
Index to the Vascular Plant Types Collected by H. H. Smith Near Santa Marta, Colombia

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INDEX TO THE VASCULAR PLANT TYPES COLLECTED BY H. H. SMITH NEAR SANTA MARTA, COLOMBIA

TINA J. AYERS¹ AND DAVID E. BOUFFORD

Ayers, Tina J. (New York Botanical Garden, Bronx, NY 10458-5126) and David E. Boufford (Harvard University Herbaria, 22 Divinity Avenue, Cambridge, MA 02138). Index to the vascular plant types collected by H. H. Smith near Santa Marta, Colombia. *Brittonia* 40: 400–432. 1988.—An index to 360 names based on specimens collected from 1898 to 1901 by H. H. Smith in Santa Marta, Colombia is provided. Each citation includes the plant name, author, place of publication, exact locality and date of collection, and, when possible, the location of the holotype and isotypes. Additional comments are provided to clarify the type status of specimens representing a single taxon and given a single collection number but collected on several different dates or from several different localities, and for truly mixed collections where two or more taxa were given the same number.

Herbert Huntington Smith (1851–1919) was a devoted collector of a wide variety of natural history specimens, primarily insects, mammals, fresh water molluscs, birds, and plants (Holland, 1919a, 1919b). He is best known for his collections from the New World tropics where he gathered specimens in Brazil, Mexico, the West Indies, and Colombia. Originally commissioned by Scribner's Magazine to write a series of natural history articles and later encouraged by Dom Pedro II, Smith spent nearly 12 years (1874–1886) collecting and making natural history surveys of Brazil. An expanded collection of Smith's articles were published in the book entitled *Brazil, the Amazons and the Coast* (1879). His Brazilian entomological collections are particularly valuable, containing at least half a million individuals representing approximately 40,000 species (Holland, 1919b). He spent 1889 in Mexico collecting animals for F. D. Godman who was preparing his *Biologia Centrali-Americana* (Godman & Salvin, 1889–1905). The following five years were spent making collections in Trinidad and the Windward Islands for the West Indian Commission of the Royal Society (Holland, 1919a).

Upon his return to the United States in 1896, Smith attempted to persuade the Carnegie Museum of Natural History to undertake a biological survey of South America. Although this was not financially feasible, he became associated with the infant museum as a Curator of Invertebrate Zoology and, while in this position, made extensive collections of the flora and fauna of western Pennsylvania and West Virginia. After two years in Pittsburgh, Smith decided to return to the tropics and arranged for the Carnegie Museum to buy a set of his collections.

Smith resigned his position with the Carnegie Museum in the spring of 1898 and traveled to Colombia accompanied by his wife and small son. Their base of operations was in the northwestern corner of the department of Magdalena in the small town of Bonda, seven miles east of Santa Marta. From Bonda, Smith made numerous trips to 19 collecting sites (Fig. 1). These were described by Smith (1904) as part of an extensive and insightful biogeographical account of the region. Although his travels in this region were limited by civil strife, Smith made numerous collections, including about 50 sets of botanical specimens. In the spring of 1902, he departed for the United States after a serious, life-threatening illness.

Upon their return, Mr. and Mrs. Smith were employed as assistants in the

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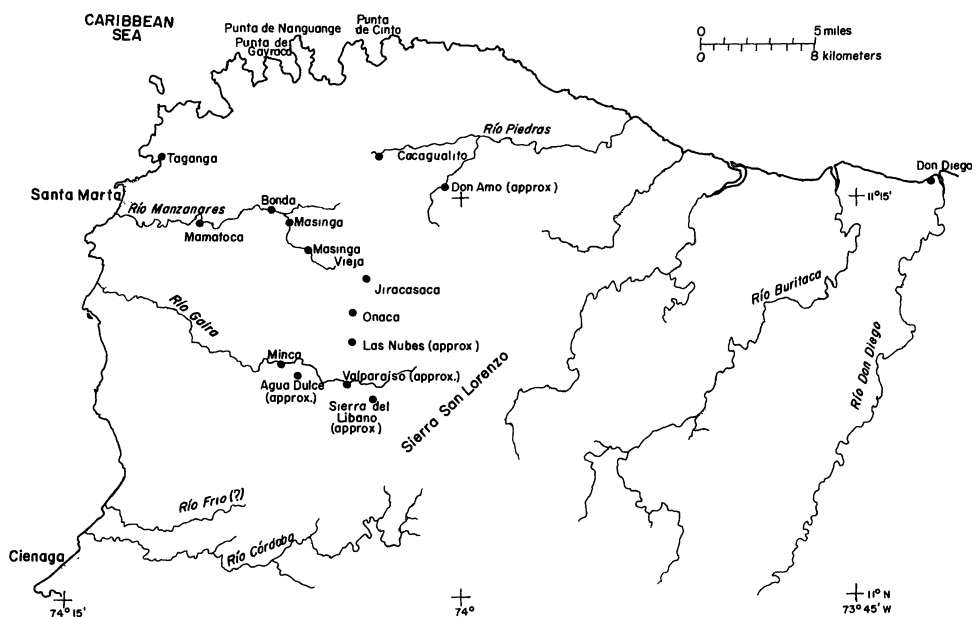


FIG. 1. Collecting localities during Smith's stay in the vicinity of Santa Marta, department of Magdalena, Colombia. Place names included are those used by Smith.

section of Botany at the Carnegie Museum where they sorted their Colombian plant collections into sets (miscellaneous notes, O. E. Jennings, Archives, Carnegie Museum of Natural History). They left Pittsburgh the following year and moved to Alabama where their focus was the collection of fresh water molluscs. In 1910, they were jointly offered the directorship of the Alabama Natural History Museum in Tuscaloosa, a position they held until Smith, who was stone-deaf, was killed by a train while walking along a railroad track on 22 March 1919.

On 30 March 1901, the Carnegie Museum (CM) accessioned one set of Smith's Colombian plants containing approximately 2500 unidentified specimens. The rest of the sets were to be issued to subscribers after they had been named. Smith arranged for most of the plant identifications to be made at the New York Botanical Garden (NY) by Dr. H. H. Rusby, Columbia University, New York City. Rusby was to earn 50 cents for each determination returned to CM (letter from Rusby to G. H. Clapp, Smith's business associate, 10 Aug 1901, Archives, Alabama State Museum of Natural History). The ferns were also sent to NY for identification by Dr. L. M. Underwood, also of Columbia University. The grasses were sent to the U.S. National Herbarium (US), Washington, D.C., possibly for identification by Drs. A. Chase and A. S. Hitchcock (letter from Smith to H. J. Heinz, 30 Jan 1900, Archives, Alabama State Museum of Natural History). It is not known whether Drs. Underwood, Chase, and Hitchcock were offered fees for their services. Specimens sent to NY for identification by Rusby and Underwood were accompanied by carefully noted habit, habitat, and locality data, handwritten in pencil on slips of paper. These slips were subsequently mounted with the plant material (Fig. 2A).

