

THE MEXICAN AND CENTRAL AMERICAN SPECIES OF *ADELOBOTRYS* (MELASTOMATACEAE)¹

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ABSTRACT

Adelobotrys, a neotropical genus comprising ca. 25 described species, is largely restricted to the Amazon basin and adjacent regions of South America. The Mexican and Central American species represent geographical fringe elements of the genus and show no close similarities to one another. *Adelobotrys panamensis* and *A. jefensis* are described as new and presented in the context of a regional revision with a key, descriptions, brief discussions, illustrations and citation of representative specimens.

Adelobotrys, comprising some 25 described species is one of five merianioid genera currently recorded from tropical regions north of the South American continent. Although centered in the Amazon basin, *Adelobotrys* ranges south to Bolivia, east to Surinam and north through Central America to southern Mexico and Jamaica. The genus has never been the subject of a comprehensive revision but information gleaned from descriptions of new species and regional floristic accounts indicates that *Adelobotrys* is typically a genus of lowland rainforest habitats. Some species grow at elevations as high as 1,000 meters and a few are apparently restricted to the lower elevation montane slopes which are frequently shrouded in mist because of their geographic position and exposure. In this paper I describe two new Panamanian species of local distribution which fall into the latter category. These novelties are described in the context of a regional treatment with a key and descriptions that will readily facilitate identification and comparison of the Mexican and Central American species.

The species considered here represent geographical fringe elements of the genus and for this reason it is not surprising that they show no close similarities to one another. Each appears to have closest affinities with a different group of South American species but a confident assessment of relationships must await critical study of the entire genus.

ADELOBOTRYS DC., Prodr. 3: 127. 1828

Erect shrubs, small trees to 3.5 m, scandent woody vines or hemiepiphytes adhering to tree trunks by adventitious roots. *Internodes* glabrous to variously pubescent, terete or $\pm$ compressed and 2-edged. *Leaves* opposite, decussate or distichous, those of a pair equal to slightly unequal, petiolate or sessile, glabrous or variously beset with malpighiaceous trichomes. *Inflorescence* terminal

¹ I thank Dr. J. J. Wurdack for sharing his knowledge of *Adelobotrys* and particularly for providing critical notes on specimens housed in the U.S. National Herbarium. I am also grateful to the curators of the following herbaria who made their collections available for study: A, BM, BR, C, CR, ENCB, F, FSU, G, GH, K, L, LL, MEXU, MICH, MO, NY, TEX, U, US, WIS. The line drawings by Terry Bell were made possible by a grant from the U.S. National Science Foundation (DEB 76-83040).

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or axillary, multiflowered and paniculate or conspicuously contracted and umbelliform. *Flowers* perigynous; hypanthium free from the ovary but fully enveloping it, cylindric to campanulate or commonly urceolate, terete and smooth or strongly costate in fruit. *Calyx tube* usually well developed and flangelike; calyx lobes broadly ovate to hemispheric or markedly depressed and evident as low, truncate undulations; calyx teeth conspicuous and exceeding the calyx lobes or obsolete. *Petals* 5, free and spreading, obovate, entire, and sometimes obliquely rounded apically. *Stamens* 10, isomorphic to anisomorphic, geniculate; filaments complanate and $\pm$ declined to one side of flower; anthers linear-subulate, often arcuate and terminated by a solitary pore, the connective not prolonged below the thecae but variously modified dorsally into simple and/or bifid spurs and appendages. *Ovary* superior, cylindric to ovoid, glabrous and 5-celled. *Style* usually glabrous and $\pm$ declinate; stigma truncate or punctiform. *Capsule* dry, leathery, loculicidal. *Seeds* narrowly linear-cuneate and winged to caudate at both ends or short-cuneate and conspicuously angled.

Various authors (Gleason, 1932; Macbride, 1941) have distinguished *Adelobotrys* from related genera by its scandent vining habit, vestiture of malpighiaceus hairs, and tailed or winged seeds. These features have served to distinguish species of *Adelobotrys* from prescribed geographic areas, but it would be misleading to invoke only this constellation of characters for a strict characterization of the genus. Some species, for example, attain arborescent dimensions, some are totally glabrous, and yet other species have short cuneiform seeds with no vestige of wings or caudiform ornamentations. Evaluation of generic limits in the tribe Merianieae is much needed and may ultimately lead to an amalgamation of genera that have conventionally been accorded generic status. In this study I recognize *Adelobotrys* as a distinct and useful taxon most readily distinguished from other Mexican and Central American Merianieae by the distinctive inflorescences of either paniced umbels or axillary umbelliform clusters and by the highly modified anther connective consisting of a short acute or bilobed basal spur and an elongate, bifid or simple, ascending dorsal appendage.

