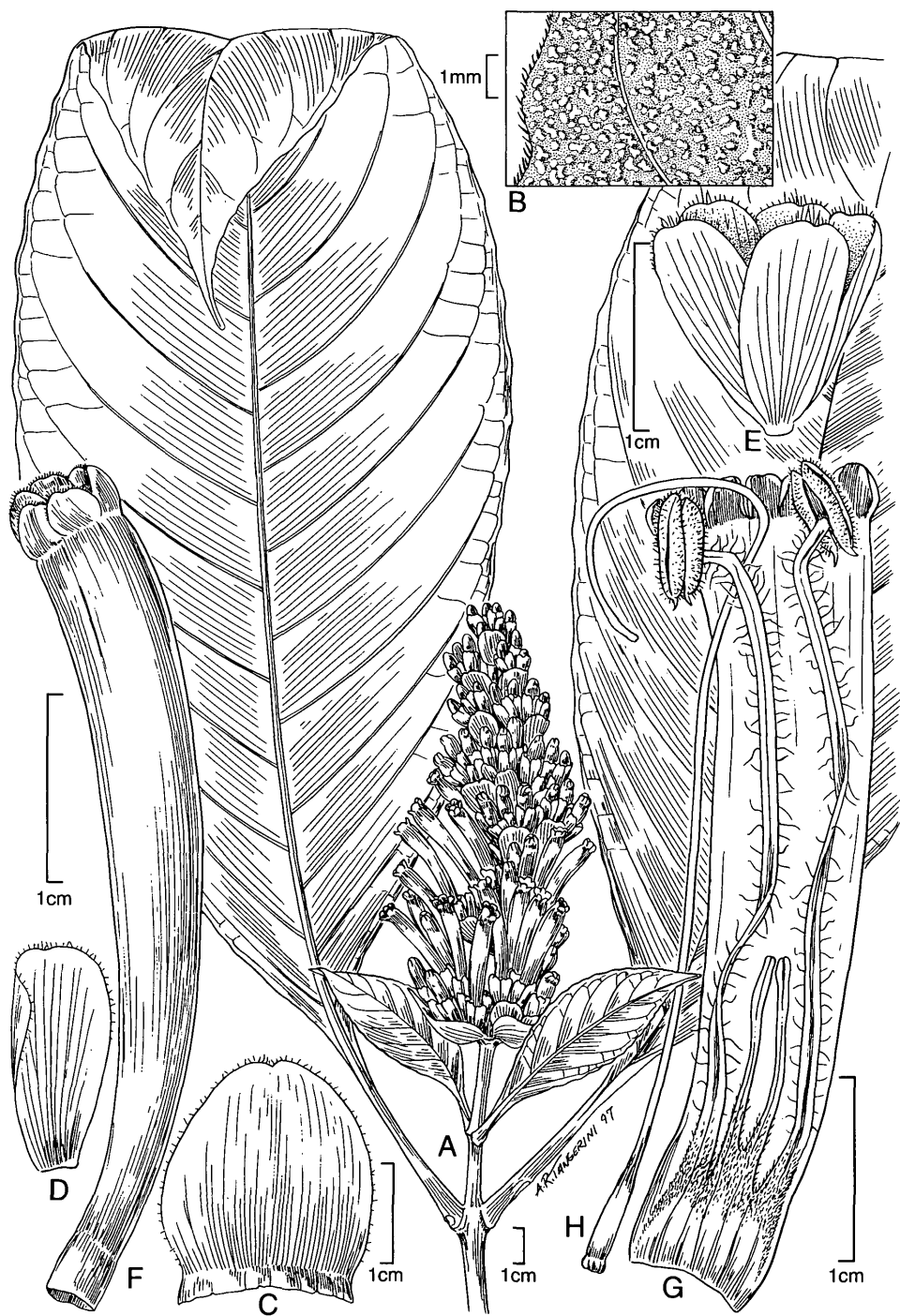


Fig. 5: *Sanchezia fosteri* WASSH. (from R. Foster 8695). A: habit; B: enlargement of leaf indumentum; C: bract; D: bracteole; E: calyx lobes; F: corolla; G: corolla expanded.

long, glabrous included and recoiled, stigma often recoiled, upper lobe 2.5 - 3 mm long, lower lobe 0.2 - 0.5 mm long; **capsule** not seen. Flowering September.