The events concerning the early naming and distribution of the sets of botanical specimens remain sketchy. Plans were changed possibly due to Smith's poor financial situation or because Rusby did not finish his assignment in the allotted time. Before his death in 1919, Smith apparently sold a number of unnamed sets

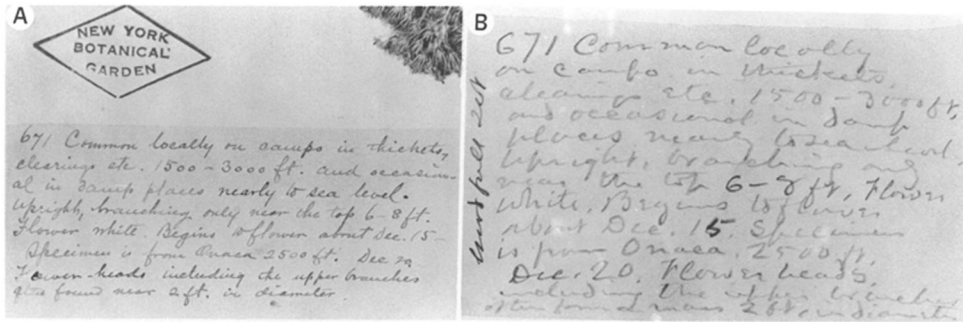


FIG. 2. Handwritten locality slips for *Verbesina colombiana* Rusby. A. Locality slip included with specimen sent to NY for identification. B. Locality slip from the Archives, Gray Herbarium Library, Harvard University. Author(s) of handwriting unknown but presumed to be Mr. and/or Mrs. Smith. Note discrepancy in last line of transcribed data (in A) from possible field notes (in B), which reads: often forms a mass 2 ft in diameter.

to various European herbaria (e.g., in Berlin and Geneva), and workers at those institutions began describing new species from the collections. From the protologues of a few species descriptions (e.g., *Epidendrum macroceras* Schltr.) it is evident that at least some specimens contained abbreviated locality data. Smith kept the distribution records himself and subsequently all records, "except the catalogue," were destroyed by fire (Mrs. Smith letter to Clapp, Sep 1920, Archives, Carnegie Museum of Natural History).

The undistributed plant sets were stored "at the top of the [Carnegie] museum building" in wooden crates. Some were water-damaged early in 1920 and the spoiled material was removed. For the following 40 years little attention was given to Smith's collections. A few sets were distributed from CM (all without localities and dates), but these were only partial sets; the unidentified material was generally not sent out (Carnegie Museum records).

In 1956, Rogers McVaugh at the University of Michigan (MICH) inquired about receiving a set of the collections. The curator of the Carnegie Museum, L. K. Henry, agreed to the request, noting that about half were unidentified. McVaugh expressed his interest in as complete a set as possible, identified or not. Five years later, an agreement was reached between McVaugh and Henry and the remaining Smith collections, all lacking localities and dates, were sent to MICH for processing, with both institutions sharing in the exchange credits.

Smith's Colombian plant collections present many problems in typification. In the field, Smith often grouped plants by family and then numbered them sequentially. A single collection number may represent plants from two or more populations or the same population collected months apart (occasionally noted as "the same shrub, vine . . .") and at different stages (i.e., flowering and fruiting). Rarely different taxa were given the same number. These collecting practices coupled with the distribution of most of the sets without this information have made the typification of names based on Smith's collections extremely frustrating and have been the impetus for the present publication.

The following list has been prepared to expedite the verification of existing type material and illustrate the precautions necessary when designating neotypes or lectotypes. It must be emphasized that workers using Smith's collections should not use the collection number alone in referring to type material unless it is known that the number represents a single collection.

The list was compiled from type specimens present at the Arnold Arboretum

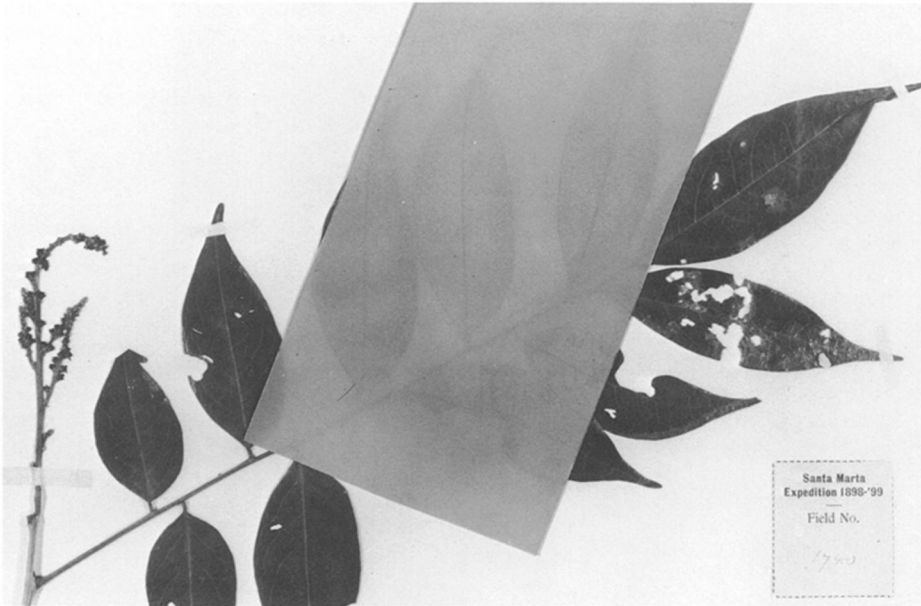


FIG. 3. Photograph of *Picramnia villosa* Rusby isotype (Smith 1740 from Field Museum). The overlay is a photo of the pink imprint found on the back of a locality slip from the Archives of the Gray Herbarium Library, Harvard University.

(A), CM, Gray Herbarium (GH), MICH, NY, and US. Sheets from NY provided the localities and collection dates for most of the specimens. Localities for collections that we have been unable to locate and for some collections on loan from NY were taken from a box of locality slips recently discovered by D. Boufford at GH. The box contains localities for about 2200 of Smith's collections (numbers 100–2000 inclusive; beyond 2000 incomplete), handwritten in pencil on both sides of thin, friable, 3 × 5 inch paper slips (Fig. 2B).

In a letter from B. L. Robinson to Mrs. Smith on 22 March 1922 (Archives, Gray Herbarium Library, Harvard University), Robinson thanked Mrs. Smith for the shipment of the transcribed locality data, noting that these were “half of the data for the series.” A payment of \$15.00 was rendered. On the back of one of the slips, Smith 1740, the type collection of *Picramnia villosa* Rusby, a pink imprint of a leafy stem can be seen (see overlay in Fig. 3). Such imprints are characteristic of certain species of *Picramnia*. These species are reportedly used by natives for ink and dyeing fabric (W. Thomas, pers. comm.). The imprint is traceable to an isotype of the above species housed at the Field Museum of Natural History (F) (Fig. 3). The existence of the *Picramnia* imprint supports a hypothesis that at least some of the slips at GH are not transcriptions but are the original locality slips included with the newly collected specimens while they were being dried.

List of Vascular Plant Types

The following specimens were collected in Colombia in the department of Magdalena near Santa Marta, and this information is not repeated for each citation. Locality data were taken from protologues, handwritten labels on NY specimens, or from the locality slips at GH (see above). No year is appended to

the collection dates since exact records designating the months of each year have not been found. The years 1898–99 are printed on perforated tags bearing the collection numbers (see Fig. 3). It is recommended that the yearly dates be approximated by using these or by using 1898–1901, the entire length of Smith's stay in Colombia. Supplemental information appears in brackets.