KEY TO THE SPECIES OF ADELOBOTRYS OF MEXICO AND CENTRAL AMERICA

- 1a. Shrub or small tree, the young branches flattened and 2-edged; distal internodes, vegetative buds, immature hypanthia, and branchlets of the inflorescence glabrous; principal leaves acute to rarely obtuse basally; inflorescence a congested axillary umbel arising from short branchlets 5–8 mm long 1. *A. panamensis*
- 1b. Scandent vine or hemiepiphyte adhering to tree trunks by adventitious roots, the young branches terete; distal internodes, vegetative buds, immature hypanthia, and branchlets of the inflorescence beset with brown malpighiaceus hairs; principal leaves broadly rounded to cordate or auriculate basally; inflorescence a terminal panicle with the ultimate units consisting of solitary flowers or 2–6(–12)-flowered umbels.
 - 2a. Principal leaves prevailing ovate, elliptic-ovate or subrotund, broadly rounded to cordate basally, (5.6–)7.5–22 cm long and 3–13.5 cm wide; petioles 1.0–3.5(–5.5) cm long; calyx lobes obsolete or consisting of poorly developed truncate undulations; calyx teeth obsolete, if present then mostly minute and inconspicuous or only slightly exceeding the calyx lobes 2. *A. adscendens*
 - 2b. Principal leaves prevailing elliptic to elliptic-ovate, cordate-clasping to auriculate basally, (2.5–)3.0–4.6 cm long and 1.3–2.8 cm wide; petioles (0.1–)0.2–0.3 cm long; calyx lobes well developed, broadly deltoid to hemispheric; calyx teeth conspicuous and markedly exceeding the calyx lobes 3. *A. jefensis*

1. *Adelobotrys panamensis* Almeda, sp. nov.—FIG. 1.

Frutex vel arbuscula ad 2–3.5 m altus, ramis, petiolis, foliis, et pedunculis omnino glabris. Folia in dimensionibus paulo inaequalia in forma isomorphica. Petioli (0.7–)1.5–4.0 cm; lamina 9–26 × 5.5–12.5 cm elliptica vel elliptico-lanceolata, apice acuminato vel cuspidato basi acuta vel obtusa, 5-plinervata nervis primariis interioribus (1.0–)1.5–3.5(–4.5) cm supra basim divergentibus. Inflorescentia axillaris ca. 5–8 mm pedunculata, floribus 10–50(–80) subumbellatim aggregatis, pedicellis (6–)10–25 mm longis. Hypanthium fructiferum (ad torum) 6–7 mm longum; calycis tubus ca. 2 mm longus. Petala asymmetricè obovata apice hebeti-obtusa. Stamina isomorphica glabra; antherarum thecae declinatae subulatae 7.5–8 mm longae, connectivi dente basali 1 mm longo robusto acuto, appendice dorsali 2–3 mm longa. Semina cuneata 0.5–1 mm longa.