Distribution and habitat: found in primary rainforest along trails in vicinity of rivers, 250 - 300 m in elevation.

Epithet: This species is dedicated to Robin B. Foster of the Field Museum of Natural History for his outstanding tireless fieldwork contributing to our knowledge of taxonomic botany.

Paratype: Peru, Huánuco, Prov. Pachitea, SE of Pucallpa, primary rainforest in a distance of 10 - 2000 m from the Río Yuyapichis, next to the junction of the Río Pachitea and the Río Yuyapichis, village of Panguana and surroundings, (9°37' S, 74°56' W), ca. 260 m; shrub 2 m, main inflorescence axes green, bracts red to orange, partially greenish, calyces red, corolla orange-red, tube yellowish within, filaments and anthers whitish-yellow, styles whitish-yellow, towards apex orange, pollinated by hummingbirds; 29 Sep. 1985, W. Morawetz & B. Wallnöfer 17-29985 [US, USM n.v., W].

Sanchezia oblonga RUIZ & PAV.

Peru, Huánuco, Prov. Pachitea, primary mountain forest, ca. 24 km SE of Puerto Inca, from the "Campamento Sira" (9°28' S, 74°47' W) SE down the valley of the Río Negro, 650 - 800 m; shrub 2.5 m, inflorescence axes reddish-brown, bracts red, the covered bracts and calyces in the dense inflorescence yellow, exposed calyces light red, corolla orange; 16 Mar. 1988, B. Wallnöfer & M. Henzel 111-16388 [US, USM n.v., W].

Sanchezia rubriflora LEONARD

Peru, Huánuco, Prov. Pachitea, primary tall lowland rain forest, small plots disturbed by local agriculture and logging, ca. 26 km S to ca. 24 km SSE of Puerto Inca, hilly country between the field station "Panguana" (9°37' S, 74°56' W) and the casa "Don Victor" (9°34' S, 74°53' W), N of the Río Yuyapichis, 260 - 400 m; plant 1 m tall, woody at base, flowers orange-red; 23 Aug. 1988, G. Gottsberger & J. Döring G16-23888 [USM n.v., W].

Sanchezia scandens (LINDAU) LEONARD (Fig. 9 E)

Peru, Huánuco, Prov. Pachitea, SE of Pucallpa, next to the junction of the Río Pachitea and the Río Yuyapichis, primary rain forest a distance of 10 - 2000 m from the river Yuyapichis, Panguana (9°37' S, 74°56' W), ca. 260 m; treelet 5 m, flowers carmine-red; 26 Sep. 1985, W. Morawetz & B. Wallnöfer 117-26985 [US, USM n.v., W]; – same area: primary tall lowland rain forest, in part temporarily inundated by creeks, from ca. 24 km SSE to ca. 20 km SE of Puerto Inca, hilly and plain land along the valley of the Río Yuyapichis between the casa "Don Victor" (9°34' S, 74°53' W) and the "Campamento Oro" (9°29' S, 74°50' W), ca. 300 m; treelet 5 m, DBH ca. 7 cm, inflorescence axes green, calyces and bracts green, reddish tinged, corolla light carmine-red, filaments light brown, 4, 2 of them short and without anthers, with white trichomes, anthers yellowish, connectives reddish, styles below light brown, above reddish, ovaries and receptacles whitish-light green; 8 Aug. 1988, W. Morawetz & B. Wallnöfer 17-8888 [US, USM n.v., W].