Where there is evidence of only one locality, a holotype designation is given to the specimen seen by the author. The following institutions may house isotypes: A, B (mostly destroyed during World War II), BM, BP, BPI?, BR, BRU, CAL, CAS, CM, COL, DAO, DPU, E, F, G, GENT, GH, ISC, K, L, LCU, LE, LL, MA, MANCH, MEDEL, MICH, MO, MPU, MT, NA, NCU, NY, O, OKLA, P, PENN, PH, PNH (destroyed during World War II), R, S, SMU, TEX, U, UC, US, USF, VT, W, WIS, WVA (Vegter, 1986; Carnegie Museum records). When specimens representing more than one locality or date were given the same number, only the holotype and confirmed isotypes are listed. All specimens that bear the same collection number but lack locality data should be treated as possible isotypes until their status can be evaluated by a monographer. A question mark is appended to type designations when the specimens' existence has not been confirmed (i.e., by more recent workers). If the specimens housed at A, GH, or NY were on loan, the type designations for these institutions lack a question mark or exclamation point. Taxonomic synonyms were taken from annotation labels affixed to A, GH, or NY specimens during the last 20 years and are by no means an exhaustive attempt to present the current status of all names based on Smith's collections.

ACANTHACEAE

Aphelandra daemonia Leonard

Contr. U.S. Natl. Herb. 31: 223, fig. 79. 1953. Near Bonda, below 3000 ft, 31 Oct, *Smith 1415* (HOLOTYPE: US—703914; ISOTYPES: CM!, GH, MICH, NY—2 sheets, PH, S).

Aphelandra mildbraediana Leonard

Contr. U.S. Natl. Herb. 31: 218, fig. 77. 1953. Above Las Nubes at Alto del Cielo, 5000 ft, 18 Dec, *Smith 1414* (HOLOTYPE: US—703913; ISOTYPES: GH!, MICH, MO, NY, PH, S).

Beloperone sanmartensis Rusby

Desc. S. Amer. Pl. 128. 1920. Near Mamatoca, 100 ft, Nov, *Smith 96* (HOLOTYPE: NY!—2 sheets; ISOTYPES: A!, CM!, GH!, MICH, US).

Dicliptera sanctae-martae Leonard

Contr. U.S. Natl. Herb. 31: 378. 1958. Near Cacagualito, 1500 ft, Dec, *Smith 1411* (HOLOTYPE: US—703911; ISOTYPES: A!, CM!, GH!, K, MICH, MO, NY!, S).

Jacobinia lindaviana Rusby

Desc. S. Amer. Pl. 128. 1920. N coast of Playa Brava, 6 Jun, *Smith 2821* (HOLOTYPE: NY!; isotype: US).

Justicia rhodoides Leonard

Contr. U.S. Natl. Herb. 31: 519. 1958. 3 to 5 mi N of Bonda, 100–300 ft, 29 Nov, *Smith 1358* (HOLOTYPE: US—703897; ISOTYPE: NY!). = *Siphonoglossa ramosa* var. *hondurensis* (Standley & Steyerl.) Hilsenbeck. [Another specimen collected 6 Jun (fl) (NY!) was given the same number.]

Justicia secunda var. *leucantha* Leonard

Contr. U.S. Natl. Herb. 31: 604. 1958. Along the Agua Dulce road, ca 800 ft, Dec, *Smith 1413* (HOLOTYPE: US—533522; ISOTYPES: A!, CM!, GH!, NY!, PH).

Odontonema bracteolatum var. *parviflorum* Leonard

Contr. U.S. Natl. Herb. 31: 399. 1958. Cacagualito, 1500 ft, May, *Smith 1389* pro parte (HOLOTYPE: US—2028723). = *O. rubrum* (Vahl) Kuntze. [Additional specimens collected at Bonda, ca 250 ft,

1 Nov (GH!, NY!) which represent the typical variety, were given the same number; see Leonard, p. 399.]

ACTINIDIACEAE

Saurauia herbert-smithii Rusby

Desc. S. Amer. Pl. 57. 1920. Cacagualito, 1500 ft, May, *Smith 857* (HOLOTYPE: NY!). [Additional specimens collected at Las Partidas, 3500 ft, 1 Jun (A!, GH!, NY!), were given the same number.] = *S. yasicae* Loes.

Saurauia smithiana Buscal.

Malpighia 29: 445. 1923. *Smith 857* (B, K, L, US). = *S. herbert-smithii* Rusby.

ADIANTACEAE

Pityrogramma ornithopteris var. *sanctae-marthae* Domin

Lilloa 2: 34. 1938. *Smith 1061* (HOLOTYPE: US). = *Pityrogramma chrysoconia* (Desv.) Maxon & Domin.

AMARANTHACEAE

Iresine pilgeri Suesseng.

Repert. Spec. Nov. Regni Veg. 39: 12. 1935. Horqueta Mountain, 7500 ft, 28 Dec, *Smith 2605* (B, K, MO, S).

Pfaffia eriocephala Suesseng.

Repert. Spec. Nov. Regni Veg. 35: 329. 1934. Neguange, near Playa Brava, 21 Mar, *Smith 2095* (B, S; ISOSYNTYPES: CM!, NY!).

ANACARDIACEAE

Astronium fraxinifolium f. *glaberrimum* Mattick

Notizbl. Bot. Gart. Berlin-Dahlem 11: 1005. 1934. Road to Agua Dulce, ca 1200 ft, 16 Jan, *Smith 910* (HOLOTYPE: B?; isotypes: CM!, GH, NY, US).

Loxopterygium gutierrezii F. Barkley

Lloydia 25: 121. 1962. Near Masinga, ca 600 ft, 22 Jan, *Smith 911* (HOLOTYPE: NY?; ISOTYPES: A!, CM!, MICH, US).

APIACEAE

Hydrocotyle grossulariaefolia Rusby

Desc. S. Amer. Pl. 73. 1920. Sierra del Libano, 7000 ft, 26 Feb; Above Valparaiso, 5000 ft, 20 Jan; *Smith 1316* (NY!—2 sheets, one from each locality).

APOCYNACEAE

Aspidosperma elliptica Rusby

Desc. S. Amer. Pl. 82. 1920. Masinga Vieja, 800 ft, 25 Apr (fl); Bonda, Feb (fr); *Smith 836* pro parte (NY!—2 sheets, one from each locality). = *A. cuspa* (Kunth) S. F. Blake. [Additional specimens collected near Bonda, Aug, were given the same number; this collection is a mixture with *A. decipiens* Muell. Arg., see Rusby, p. 82 (protologue).]

Dipladenia alba-viridis Rusby

Desc. S. Amer. Pl. 86. 1920. Sierra del Libano, 6000 ft, 22 Jan, *Smith 1904* (HOLOTYPE: NY—lost in mail, 1978 [see correspondence at NY]; ISOTYPES: CM!, GH!).

Echites bicorniculata Rusby

Desc. S. Amer. Pl. 86. 1920. Cienaga, near sea level, 10 Sep, *Smith 1640* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

Echites sanctae-martae Rusby

Desc. S. Amer. Pl. 85. 1920. Above Jiracasaca, 3000 ft, 25 Aug, *Smith 2525* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, NY—lost in mail, 1978, US). = *Laubertia santa-martae* (Rusby) Woodson. [Another collection, near Valparaiso, 4000–5000 ft, 20 Jan, *Smith 1643*, was mistakenly cited by Woodson when he made the new combination (Ann. Missouri Bot. Gard. 23: 372. 1936).]