Shrub or small tree 2–3.5 m tall. Cauline internodes and distal branchlets ± flattened or compressed and 2-edged, glabrous throughout. Older stems with prominent corky leaf scars, the bark cracking and becoming somewhat corky in age. Leaves of a pair somewhat unequal in size, the larger leaf at each node (11–)14–26 cm long and 7–12.5 cm wide, the smaller leaf 9–19.2 cm long and 5.5–9.5 cm wide; blades chartaceous, glabrous, entire, broadly elliptic, elliptic-lanceolate or rarely varying to oblanceolate, acuminate to cuspidate apically and acute to rarely obtuse basally, 5-plinerved with a network of elevated secondary nerves, the innermost pair of primary nerves diverging from the median nerve (1.0–)1.5–3.5(–4.5) cm above the petiole/laminar junction, the outer pair of primaries diverging at or near the base of the blade; petioles (0.7–)1.5–4.0 cm long. Inflorescence a congested multiflowered, axillary umbel arising from short branchlets 5–8 mm long. Pedicels (6–)10–25 mm long, flexuous and glabrous. Hypanthia (at anthesis) campanulate, glabrous, 3–5 mm long to the torus. Calyx tube ca. 2 mm long, spreading and flangelike; calyx lobes depressed and evident as low, truncate undulations; calyx teeth obsolete. Petals glabrous, reportedly white to pink but drying yellow, obovate, ± obliquely rounded apically, entire, 10–13 mm long and 8–9 mm wide. Stamens isomorphic to anisomorphic; filaments declinate, ligulate, 7–10 mm long and 1 mm wide; anthers geniculate, 7.5–8 mm long, subulate and curved distally, the connective modified at the base on the dorsal side into an erect spur 1 mm long and a rigid acuminate appendage (2–3 mm long) directed ± parallel to the anther thecae. Style glabrous, ± declinate, 8–8.5 mm long; stigma punctiform. Hypanthia (at maturity) campanulate, ecostate and becoming papery or somewhat corky in age, 6–7 mm long to the torus and 6–8 mm wide. Seeds brown, minutely asperulate, cuneate and conspicuously angled but not winged, mostly 0.5–1 mm long.

TYPE: PANAMA. COCLÉ: El Cope, on slope and ridge west of sawmill, 5 April 1978, *Hammel 2380* (CAS, holotype; MO, isotype).

Habitat and Distribution: Growing in cloud forests and along stream margins at elevations from 500 to 900 meters in the vicinity of Alto Calvario and El Cope de Veraguas, Panama. Flowering and fruiting specimens have been collected in January, April, May, and July.

This evidently local species was collected in an area which is already yielding a flora of high specific endemism. Distinguishing features of this taxon include the completely glabrous vegetative and floral organs, the compressed, 2-edged distal branchlets, and the multiflowered, umbelliform, axillary inflorescences. The