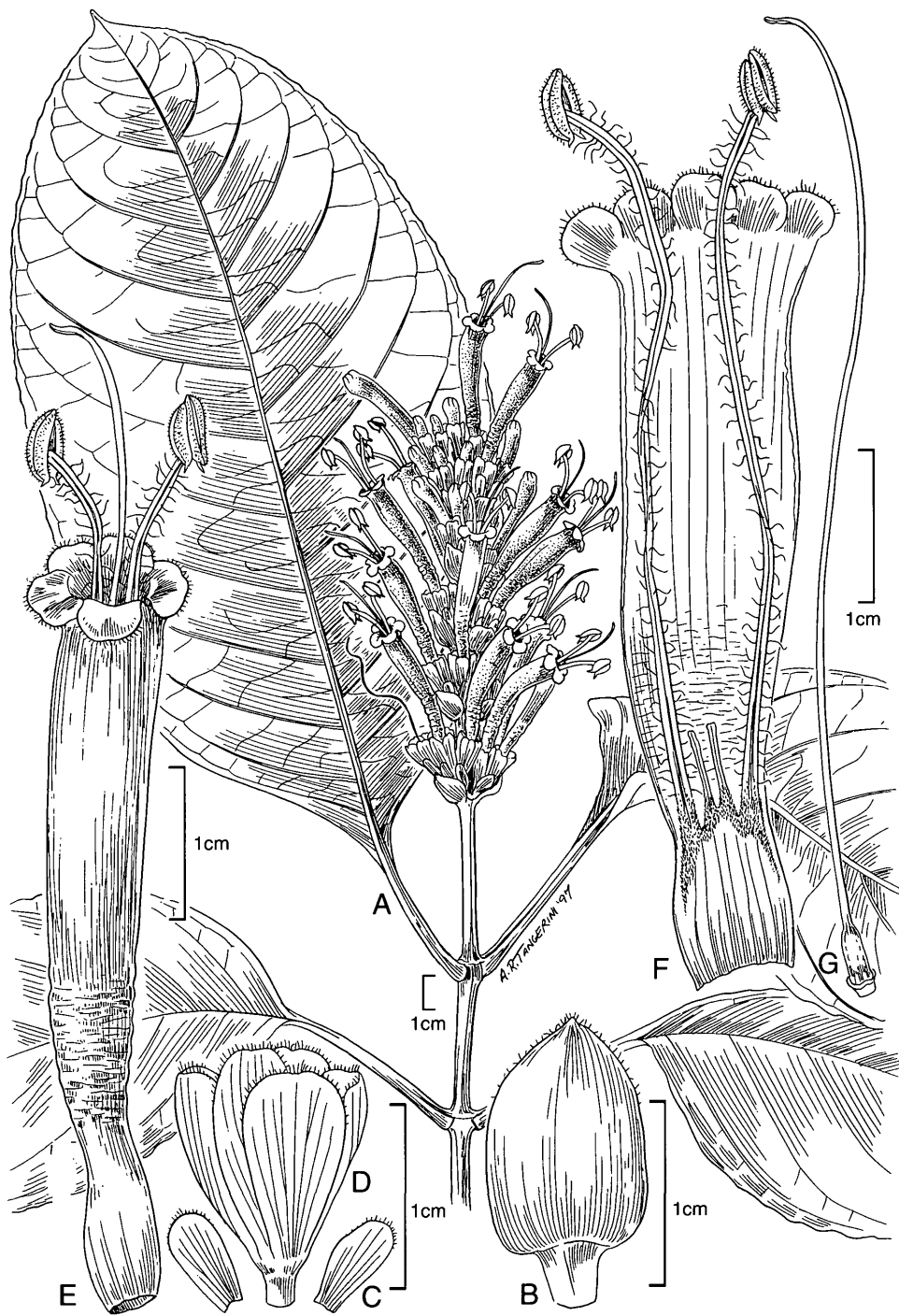


Fig. 6: *Sanchezia siraensis* WASSH. (from F. Wolfe 12201). A: habit; B: bract; C: bracteole; D: secondary bracteole and calyx lobes; E: corolla, stamens and pistil; F: corolla expanded; G: pistil.