Mandevilla attenuata Rusby

Desc. S. Amer. Pl. 89. 1920. Las Partidas, 3500 ft, 2 Jun, *Smith 1663* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US). = *M. bracteata* (Kunth) Kuntze.

Peltastes colombianus Woodson

Ann. Missouri Bot. Gard. 23: 317. 1936. Below Valparaiso, ca 400 ft, 26 Mar, *Smith 1647* (ISOTYPES: CM!, GH!, NY!—2 sheets, US).

Prestonia gracilis Rusby

Desc. S. Amer. Pl. 91. 1920. Near Masinga, 250–500 ft, 18 Nov, *Smith 1644* (HOLOTYPE: NY!). [Another specimen collected 5 mi N of Bonda, 23 Oct (NY!), was given the same number.]

Prestonia laxa Rusby ex Woodson

Ann. Missouri Bot. Gard. 23: 317. 1936. Below Valparaiso, ca 400 ft, 26 Mar, *Smith 1647* (HOLOTYPE: NY!; ISOTYPES: CM!, GH, MO).

Prestonia mucronata Rusby

Desc. S. Amer. Pl. 90. 1920. Las Nubes, 4500 ft, 18 Dec, *Smith 1656* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, GH!, MICH, US).

Rauwolfia [Rauwolfia] littoralis Rusby

Desc. S. Amer. Pl. 84. 1920. Near the mouth of the Buritaca River, 22 Sep, *Smith 1905* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, GH!, MICH, US).

ARACEAE

Dieffenbachia brittonii Engl.

Pflanzenr. IV 23(Heft 64): 59. 1915. Above El Libano plantation, 250 ft, 26 Jul, *Smith 2764* (HOLOTYPE: B?; ISOTYPES: GH!, MICH, NY!, US).

Xanthosoma bilineata Rusby

Desc. S. Amer. Pl. 3. 1920. Onaca, 2500 ft, 16 Aug, *Smith 2475* (HOLOTYPE: NY—2 sheets; ISOTYPES: CM!, MICH, US).

ARALIACEAE

Gilibertia amplifolia I. M. Johnston

Contr. Gray Herb. 70: 81. 1924. Near Valparaiso, ca 4000 ft, 24 Feb, *Smith 1778* (HOLOTYPE: GH!). [Additional specimens collected 18 Mar were given the same number.]

Pentapanax granatensis Rusby

Desc. S. Amer. Pl. 72. 1920. Near Masinga, 250 ft, 22 Mar, *Smith 1595* (HOLOTYPE: NY!; ISOTYPES: CM!, GH, US).

ARECACEAE

Geonoma platybothros Burret

Notizbl. Bot. Gart. Berlin-Dahlem 11: 200. 1931. Valparaiso, 4500 ft, 24 Feb, *Smith 2340* (HOLOTYPE: B?; ISOTYPES: CM!, NY!—2 sheets, US).

ASCLEPIADACEAE

Amphistelma leptocarpa Rusby

Desc. S. Amer. Pl. 98. 1920. Sierra del Libano, 6000 ft, 23 Jan, *Smith 1679* (HOLOTYPE: NY!; ISOTYPES: GH!, MICH, US).

Cynanchum subpaniculatum Woodson

Ann. Missouri Bot. Gard. 28: 275. 1941. Near Don Amo, 2000 ft, 4 Jun, *Smith 2410* (HOLOTYPE: MO; ISOTYPES: CM!, GH!, NY!, US). = *C. cubense* (A. Rich.) Woodson.

Irmischia angustifolia Rusby

Desc. S. Amer. Pl. 93. 1920. Jiracasaca, 2500 ft, 28 Sep, *Smith 1677* (HOLOTYPE: NY!; ISOTYPE: CM!).

Irmischia aristata Rusby

Desc. S. Amer. Pl. 93. 1920. Near Cacagualito, 1800 ft, 5 Jan, *Smith 1901* (HOLOTYPE: NY!; ISOTYPES: A!, GH!). [Additional specimens collected at Playa Brava, 500 ft, 25 Jun, were given the same number.]

Marsdenia asclepioidea Rusby

Desc. S. Amer. Pl. 100. 1920. Valparaiso, 4500 ft, 26 Feb, *Smith 1667* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

Marsdenia ecorpuscula Rusby

Desc. S. Amer. Pl. 99. 1920. Near Mamatoca, below 1500 ft, 3 Jun, *Smith 2094* (HOLOTYPE: NY!). = *M. altissima* (Jacq.) Dugand. [Another specimen collected at Masinga, 250 ft, 10 May (NY!), was given the same number.]

Marsdenia inelegans Rusby

Desc. S. Amer. Pl. 100. 1920. 3 mi SE of Bonda, 500 ft, 30 May, *Smith 2296* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, US).

Metastelma atrovirens Rusby

Desc. S. Amer. Pl. 95. 1920. Seacoast at Playa Brava, 6 Jun, *Smith 1680* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, MICH, US).

Metastelma ovatum Rusby

Desc. S. Amer. Pl. 96. 1920. Near Bonda, 150 ft, Jul (fl); Aug (fr), *Smith 1676* (NY!—1 sheet with 2 individuals, one from each date). = *M. jacquinii* (Decne.) Dugand.

Metastelma pallidum Rusby

Desc. S. Amer. Pl. 96. 1920. Cacagualito, 2000 ft, 10 Jan, *Smith 1900* (HOLOTYPE: NY?; ISOTYPE: A!). [Additional specimens collected in Dec were given the same number.]

Philibertella filipes Rusby

Desc. S. Amer. Pl. 94. 1920. Near Bonda, 150 ft, 24 Nov, *Smith 1669* (HOLOTYPE: NY!). = *Sarcostemma bilobum* subsp. *filipes* (Rusby) Dugand. [Another specimen collected from the Onaca Estate, 2000 ft, 2 Dec (NY!), was given the same number.]

Philibertella [*Philibertella*] *ovalifolia* Rusby

Desc. S. Amer. Pl. 94. 1920. 5 mi S of Mamatoca, 250 ft, 11 Mar, *Smith 1683* (HOLOTYPE: NY!; ISOTYPES: CM!, MICH, US). = *Sarcostemma glaucum* Kunth.

Rouliniella colombiana Vail

Bull. Torrey Bot. Club 29: 663. 1902. Near Bonda, ca 150 ft, 16 Nov, *Smith 1668* (HOLOTYPE: NY!; ISOTYPES: BM, CM!, F, G, GH, L, LE, MICH, P, S, U, UC, US, VT, W; see C. Sundell, *Evol. Monogr.* 5: 41. 1981). = *Cynanchum racemosum* (Jacq.) Jacq.

Stenomeria tomentosa Rusby

Desc. S. Amer. Pl. 95. 1920. Minca, 2000 ft, 1 Jun [14 Jun in publication], *Smith 1523* (HOLOTYPE: NY!; ISOTYPE: CM!).