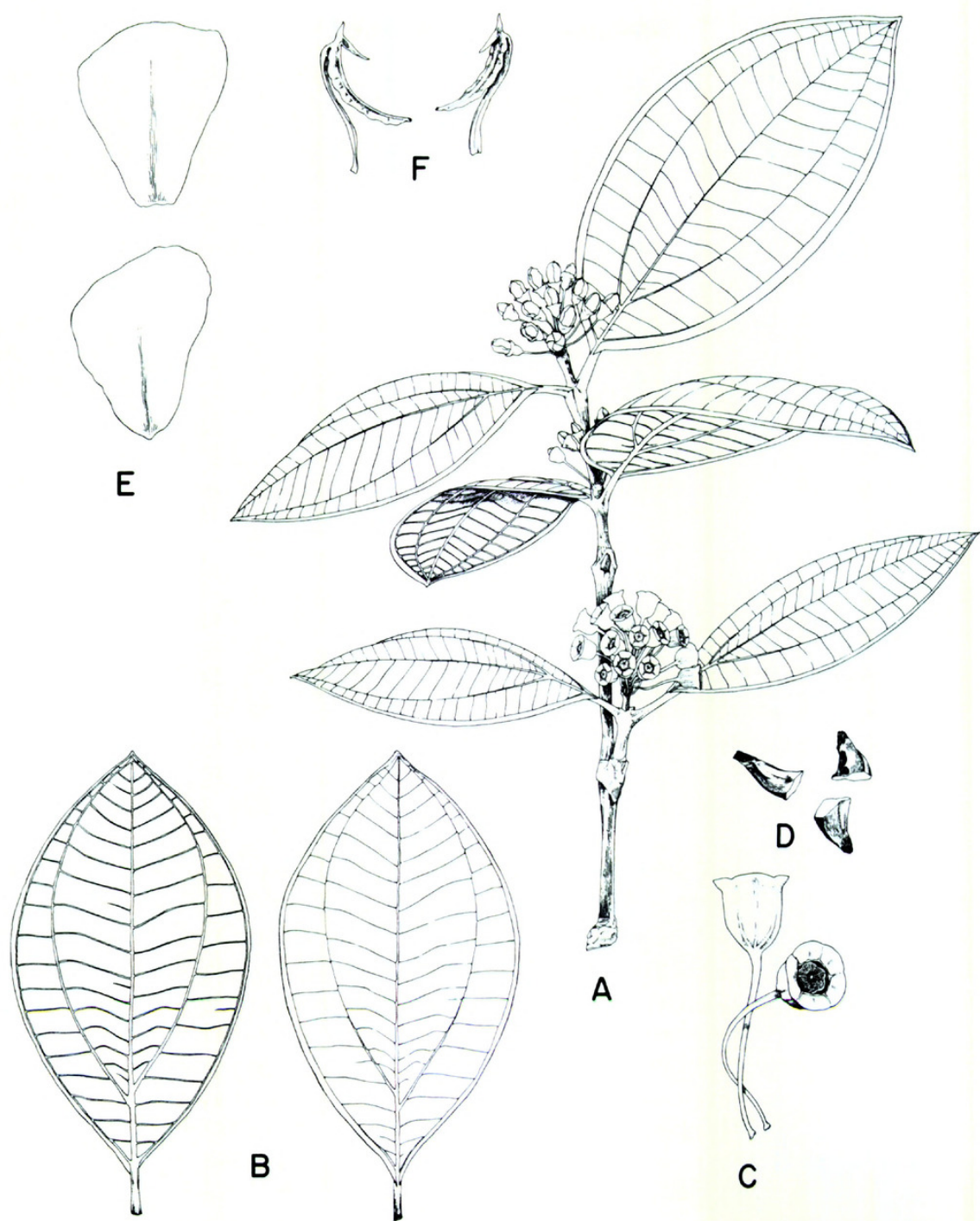


FIGURE 1. *Adelobotrys panamensis* Almeda.—A. Habit showing congested umbelliform inflorescences, $\times \frac{1}{4}$.—B. Representative leaves, lower surface (left) and upper surface (right), $\times \frac{1}{4}$.—C. Mature hypanthia, $\times$ ca. 1.—D. Seeds, $\times$ ca. 5.—E. Petals, $\times 1\frac{1}{2}$.—F. Representative stamens (lateral view), $\times$ ca. $1\frac{1}{4}$. (A–F from Hammel 2380 and Folsom 1234.)

congested inflorescence which arises from a short stubby branchlet frequently appears terminal on new growth but its lateral position becomes obvious as vegetative growth continues after flowering of any one inflorescence.

Androecial morphology of this taxon is very much like that of *A. macrophylla*

Pilger, *A. marginata* Brade, and other South American species with a blunt or barely emarginate apex to the ascending connective appendage. Functional significance of the similar floral morphology among these species remains to be demonstrated. In the absence of clues from other structures it is tempting to utilize these floral characters in assessing relationships. On the other hand, the specified assemblage of South American species differs so markedly from *A. panamensis* in foliar size and shape, type of inflorescence, and vestiture that any statement regarding affinities would be tentative and ambiguous on the basis of present information.

Additional Specimens Examined: PANAMA. COCLÉ: 7 km N of El Cope de Veraguas, *Folsom* 1234, 3219 (both CAS, MO). New works at Aseradera Rivera, Alto Calvario, *Folsom* 2337 (CAS, MO). Area around Rivera Sawmill, Alto Calvario, *Folsom* 4117 (CAS, MO). 8 km above El Cope, *Hammel* 799 (CAS, MO). Top of El Petroso, *D'Arcy* 11353 (CAS, MO). North of El Cope, *D'Arcy* 11291 (CAS, MO).

2. *Adelobotrys adscendens* (Sw.) Triana, Trans. Linn. Soc. London 28: 67, pl. 5, fig. 56. 1871.

Melastoma adscendens Sw., Fl. Ind. Occ. 2: 772. 1798. TYPE: Jamaica, without exact locality, *Swartz s.n.* (holotype presumably at Stockholm (S) but not seen; C, probable isotype).

Davya guianensis DC., Prodr. 3: 105. 1828. TYPE: French Guiana, without exact locality, *Patris s.n.* (G-DC, holotype; P, isotype).

D. adscendens (Sw.) Griseb., Fl. Brit. W. Ind. 265. 1860.

Adelobotrys guianensis (DC.) Gleason, Brittonia 1: 141. 1932.