***Sanchezia siraensis* WASSH., sp.n. (Fig. 6)**

Type: Peru, Dept. Huánuco, Prov. Pachitea, SW slope of the Río Llulla Pichis [= Yuyapichis] watershed, on the ascend of Cerros del Sira (9°35' S, 74°51' W), Camp I (Huangana), ca. 250 m, 27 Jun. 1969, F. Wolfe 12201 [holotype: NA].

Diagnosis: Differt a *Sanchezia fosteri* WASSH. floribus minoribus, 3 - 4 aggregatis, in bractearum axilis, corolla aurantiaca vel cerina et foliis ad apicem rotundis vel laeve lobatis.

Ascending herb 30 - 60 cm; stem subquadrangular, glabrous, older portions conspicuously suberous; **leaves** long-petiolate; blades large, elliptic to narrowly obovate, 25 - 28 × 14 - 17 cm, glabrous and verrucose on both surfaces with the upper drying darker green, cystoliths conspicuous under a lens on lower surface, apex rounded, tip minutely lobed, base obtuse, margin undulate, crenulate; petioles, 5 - 6 cm long, glabrous, canaliculate; **inflorescence** spicate, the flowers 3 - 4, sessile, crowded in the axils of the bracts and forming fascicles 1 cm in diam.; bracts free to base, ovate, shorter than the calyx lobes, 8 - 11 × 6 - 8 mm, apically acute to obtuse, abaxial surface glabrous and densely verrucose, margin ciliolate; bracteoles and secondary bracteoles narrowly elliptic to elliptic, 5 - 6 × 2 - 2.3 mm; **flowers** regular; calyx deep pink to red, 9 - 12 mm long, lobes broadly elliptic to narrowly obovate, subequal in length, 3.5 - 5.5 mm wide, apically rounded to slightly retuse, abaxially glabrous; corolla orange to waxy yellow, 40 - 45 mm long (excluding stamens), externally glabrous, tube 38 - 43 mm long, distinctly banded and expanded at 10 - 15 mm above base into a ± distinct throat 30 - 35 mm long, limb 8 - 9 mm in diam., lobes 2 - 3 × 2 - 4 mm, recoiled, apically unequally emarginate; stamens 50 - 55 mm long, exserted 15 - 20 mm beyond mouth of corolla, filaments villous, anthers 4 - 5 mm long, basal appendages, pointed, to 1 mm long, pubescent; staminodes equal, 6 - 7 mm long, included in corolla tube; ovary glabrous, nitid, style 65 - 70 mm long, glabrous, stigma curved, upper lobe 2 mm long, lower lobe 0.2 - 0.5 mm long; **capsule** not seen. Flowering June.

Distribution and habitat: Found in mature, dense lowland rainforest at 250 meters in elevation. This new species is known only from the type locality and one other collection (F. Wolfe 12126).

Paratype: Peru, Dept. Huánuco, Prov. Pachitea, SW slope of the Río Llulla Pichis [= Yuyapichis] watershed, on the ascend of Cerros del Sira, (9°35' S, 74°51' W), Camp I (Huangana) ca. 250 m, 21 Jun. 1969, F. Wolfe 12126 [NA].

***Sanchezia stenantha* LEONARD**

Peru, Huánuco, Prov. Pachitea, southwestern slope of the Río Llulla Pichis [= Yuyapichis] watershed, on the ascent of Cerros del Sira (9°35' S, 74°51' W), Camp I (Huangana), ca. 250 m, 26 Jun. 1969, F. Wolfe 12197 [NA].