Tassadia recurva Rusby

Desc. S. Amer. Pl. 97. 1920. Las Partidas, 3500 ft, 15 Mar; Minca, 2000 ft, 1 Jun; *Smith 1621* (NY!—1 sheet with 2 individuals, one from each locality; see attempted lectotypification by J. Fontella, *Arch. Jard. Bot. Rio de Janeiro* 21: 373. 1978). = *Cynanchum recurvum* (Rusby) Spellman = *Tassadia obovata* Decne.

Vincetoxicum acutissimum Rusby

Desc. S. Amer. Pl. 99. 1920. Near Las Partidas, 3500 ft, 10 Mar, *Smith 1646* (HOLOTYPE: NY!; ISOTYPES: CM!, MICH, US).

ASPLENIACEAE

Dryopteris columbiana C. Chr.

Kongel. Danske Vidensk. Selsk. Naturvidensk. Math. Afh. 4: 229. 1907. Alto del Cielo, 5000 ft, 13 Dec; Horqueta Mountain, 8000 ft, 28 Dec; Onaca, 3500 ft, 17 Aug; *Smith 998* (HOLOTYPE: Herbarium H. Christ, now at P). = *Thelypteris columbiana* (C. Chr.) C. Morton.

Dryopteris opposita var. *longissima* C. Chr.

Kongel. Danske Vidensk. Selsk. Naturvidensk. Math. Afh. 4: 289. 1907. Onaca, 2500 ft, 3 Dec; Minca road, 1200 ft, Dec; *Smith 1008* (HOLOTYPE: Herbarium H. Christ, now at P). = *Thelypteris opposita* (Vahl) Ching.

ASTERACEAE

Baccharis densifolia Rusby

Desc. S. Amer. Pl. 149. 1920. San Lorenzo Ridge, 6750–7500 ft, 26 Jan, *Smith 1997* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US). = *B. prunifolia* var. *subprunifolia* Cuatrec.

Baltimora ovata Rusby

Desc. S. Amer. Pl. 151. 1920. Within 3–4 mi of the sea at Cienaga, Papare, Santa Marta, Braba, etc., Sep–Nov, *Smith 536* (HOLOTYPE: NY!). = *B. geminata* (Brandege) Stuessy.

Calea congesta Rusby

Desc. S. Amer. Pl. 155. 1920. Onaca, 2000–3000 ft, Dec, *Smith 648* pro parte (HOLOTYPE: NY!, photo & fragment at US; ISOTYPES: G, PH p.p., U p.p., US, photo of US in US; J. Pruski, pers. comm.). = *C. solidaginea* Kunth. [This collection is a mixture with *C. herbert-smithii* Rusby.]

Calea herbert-smithii Rusby

Desc. S. Amer. Pl. 156. 1920. Onaca, 2000–3000 ft, Dec, *Smith 648* pro parte (HOLOTYPE: NY!, photo & fragments at US; ISOTYPES: F, photo of F in US, G–2 sheets, GH, K, LL, MO, PH p.p., S, TEX, U p.p., UC, US; J. Pruski, pers. comm.). = *C. solidaginea* Kunth. [This collection is a mixture with *Calea congesta* Rusby.]

Calea holtonii Rusby

Desc. S. Amer. Pl. 156. 1920. 5 mi E of Bonda, Sep–Oct, *Smith 524* (HOLOTYPE: NY!, photo & fragment at US; ISOTYPES: E, F, photo of F in US, G–2 sheets, GH, LL, MICH, MO, PH, S, U, UC, US–2 sheets plus a photo of one; J. Pruski, pers. comm.). = *C. berteriana* DC.

Clibadium lanceolatum Rusby

Desc. S. Amer. Pl. 150. 1920. *Smith s.n.* (HOLOTYPE: NY; ISOTYPE: US).

Clibadium latifolium Rusby

Desc. S. Amer. Pl. 150. 1920. Banks of Buritaca River, 2 mi from the sea, 25 Sep, *Smith 2014* (HOLOTYPE: NY; ISOTYPES: CM!, MICH, US).

Encelia deltoidea Rusby

Desc. S. Amer. Pl. 154. 1920. Playa Brava, Nov, *Smith 594* (HOLOTYPE: NY; ISOTYPE: US). [Another specimen from the same locality, but collected 26 Oct (NY), was given the same number.]

Eupatorium chrysostictum Robinson

Proc. Amer. Acad. Arts 54: 240. 1918. Las Nubes, 4500 ft, 7 Feb, *Smith 660* (HOLOTYPE: GH; ISOTYPES: CM!, MICH, US). = *Chromolaena chrysosticta* (Robinson) R. King & H. Robinson.

Eupatorium diaphanophlebium Robinson

Proc. Amer. Acad. Arts 54: 243. 1918. Las Nubes, 4500 ft, 6 Feb, *Smith 1990* (HOLOTYPE: GH!; ISOTYPE: NY!). [Additional specimens collected near the top of Horqueta Mountain, 7500 ft, 28 Dec, were given the same number.] = *Chromolaena diaphanophlebia* (Robinson) R. King & H. Robinson.

Eupatorium erioclinium Robinson

Proc. Amer. Acad. Arts 54: 243. 1918. Las Nubes, 4500 ft, 15–20 Dec, *Smith 625* (HOLOTYPE: GH!; ISOTYPES: CM!, NY!, US). = *Hebeclinium erioclinium* (Robinson) R. King & H. Robinson.

Eupatorium iridolepis Robinson

Proc. Amer. Acad. Arts 54: 247. 1918. Las Nubes, 4500 ft, 18 Dec, *Smith 615* (HOLOTYPE: GH!; ISOTYPES: A!, CM!, NY!, US). = *Chromolaena iridolepis* (Robinson) R. King & H. Robinson.

Eupatorium magdalenense Robinson

Proc. Amer. Acad. Arts 54: 250. 1918. Sierra del Libano, 5500–6500 ft, 25 Jan, *Smith 1993* (HOLOTYPE: GH!; ISOTYPES: CM!, MICH, NY!, US). = *Fleischmannia magdalensis* (Robinson) R. King & H. Robinson.

Eupatorium psilodorum Robinson

Proc. Amer. Acad. Arts 55: 27. 1919. Las Nubes, 4500 ft, 16 Dec, *Smith 621* (HOLOTYPE: GH!; ISOTYPES: CM!, MO, NY!, US). = *Ageratina psilodora* (Robinson) R. King & H. Robinson.

Eupatorium uromeres Robinson

Proc. Amer. Acad. Arts 54: 260. 1918. Below 3000 ft, May–Dec (fl), *Smith 505* (HOLOTYPE: GH!; ISOTYPES: CM!, MICH, NY!, US). = *Chromolaena uromeres* [*uromenes* in publication] (Robinson) R. King & H. Robinson.

Gnaphali[u]m multicapitatum Rusby

Desc. S. Amer. Pl. 149. 1920. Las Nubes, 4500 ft, 18 Dec, *Smith 606* (HOLOTYPE: NY!; ISOTYPES: CM!, US).

Jungia calyculata Cuatrec.

Repert. Spec. Nov. Regni Veg. 55: 125. 1953. Las Nubes, 4500 ft, 5–15 Dec, *Smith 677* (HOLOTYPE: F; ISOTYPES: CM!, GH!, NY!, US).