Scandent woody vine or hemiepiphyte adhering to tree trunks by adventitious roots. Internodes and distal branchlets terete, pubescent to glabrate but young shoots, petioles, immature hypanthia, pedicels, and branches of the inflorescence beset with a sparse to dense covering of brown malpighiaceae hairs. Leaves of a pair somewhat unequal in size but otherwise similar in shape and vestiture; blades chartaceous, entire to denticulate, (5.6–)7.5–22 cm long and 3–13.5 cm wide, ovate, elliptic-ovate, or subrotund, acute to short-acuminate apically and broadly rounded to cordate basally, 5–7-nerved, glabrous above at maturity, but with a sparse to moderate covering of malpighiaceae hairs mostly restricted to the elevated primary nerves below; petioles 1–3.5(–5.5) cm long and 1.5–2.5 cm wide. Inflorescence a terminal panicle mostly 14–40 cm long composed of umbelliform clusters of 2–6(–12) flowers; bracteoles sessile, entire, early deciduous, 1–3 mm long and 0.5–1.5 mm wide, linear-lanceolate to subulate. Pedicels 1–5(–7) mm long. Hypanthia (at anthesis) subcylindric to suburceolate, 3–5 mm long to the torus. Calyx tube 1–2 mm long, $\pm$ spreading and flangelike; calyx lobes obsolete; calyx teeth usually obsolete or minute and inconspicuous when present. Petals glabrous, white to pale pink but yellow on drying, obovate and rounded to oblique apically, entire, 10–12 mm long and 7–8 mm wide. Stamens isomorphic or dimorphic; filaments declinate, ligulate, white when fresh but frequently drying blue or blue green, 7–10 mm long and 1 mm wide; anthers geniculate, 5–10 mm long, glabrous, yellow, linear-subulate and tipped with a dorsally inclined solitary pore, the connective $\pm$ thickened dorsally and modified into a short (0.5–1 mm) ascending acuminate spur and a bifid caudiform appendage (3.5–4 mm) directed $\pm$ parallel to the anther thecae. Style glabrous, $\pm$ declinate but incurved apically, 7–9.5 mm long; stigma punctiform. Hypanthia (at maturity) urceolate, promi-

nently 10-ribbed, 6–9 mm long and 6–8 mm wide. Seeds pale brown, obscurely foveolate, linear-cuneate, winged at the apex but tapered and $\pm$ caudate at the base, mostly 1.5–2.5 mm long.

Habitat and Distribution: Growing in wet forests from sea level to about 1,000 meters elevation. This, apparently, is the most widespread species of *Adelobotrys*, ranging from southern Mexico and Jamaica through northern South America to the Amazon basin. It flowers and fruits sporadically all year.

Populations of this species from Peru (Macbride, 1941), British Guiana (Wurdack, 1970), and Jamaica (Gleason, 1932) are reported to have dimorphic stamens. Specimens from British Honduras (*Gentle* 8646), Mexico (*Mexia* 9151), Costa Rica (*Schnell* 582), and Panama (*Mori & Kallunki* 2354) also exhibit differentiation in staminal size but the frequency of this dimorphism among Mexican and Central American populations is unclear and needs further study.

Through its broad range, this species is represented by a number of local but taxonomically insignificant variants differing in leaf size and shape, density of cauline and foliar pubescence, inflorescence size, and development of calyx teeth. The most notable variants among specimens studied are from the provinces of Colón, Panamá, and Veraguas in central Panama. These stand out by virtue of their copiously pubescent hypanthia, more congested umbelliform clusters of the inflorescence, and $\pm$ elevated, deltoid calyx teeth which conspicuously project beyond the calyx tube when in bud.