***Stenostephanus wallnoeferi* WASSH., sp.n. (Figs. 7, 9 A)**

Type: Peru, Dept. Huánuco, Prov. Pachitea, ca. 24 km SE of Puerto Inca from the "Campamento Sira" (9°28' S, 74°47' W) SE down to the valley of the Río Negro, 650 - 800 m; shrub of 2.5 m, midrip on lower leaf surfaces reddish, inflorescence axes and

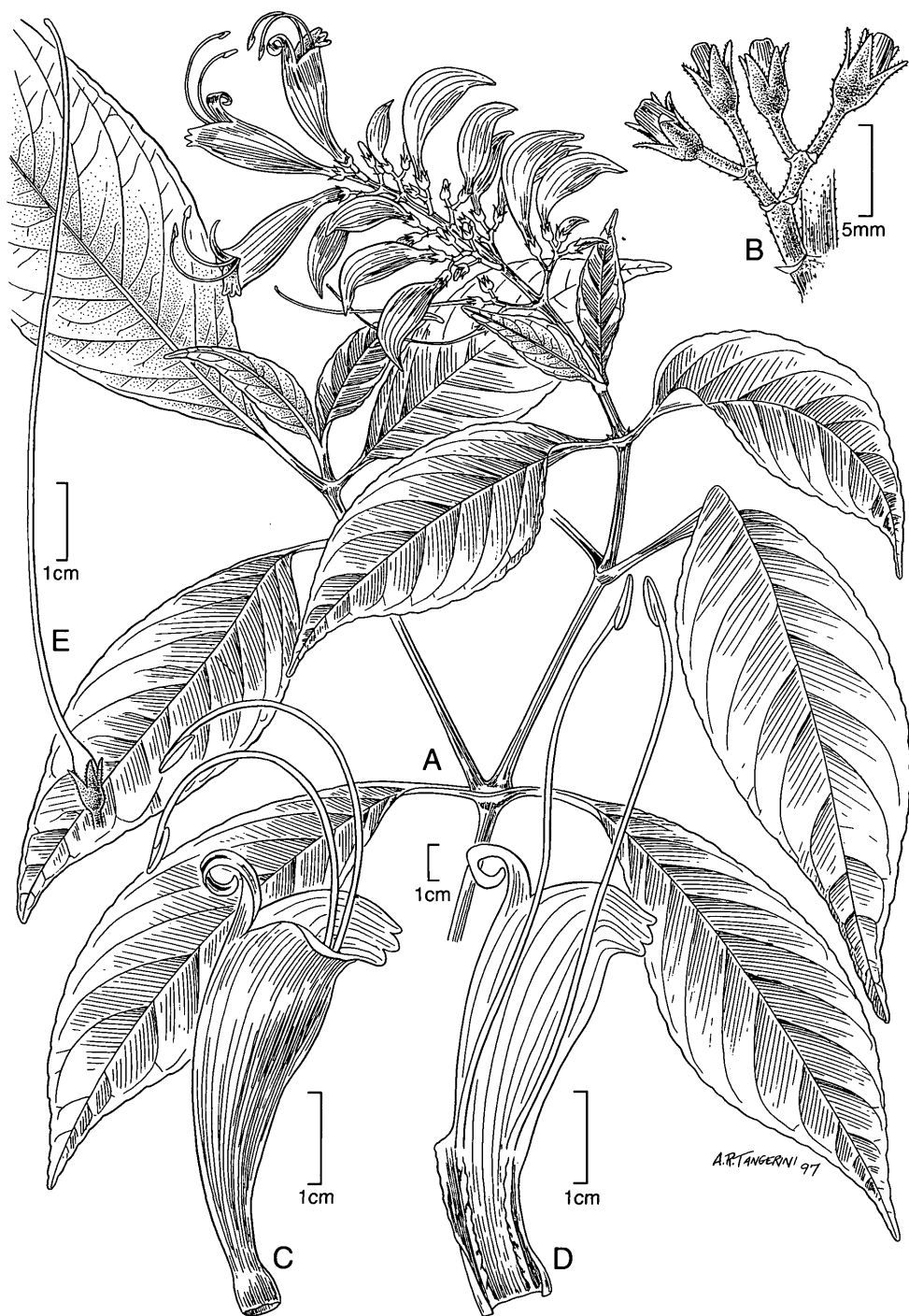


Fig. 7: *Stenostephanus wallnoeferi* WASSH. (from B. Wallnöfer & M. Henzel 110-16388). A: habit; B: thyrse with bracts; C: corolla; D: corolla expanded; E: pistil.

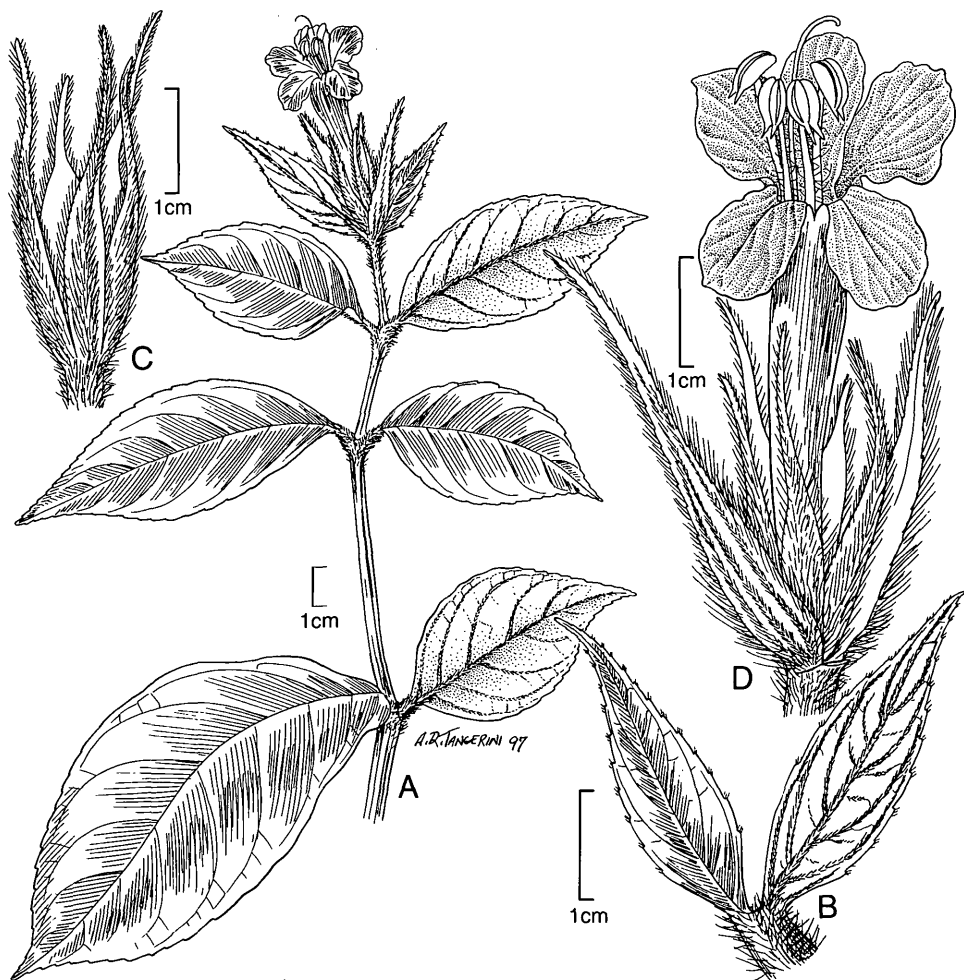


Fig. 8: *Suessenguthia wallnoeferi* WASSH. (from B. Wallnöfer 12-30588). A: habit; B: outer bracts; C: calyx segments; D: bracteoles (inner bracts), calyx lobes and corolla.

calyces reddish-brown, corolla and other floral organs red; 16 Mar. 1988, B. Wallnöfer & M. Henzel 110-16388 [holotype: W, isotypes: US, USM n.v.].