Liabum biattenuatum Rusby

Desc. S. Amer. Pl. 159. 1920. Sierra del Libano, 5500 ft, 19 Jan, *Smith 2013* (HOLOTYPE: NY!). [Another collection, possibly a different taxon (see Rusby, p. 159), was given the same number.]

Liabum falcatum Rusby

Desc. S. Amer. Pl. 161. 1920. Agua Dulce, 2200 ft, 20 Jan, *Smith 2012* (HOLOTYPE: NY!; ISOTYPES: CM!, US).

Liabum stipulatum Rusby

Desc. S. Amer. Pl. 160. 1920. Las Nubes, 4500 ft, 7 Feb, *Smith 2001* [200 in publication] (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, US). = *L. nigropilosum* Hieron.

Lycoseris oblongifolia Rusby

Desc. S. Amer. Pl. 162. 1920. Las Nubes, Onaca, Bonda, etc., 0–4500 ft, begins to flower 25 Dec, *Smith 661* (HOLOTYPE: NY!). [Additional specimens collected near Cacagualito, 1500 ft, 26 Dec, may be a different taxon (see Rusby, p. 163).]

Melanthera longipes Rusby

Desc. S. Amer. Pl. 153. 1920. Near Cacagualito, 1600 ft, 15 Nov, *Smith 2719* (HOLOTYPE: NY!).

Mikania clematidiflora Rusby ex Robinson

Contr. Gray Herb. 61: 13. 1920. Las Nubes, 4500 ft, 16 Dec, *Smith 634* (HOLOTYPE: NY!; ISOTYPE: GH!). [Another specimen collected 12 Dec (NY!), was given the same number.]

Mikania flabellata Rusby ex Robinson

Contr. Gray Herb. 61: 14. 1920. Sierra del Libano, 6000 ft, 21 Jan, *Smith 2002* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, US).

Mikania globifera Rusby ex Robinson

Contr. Gray Herb. 61: 15. 1920. Minca road near Santa Marta, ca 1200 ft, 17 Jan, *Smith 1986* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, US).

Mikania miconioides Robinson

Contr. Gray Herb. 61: 19. 1920. Las Nubes, 4500 ft, 18 Dec, *Smith 631* (HOLOTYPE: GH!; ISOTYPES: NY!, US).

Montanoa serrata Rusby

Desc. S. Amer. Pl. 151. 1920. Near the coast at Playa Brava, 1 Apr, *Smith 516* (HOLOTYPE: NY!; ISOTYPE: GH!). = *Viguiera serrata* (Rusby) H. Robinson. [Additional specimens collected on the road to Agua Dulce, 16 Jan (NY!), and from Bonda to Cacagualito, Campo Alegre, etc., 2000 ft (NY!), were given the same number.]

Pectis densa Rusby

Desc. S. Amer. Pl. 158. 1920. Near Bonda, 250 ft, 16 Nov, *Smith 528* pro parte (HOLOTYPE: NY). [This collection is a mixture with *P. rosea* Rusby; additional specimens collected near Escalera de los Indios, 800 ft, 8 Nov, were given the same number.]

Pectis rosea Rusby

Desc. S. Amer. Pl. 157. 1920. Near Bonda, below 1000 ft, Jul–Oct, *Smith 528* pro parte (HOLOTYPE: NY!). = *P. linearis* var. *graveolens* (Klatt) Keil. [This collection is a mixture with *P. densa* Rusby; additional specimens collected near Escalera de los Indios, 800 ft, 8 Nov, were given the same number.]

Piptocarpha gracilis Rusby

Desc. S. Amer. Pl. 146. 1920. 5 mi NE of Bonda, 150 ft, 14 Jan, *Smith 1982* (HOLOTYPE: NY!; ISOTYPES: CM!, G, K, MO, P, US; Gerald L. Smith, pers. comm.). = *Vernonia gracilis* Kunth.

Sclerocarpus colombianus Rusby & S. F. Blake

In: S. F. Blake, Contr. U.S. Natl. Herb. 22: 609. 1924. Near sea at Cienaga, 6–12 Sep, *Smith 518* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

Senecio genuflexus Greenman

Ann. Missouri Bot. Gard. 10: 82. 1923. Sierra del Libano, 5500–6500 ft, 19 Jan, *Smith 1987* (HOLOTYPE: MO; ISOTYPES: F, GH! p.p., NY!, US p.p.). [Another specimen collected 27 Feb (fr) (NY!), was given the same number.]

Senecio lophophilus Greenman

Ann. Missouri Bot. Gard. 10: 84. 1923. San Lorenzo Ridge, 6500–7500 ft, 27 Jan, *Smith 1988* (HOLOTYPE: NY!, photo & fragment at MO). = *Pentacalia lophophila* (Greenman) Cuatrec.

Senecio sanctae-martae Greenman

Ann. Missouri Bot. Gard. 10: 91. 1923. San Lorenzo Ridge, 6500–7000 ft, 25 Jan (fl); 26 Feb (fr); *Smith 1977* (F, MO, NY!).

Senecio scortifolius Greenman

Ann. Missouri Bot. Gard. 10: 91. 1923. Las Nubes, 4500 ft, 16 Feb, *Smith 2000* (HOLOTYPE: MO; ISOTYPES: GH!, NY!). = *Pentacalia scortifolia* (Greenman) Cuatrec. [Another specimen collected at Sierra del Libano, 6000 ft, 23 Jan (NY!), was given the same number.]

Spilanthes ocyimifolia f. *radiifera* A. H. Moore

Proc. Amer. Acad. Arts 42: 533. 1907. Bonda, Mamatoca, Onaca, etc., below 3000 ft, Nov–Dec, *Smith 513* (HOLOTYPE: NY!).

Steiractinia rusbyana S. F. Blake

Contr. U.S. Natl. Herb. 22: 627. 1924. San Lorenzo Ridge, 7250 ft, 25 Jan (fl); 26 Feb (fr); *Smith 1342* (NY!—1 sheet with 3 individuals, possibly representing both dates, photo & fragments at US).

Verbesina columbiana Robinson

Proc. Amer. Acad. Arts 47: 211. 1911. Onaca, 2500 ft [250 ft in publication], 20 Dec, *Smith 671* (HOLOTYPE: GH!; ISOTYPES: NY!—2 sheets, US).

Wedelia heterophylla Rusby

Desc. S. Amer. Pl. 152. 1920. Bonda, Jul; Near Cacagualito, 1600 ft, 15 Nov, *Smith 515* (NY— one from each locality; ISOSYNTYPES: F, MICH; J. Strother, pers. comm.). [Additional specimens

collected near Masinga, 250 ft, "the larger one" on 16 Dec and "the smaller one" on 20 Nov, were given the same number.]

Wedelia symmetrica Rusby

Desc. S. Amer. Pl. 153. 1920. Cinto, on the north coast, 22 Mar, *Smith 1975* (HOLOTYPE: NY; ISOTYPES: CM!, F, MICH, US; J. Strother, pers. comm.).

BEGONIACEAE

Begonia chlorolepis Lyman B. Smith & B. G. Schubert

Caldasia 4: 16, tab. 3. 1946. Las Nubes, 4500 ft, 18 Dec, *Smith 1268* (HOLOTYPE: GH!; ISOTYPES: NY!—3 sheets, US).