Representative Specimens: MEXICO. OAXACA: Sierra San Pedro Nolasco, Talea, *Jurgensen* 865 (BM, G, K, US). Distrito Choapan, Yaveo, *Mexia* 9151 (CAS, F, G, GH, MO, NY, U). GUATEMALA. ALTA VERAPAZ: 8–10 mi NW of Cubilguitz along Río Ixvolay, *Steyermark* 45042 (F). Sebol, ca. 1 km W of village, *Contreras* 4509 (LL). Chahal, near airport, *Contreras* 7994 (LL). IZABAL: Between Virginia and Lago Izabal, Montaña del Mico, *Steyermark* 38869 (F). Near Entre Ríos, *Standley* 72589 (F). Vicinity of Puerto Barrios, *Standley* 25000 (GH, US). PETÉN: La Esperanza on Cadenas Rd., *Contreras* 6506 (DS, F, LL). BELIZE. EL CAYO: High ridge at base of hill, Hummingbird Hwy., *Gentle* 8646 (F, LL, MICH). STANN CREEK: Big Eddy Ridge, *Gentle* 3499 (A, MICH, NY). TOLEDO: Between Rancho Chico and Cockscomb, *Gentle* 4317 (LL). HONDURAS. ATLANTIDA: Vicinity of San Alejo, *Standley* 7911 (F). Lancetilla Valley, near Tela, *Standley* 54162 (F, US). COLÓN: Guarunta, Wisperrini Camp, *von Hagen & von Hagen* 1379 (F, NY). CORTÉS: Ca. 6 km N of Rancho Agua Azul, *Williams & Molina* 17777 (F, GH). NICARAGUA. COMARCA DEL CABO: Between Waspán and Puerto Cabezas, *Nelson* 4826 (MO). CHONTALES: Vicinity of Santo Domingo, *Bunting & Licht* 1186 (F). RÍO SAN JUAN: Near Caño Chontaleño, *Neill* 3358 (CAS, MO). RIVAS: Volcán Madera, *McGillivray* 103 (F). ZELAYA: Vicinity of El Recreo, on Río Mico, *Standley* 19747 (F). 3.1 km N of base camp 3.6 km SE of Cerro San Isidro, *Proctor et al.* 27177 (NY). COSTA RICA. ALAJUELA: 3 km NNE of Bijagua, *Burger & Baker* 9834 (F). CARTAGO: Valle Escondido, *Schnell* 656 (F, US). HEREDIA: E of Puerto Viejo, *Godfrey* (FSU). Tirimbina, *Proctor* 32250 (LL). LIMÓN: Vicinity of Guápiles, *Standley* 37299 (US). Barra de Colorado, *Schnell* 582 (F, US). PUNTARENAS: Helechalis, *Schnell* 488 (US). Esquinas Forest Preserve, *Allen* 5759 (DS, F, FSU, GH). Rd. to tower above Golfito, *Almeda et al.* 3090 (CAS). 6–9 km E of Salitre, *Almeda & Nakai* 4083 (CAS). Hills N of Palmar Norte, *Croat* 35179 (MO). SAN JOSÉ: 1–3 km SW of Quizarrá, *Almeda & Nakai* 4140 (CAS). Vicinity of El General, *Skutch* 3190 (GH, MO, NY). PANAMA. BOCAS DEL TORO: Almirante region, Cricamola Valley, *Cooper* 201 (F, NY). CANAL ZONE: Barro Colorado Island, *Foster* 2090 (MO). COCLÉ: 2 km W of Cerro Pilón, *Sullivan* 452 (CAS, MO). 3 km NE of El Valle, *Mori & Kallunki* 2964 (MO). COLÓN: Summit of Cerro Santa Rita, *Allen* 5106 (BM, BR, G, MO, NY). DARIÉN: Between Río Perecenico and Rancho Frio, *Duke & Elias* 13887 (MO). Cerro de Garagara, Sambu basin, *Pittier* 5667 (US). PANAMÁ: El Llano-Carti Rd., 17.5 km from Panamerican Hwy., *Mori et al.* 4606 (MO). Slopes of Cerro Campana, *Wilbur & Weaver* 11303 (MICH, MO). Rd. to Altos de Pacora, *Mori & Kallunki* 2354 (MO). Cerro Jefe, *Duke* 8001 (MO). VERAGUAS: Río Segundo Brazo, *Maas & Dressler* 1671 (U, US).