Diagnosis: Ab affini *Stenostephano thyrsoidei* LINDAU foliis parvis 12 - 20 cm longis, 4 - 7 cm latis, ellipticis vel anguste oblongis; corolla magna, rubra, tubo 35 - 38 mm longo et rhachidi, pedunculis, pedicellis et calyce rubro-castaneo distincta.

Shrub 2 - 4 m; younger stems terete or subquadrate, glabrate; **leaves** petiolate; blades elliptic to narrowly ovate, 12 - 20 × 4 - 7 cm, often somewhat anisophyllous at node, glabrous or nearly so on both surfaces, drying a lighter green below, midrib of lower leaf surface reddish, apex acuminate, tip blunt, base attenuate, margin entire to crenulate; petioles 7 - 40 mm long, glabrous, canaliculate; leaves subtending the inflorescence reduced, more ovate, basally rounded and sessile; **inflorescence** a terminal pedunculate



Fig. 9: A: *Stenostephanus wallnoeferi* WASSH. (B. Wallnöfer & M. Henzel 110-16388); B: *Suessenguthia wallnoeferi* WASSH. (B. Wallnöfer 12-30588); C: *Justicia wallnoeferi* WASSH. (B. Wallnöfer 118-31788); D: *Justicia siraensis* WASSH. (B. Wallnöfer 14-15788); E: *Sanchezia scandens* (LINDAU) LEONARD (W. Morawetz & B. Wallnöfer 17-8888); F: *Pachystachys schunkei* WASSH. (B. Wallnöfer 15-14788); – photos: B. Wallnöfer.

thyse to 100 mm long, peduncles to 25 mm long, rachis quadrate-flattened, reddish-brown bifariously to $\pm$ evenly puberulent; dichasia opposite, expanded, 1 - 3-flowered, pedunculate, peduncles 409 mm long, reddish-brown pubescent like rachis; bracts subulate, 2.5×0.75 mm acute at apex, abaxial surface glabrous or puberulent; bracteoles and secondary bracteoles triangular to subulate, $0.75 - 1 \times 0.5 - 1$ mm, abaxial surface glabrous or puberulent; **flowers** strongly bilabiate, pedicellate, pedicels 2.5 - 3 mm long, reddish-brown, pubescent like rachis, lateral flowers borne on secondary peduncles 3 mm long; calyx 3 - 4 mm long, reddish-brown, abaxially glabrous or minutely glandular-puberulent, lobes lance-subulate, $2.5 - 3 \times 1$ mm; corolla falcate to fusiform in bud, red, 40 - 45 mm long (excluding stamens), externally glabrous, tube 35 - 38 mm long, basally cylindrical, 3.5 mm in diam. at base, narrowed to 2 mm at 5 - 6 mm above base, then becoming inflated and suboblique, lacking a well-defined throat, 9 - 10 mm in diam. at throat, upper lip recurved and recoiled, linear, $8 - 10 \times 2 - 2.5$ mm, lower lip broad, triangular-ovate, $16 - 18 \times 8 - 10$ mm, 3-lobed at tip, the lobes ca. 0.25×0.5 mm; stamens exserted 20 - 22 mm beyond the mouth of the corolla tube; anthers linear-oblong, 4 - 4.5 mm long and 3 - 3.5 mm broad, minutely apiculate at base; ovary glabrous; style to 80 mm long, exserted, glabrous, the stigma minute; **capsule** not seen. Flowering March.

Distribution and habitat: Riverside vegetation, primary mountain rainforest, having some species and features of the lowland rainforest. Elevation 650 - 800 meters. Species is known only from the type locality.