Begonia cryptocarpa Lyman B. Smith & B. G. Schubert

Caldasia 4: 90. 1946. Onaca, 5000 ft, 22 Aug (fl); Las Nubes, 4500 ft, 18 Dec (fr); *Smith 1266* (HOLOTYPE: GH!; ISOTYPE: NY).

Begonia heterodonta Rusby

Desc. S. Amer. Pl. 66. 1920. Agua Dulce road, 1000 ft, 21 Nov, *Smith 1264* (HOLOTYPE: NY!). = *B. filipes* Benth. [Another specimen collected 7 mi N of Bonda, 400 ft, 4 Nov (NY!), was given the same number.]

Begonia santae-martae Irmscher

Bot. Jahrb. Syst. 74: 618. 1949. Las Nubes road, 4000 ft, 20 Dec, *Smith 1262* (HOLOTYPE: B?; ISOTYPES: GH!, US).

Begonia subcostata Rusby

Desc. S. Amer. Pl. 67. 1920. Las Nubes, 4500 ft, 15 Dec, *Smith 1265* (HOLOTYPE: NY!; ISOTYPES: GH!, MICH, US).

BIGNONIACEAE

Arrabidaea magnifica Sprague ex Steenis

Recueil Trav. Bot. Néerl. 24: 830. 1927. Near Masinga Vieja, 500–1500 ft, 2 Dec, *Smith 741* (HOLOTYPE: U; ISOTYPE: NY!). [Additional specimens collected at Minca, Jun, and at 1500 ft, Sep (A!, GH!), were given the same number.]

Arrabidaea pachycalyx Sprague

Bull. Herb. Boissier 6: 373. 1906. Near Masinga, 300 ft, 1 Dec, *Smith 744*; Agua Dulce road, 500–1000 ft, 22 Nov, *Smith 742* (K?).

Arrabidaea sanctae-martae Sprague ex Sandw.

Recueil Trav. Bot. Néerl. 34: 229. 1937. Bonda, below 1000 ft, 2 Jan; 7 mi S of Mamatoca, 500 ft, 2 Feb (fl); near Bonda, 250 ft, 25 Apr (fr); *Smith 743* (K?).

Clytostoma pterocalyx Sprague ex Urban

Ber. Deutsch. Bot. Ges. 34: 741. 1916. Bonda, 150 ft, 30 May (fl); 3 Jun (fl); 28 Sep (fr); *Smith 2401* (B?; ISOSYNTYPES: NY!—3 sheets, one from each date).

BLECHNACEAE

Stenochlaena angusta L. Underw.

Bull. Torrey Bot. Club 33: 594. 1907. Jordan, 1200–1400 ft, *Smith 1051* (HOLOTYPE: NY; ISOTYPE: US). = *Lomariopsis fendleri* D. C. Eaton.

BOMBACACEAE

Ochroma obtusa Rowlee

J. Wash. Acad. Sci. 9: 166. 1919. Near Mamatoca, 10 Dec, *Smith 829* (HOLOTYPE: NY!; ISOTYPES: A!, GH!, US).

Pseudobombax maximum Robyns

Bull. Jard. Bot. État 33: 71. 1963. Bonda, 150 ft, Jan, *Smith 1888* (HOLOTYPE: NY!). [Another specimen collected at Bonda, Dec (sterile) (NY!), was given the same number.]

BORAGINACEAE

Cordia opaca Rusby

Desc. S. Amer. Pl. 104. 1920. Valparaiso, 4500 ft, 25 Feb, *Smith 1872* (HOLOTYPE: NY; ISOTYPES: CM!, GH!, MICH, US).

Cordia subtruncata Rusby

Desc. S. Amer. Pl. 105. 1920. Cienaga, near sea level, 12 Sep; 4 mi E of Bonda, 300 ft, 24 Aug; *Smith 583* (NY!—2 sheets, one from each locality).

Tournefortia macrostachya Rusby

Desc. S. Amer. Pl. 106. 1920. Sierra del Libano, 6000 ft, 21 Jan, *Smith 1865* (HOLOTYPE: NY!, photo & fragments at GH!; ISOTYPES: CM!, GH!, MICH, NY!, US).

BROMELIACEAE

Tillandsia attenuata Rusby

Desc. S. Amer. Pl. 4. 1920. Near Manzanares, 3500 ft, 9 Dec, *Smith 2857* (HOLOTYPE: NY!).

Tillandsia crenulipetala Mez

Repert. Spec. Nov. Regni Veg. 16: 76. 1919. *Smith 2349* (HOLOTYPE: B?; ISOTYPE: US).

BURSERACEAE

Bursera graveolens var. *villosula* Cuatrec.

Webbia 12: 431. 1957. Near Bonda, 250 ft, 30 May, *Smith 2396* (HOLOTYPE: US; ISOTYPES: A, CM!, GH!, NY!).

Protium mucronatum Rusby

Desc. S. Amer. Pl. 34. 1920. Don Diego, 21 May, *Smith 2743* (HOLOTYPE: NY!; ISOTYPES: CM!, F!, G!, MICH!, MO!, US; D. Daly, pers. comm.). = *Tetragastris mucronata* (Rusby) Swart.

Protium neglectum var. *tenuifolium* Swart

Recueil Trav. Bot. Néerl. 39: 204. 1942. Near Plantation Maria Teresa, 3500 ft, 19 Jan, *Smith 1741* (HOLOTYPE: U; ISOTYPES: A!, CM!, F!, NY!, US!, WIS!; D. Daly, pers. comm.). = *P. tenuifolium* var. *herbertii* Cuatrec.

CACTACEAE

Pereskia colombiana Britton & Rose

Publ. Carnegie Inst. Wash. 248(1): 17. 1919. Bonda, 150 ft, 5 Apr (fl), *Smith 1886* (LECTOTYPE: NY!; ISOLECTOTYPES: BM, BR, E, F, G, GH!, L, LE, MICH, MO, P, S, U, UC, US, VT; see B. Leuenberger, Mem. New York Bot. Gard. 41: 85. 1986). = *P. guamacho* F. A. C. Weber.

CAESALPINIACEAE

Chamaefistula smithiana Britton & Rose

In: Britton & Killip, Ann. New York Acad. Sci. 35: 172. 1936. 5 mi E of Cienaga, below 500 ft, 10 Sep, *Smith 251* (HOLOTYPE: NY!; ISOTYPES: F, MICH, US). = *Senna smithiana* (Britton & Rose) Irwin & Barneby.

CAMPANULACEAE

Centropogon foliosum Rusby

Desc. S. Amer. Pl. 146. 1920. Sierra del Libano, 6000 ft, 22 Jan, *Smith 1385* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

Siphocampylus declinatus Rusby

Desc. S. Amer. Pl. 145. 1920. Sierra del Libano and San Lorenzo Ridge, 6500 ft, 25 Jan, *Smith 1384* (HOLOTYPE: NY!; ISOTYPES: A!, GH!, US). = *Centropogon declinatus* (Rusby) F. Wimmer.

Siphocampylus rectiflorus Rusby

Desc. S. Amer. Pl. 145. 1920. Las Nubes, 4500 ft, 5 Dec, *Smith 1388* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

CAPPARACEAE

Morisonia elliptica Rusby

Desc. S. Amer. Pl. 24. 1920. Near Playa Brava, 10 Apr, *Smith 2098* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, GH!, MICH, NY!, US).