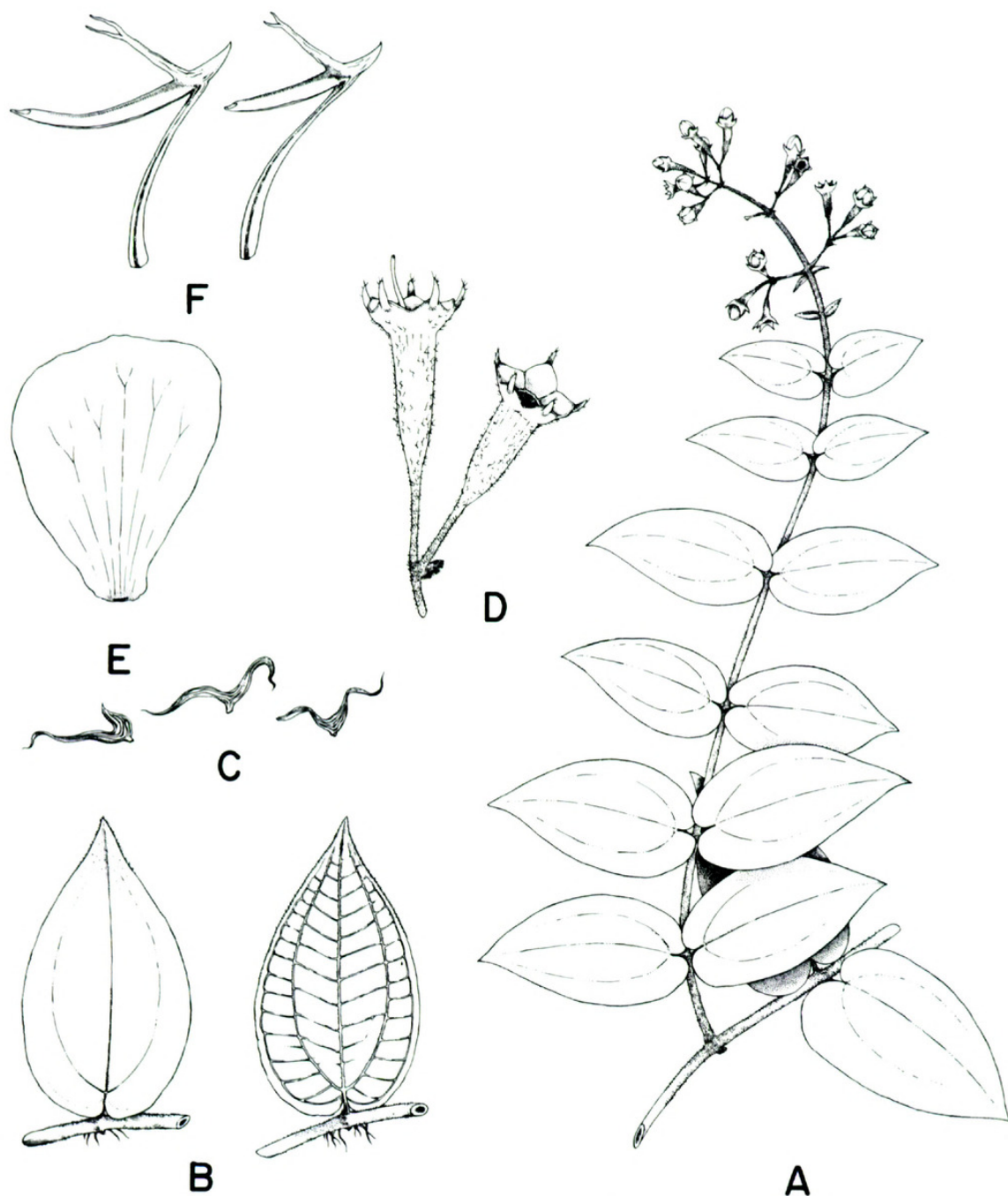


FIGURE 2. *Adelobotrys jefensis* Almeda.—A. Habit showing lax terminal panicle, $\times$ ca. $\frac{1}{3}$.—B. Representative leaves, lower surface (right) and upper surface (left), $\times$ ca. $\frac{1}{3}$.—C. Malpighiaceae trichomes, $\times 4$.—D. Immature hypanthia, $\times 2$.—E. Petal, $\times 2\frac{1}{2}$.—F. Representative stamens (lateral view) showing larger stamen (left) and smaller stamen (right), $\times$ ca. $2\frac{1}{2}$. (A–F from the holotype.)

3. *Adelobotrys jefensis* Almeda, sp. nov.—FIG. 2.