***Suessenguthia wallnoeferi* WASSH., sp.n.** (Figs. 8, 9 B)

Type: Peru, Dept. Huánuco, Prov. Pachitea, from ca. 24 km SSE to ca. 20 km SE of Puerto Inca, between casa "Don Victor" ($9^{\circ}34'$ S, $74^{\circ}53'$ W) and the "Campamento Oro" ($9^{\circ}29'$ S, $74^{\circ}50'$ W), 300 - 360 m; tree 7 m, DBH 6 cm, trunk and branches with swollen nodes like *Piper*, branches mostly zigzag and dichotomous, calyces green, with brown trichomes, corolla red, basally white-brownish, filaments beige-brownish, anthers red-violet, with a lighter border and a whitish appendage, pollen white, styli whitish, ovaries light green, basally surrounded by a white discus-like structure; 30 May 1988, Wallnöfer 12-30588 [holotype: W, isotypes: US, USM n.v.].

Diagnosis: Ab affini *Suessenguthia vargasii* WASSH. bracteis externis foliaceis, 30 - 35 mm longis, 4 - 6 mm latis, lanceolatis, pilosis; corolla rubra, glabrata; bracteis internis anguste lanceolatis, 4 - 6 mm latis, trichomate erecto, brunneo et calycis segmentibus parvis, 15 - 22 longis, 2 - 3 mm latis, pubescentibus cum trichomatibus erectis, brunneis distincta.

Treelet 7 m; trunk and branches with swollen nodes, profusely branching, braches mostly zigzag and dichotomous, younger stems terete or subquadrangular, glabrous, pilose at the nodes, trichomes brownish, 3 mm long; **leaves** short-petiolate; blades oblong to broadly elliptic, $8.5 - 15 \times 3 - 7$ cm, glabrous or nearly so above, sparsely to moderately pubescent below on mid and lateral veins, apex acuminate, base attenuate, margin entire to crenulate; petioles 0.8 - 1.5 cm long, moderately pilose, the trichomes appressed, sordid; leaves subtending the inflorescence usually reduced, narrower, and apically longer acuminate than cauline leaves; **inflorescence** terminating main and lateral braches, flowers borne terminally, solitary or arranged in fascicles of 2 - 3, sessile,

densely brown pubescent; outer bracts foliaceous, lanceolate $30 - 35 \times 4 - 6$ mm, margins entire and supermedially crenulate, ciliate, green, moderately pilose both within and without, especially on midrib, trichomes brownish; bracteoles (inner bracts) $25 - 45 \times 4 - 6$ mm, its widest part below the middle, densely pubescent with erect, brown trichomes, slender-attenuate at apex, rounded to acute at base; **flowers** regular; calyx lobes subequal, $15 - 22 \times 2 - 3$ mm, densely pubescent with erect, brown trichomes; corolla red, tube $35 - 40$ mm long, tubular 4 mm wide at base, whitish brown, 7 mm wide at mouth, glabrous except for a dorsal ring of trichomes at mouth, lobes erect or spreading, $10 - 12 \times 7 - 9$ mm, broadly ovate, emarginate; stamens exserted $10 - 13$ mm beyond the mouth of the corolla tube, filaments beige-brown, pilose, anthers 4 mm long, red-violet, with a lighter border and whitish appendage, puberulous; ovary light green, basally surrounded by a whitish discus-like structure, style whitish, glabrous, exceeding stamens; **capsule** not seen. Flowering May.

Distribution and habitat: Primary tall lowland rainforest, in part temporarily inundated by creeks; riverside vegetation and small logging areas. Elevation $300 - 360$ m meters. Species is known only from the type locality.

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Title page of volume: *Aphelandra aurantiaca* (SCHEIDW.) LINDL. var. *aurantiaca* (Acanthaceae); photographed by B. Wallnöfer in Perú, Sira mountains, May 1988.