Caulis scandens primum sicut foliorum subtus venae primariae inflorescentia hypanthiaque dense vel modice setulosi pilis castaneis malpighiaceis. Petioli (1–)2–3 mm longi; lamina 2.8–4.6 $\times$ 1.3–2.8 cm, elliptica vel ovato-elliptica apice acuto vel breviter acuminato basi cordata vel auriculata, chartacea et integra vel obscure denticulata. Panicula laxe multiflora, pedunculo usque ad 4.5–8 cm longo,

pedicellis ad anthesim 3–5 mm longis. Hypanthium (ad torum) 5 mm longum; calycis tubus 0.5–1.0 mm longus, lobis interioribus 1.5 mm longis late ovatis, dentibus exterioribus prominentibus robustis 1.5–2.0 mm eminentibus. Petala eciliata glabra, 7–9 × 5–6 mm obovata apice ± rotundata. Stamina anisomorphica glabra; antherarum thecae 3.5–4.0 vel 4.5–5.0 mm longae, dente basali 1–1.5 mm longo robusto acuto, appendice adscendenti 2.5–3 mm libera apice caudato-bifido. Fructus maturus ignotus.

Scandent vine adhering to bark of the host tree by adventitious roots. Internodes and distal branchlets terete, moderately pubescent to glabrate, young shoots, petioles, immature hypanthia, bracteoles, pedicels, and branches of the inflorescence copiously beset with ferruginous malpighiaceus hairs. Leaves of a pair equal to slightly unequal; blades chartaceous, entire to bluntly denticulate, 2.5–4.6 cm long and 1.3–2.8 cm wide, elliptic to elliptic-ovate, acute to short-acuminate apically and cordate-clasping to auriculate basally, 3-plinerved with an additional submarginal pair, the secondary nerves usually evident below as prominent ridges, glabrous above at maturity or with trichomes restricted to the median nerve, with a sparse to moderate covering of malpighiaceus hairs largely restricted to the primary and secondary nerves below; petioles (1–)2–3 mm long and 1 mm wide. Inflorescence a terminal ± diffuse panicle mostly 4.5–8 cm long, the ultimate units consisting of solitary flowers or umbelliform clusters of 3–4 flowers; bracteoles sessile, membranous, entire, markedly reduced in size upward, 1.5–4 mm long and 0.5–1.5 mm wide, linear-lanceolate to subulate. Pedicels 3–5 mm long. Hypanthia (at anthesis) cylindric to narrowly campanulate, 5 mm long to the torus. Calyx tube 0.5–1.0 mm long; calyx lobes spreading, broadly ovate or hemispheric, acute to rounded apically, entire or occasionally ciliate, 1.5 mm long and 1.5–2.0 mm wide; calyx teeth lanceolate, 1.5–2.0 mm long and conspicuously projecting beyond the calyx lobes. Petals glabrous, reportedly orange red, obovate and rounded apically, entire, 7–9 mm long and 5–6 mm wide. Stamens anisomorphic; filaments alternately 5.5 mm and 6–6.5 mm long; anthers alternately 3.5–4.0 mm and 4.5–5.0 mm long, the connective modified dorsally into an erect spur 1–1.5 mm long at the junction of the anther and filament and a bifid appendage (2.5–3 mm long) directed upward and ± perpendicular to the anther thecae. Style glabrous, erect or slightly declinate, 4–5 mm long; stigma ± truncate. Mature hypanthia and seeds not seen.

TYPE: PANAMA. PANAMÁ: La Eneida, low forest at 800 m, 2 September 1974, Maas, Dressler & Kennedy 1564 (U, holotype; CAS, photograph; US, isotype).

This species is distinguished by the combination of small (2.5–4.6 × 1.3–2.8 cm), cordate-clasping leaves, short petioles, diffuse paniculate inflorescences, highly reduced bracteoles, elongate hypanthia, prominent calyx teeth, and anisomorphic stamens. While known only from the type collection, *A. jefensis* is confidently described as a new species. It is perhaps most closely related to the habitally similar *A. spruceana* Cogn. which it superficially resembles in foliar texture and hypanthial form. As presently understood, the latter species differs most conspicuously in the short (2–3 cm) congested bracteate inflorescence, stout simple trichomes along the foliar margins, and in the anther connective which is modified basally into a ± erect bifid spur and dorsally into a simple, distally emarginate appendage.

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