CELASTRACEAE

Maytenus longipes Briq.

Annuaire Conserv. Jard. Bot. Genève 20: 361. 1919. Near Bonda, 29 Dec (fl); near Bonda, Aug (fr); Cacagualito, May (fr); *Smith 454* (G?; ISOSYNTYPES: NY!—1 sheet with three individuals, one fl, two fr).

CHRYSOBALANACEAE

Moquilea cuspidata Rusby

Desc. S. Amer. Pl. 27. 1920. Near Las Partidas, 3500 ft, 10 Mar, *Smith 1773* (HOLOTYPE: NY!; ISOTYPES: A!, GH!, MICH, US). = *Licania cuspidata* (Rusby) Prance.

Parinarium [*Parinari*] *pachyphyllum* Rusby

Desc. S. Amer. Pl. 26. 1920. Near Bonda, 150 ft, 15 Feb, *Smith 1775* (HOLOTYPE: NY!; ISOTYPES: A!, GH!). [Another specimen collected at the same locality, 17 Feb (fr) (NY!), was given the same number.]

CLETHRACEAE

Clethra smithii Briq.

Annuaire Conserv. Jard. Bot. Genève 20: 374. 1919. Near Don Amo, 2000 ft, 18 Jun, *Smith 2422* (HOLOTYPE: G?; ISOTYPES: A!, CM!, GH!, NY!, US). = *C. lanata* M. Martens & Galeotti.

CLUSIACEAE

Clusia oblanceolata Rusby

Desc. S. Amer. Pl. 58. 1920. Valparaiso, 5500 ft, 20 Mar, *Smith 1880* (HOLOTYPE: NY?; ISOTYPES: GH!, MICH, US).

COMBRETACEAE

Combretum latipaniculatum Rusby

Desc. S. Amer. Pl. 69. 1920. 5 mi N of Bonda, 100 ft, 18 Mar, *Smith 2101* (HOLOTYPE: NY!; ISOTYPES: A!, GH!, MICH, US).

Combretum multidiscum Rusby

Desc. S. Amer. Pl. 69. 1920. Near Masinga, 250 ft, 6 Feb (fr), *Smith 874* (HOLOTYPE: NY!). [Additional specimens collected at Bonda, 3 Jan (fl) (A!, GH!, NY!), were given the same number.]

Combretum oblongifolium Rusby

Desc. S. Amer. Pl. 70. 1920. Calavasa, 600 ft, 28 Dec, *Smith 1947* (HOLOTYPE: NY!; ISOTYPES: GH!, US).

CONVOLVULACEAE

Bonamia tricantha var. *oblonga* Ooststr.

Recueil Trav. Bot. Néerl. 33: 213. 1936. Near Bonda, 150 ft, 9 Dec, *Smith 1871* (HOLOTYPE: US—70020; ISOTYPES: A!, CM!, F, GH!, NY!, P, UC; G. Staples, pers. comm.).

Ipomoea hilarifolia Rusby

Desc. S. Amer. Pl. 103. 1920. Nequange, 4 [7] Apr, *Smith 2109* (HOLOTYPE: NY!; ISOTYPES: GH!, MICH, US). = *I. incarnata* (Vahl) Choisy.

Maripa acuminata Rusby

Desc. S. Amer. Pl. 102. 1920. 5 mi S of Mamatoca, 800 ft [8000 in publication], 21 Nov, *Smith 877* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US!; G. Staples, pers. comm.). = *Bonamia trichantha* H. Hallier.

CUCURBITACEAE

Calycophysum cordatum Pittier

Contr. U.S. Natl. Herb. 20: 489. 1922. Sierra del Libano, 6000 ft, 22 Jan (female fl), *Smith 1603* (HOLOTYPE: US—533953). [Additional specimens collected at the same place, Mar, and at Valparaiso, 4500 ft, May, were given the same number.]

CUNONIACEAE

Weinmannia nervosa Killip

J. Wash. Acad. Sci. 16: 569. 1926. Valparaiso, 4500 ft, 15 Apr, *Smith 1743* (HOLOTYPE: US—533715; ISOTYPE: NY!).

CYPERACEAE

Cyperus tenuis var. *grandiceps* Kük.

Pflanzenr. IV. 20(Heft 101): 417. 1936. Near Bonda, 250 ft, 10 Jul, *Smith 499* (HOLOTYPE: B?; ISOTYPE: NY!).

DICHAPETALACEAE

Stephanopodium aptotum Wheeler

Proc. Biol. Soc. Wash. 53: 7. 1940. Onaca, 4000 ft, 17 Aug, *Smith 1701* pro parte (HOLOTYPE: GH!; ISOTYPE: NY!). [This collection is a mixture with *Rhamnus atroviridis* Rusby (Rhamnaceae).]

DIOSCOREACEAE

Dioscorea frutescens Rusby

Desc. S. Amer. Pl. 5. 1920. San Lorenzo Ridge, 6500 ft, 27 Feb, *Smith 2299* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!). = *D. coriacea* Humb. & Bonpl. ex Willd.

Dioscorea hastatissima Rusby

Desc. S. Amer. Pl. 7. 1920. Near Masinga Vieja, 1000 ft, 11 Nov, *Smith 2294* (HOLOTYPE: NY; ISOTYPES: CM!, GH!, MICH, US).

Dioscorea herbert-smithii Rusby

Desc. S. Amer. Pl. 7. 1920. 6 mi from Mamatoca, 500 ft, 10 Apr, *Smith 2301* (HOLOTYPE: NY; ISOTYPES: CM!, GH!, MICH, US).

Dioscorea martensis Knuth

Notizbl. Bot. Gart. Berlin-Dahlem 7: 214. 1917. Near Masinga, 250 ft, 19 Jul, *Smith 2298* (HOLOTYPE: B?; ISOTYPES: CM!, GH!, MICH, NY, US).

Dioscorea recurva Rusby

Desc. S. Amer. Pl. 4. 1920. Near Agua Dulce, 2200 ft, 19 Oct, *Smith 2557* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US). = *D. glandulosa* Klotzsch ex Knuth.

Dioscorea truncata Rusby

Desc. S. Amer. Pl. 6. 1920; non *D. truncata* Miq., 1848. Near coast at Playa Brava, 17 Nov, *Smith 2302* (HOLOTYPE: NY!; ISOTYPE: GH!). = *D. pseudorajaniodes* Knuth. [This number was also given to a second locality, Cienaga, near sea level, 10 Sep (B, NY!, US) which was mistakenly cited by Knuth as the type locality of his new name (Repert. Spec. Nov. Regni Veg. 22: 347. 1926).]

ERICACEAE

Gaultheria fendleri Rusby

Desc. S. Amer. Pl. 74. 1920. Top of San Lorenzo Ridge, 6500–7500 ft, 27 Feb, *Smith 1719* (HOLOTYPE: NY!; ISOTYPES: CM!, GH, MICH, US).

Gaultheria sanmartensis Rusby

Desc. S. Amer. Pl. 73. 1920. Top of San Lorenzo Ridge, 6500–7500 ft, 27 Feb, *Smith 1721* (HOLOTYPE: NY!; ISOTYPES: CM!, MICH, NY!). = *Pernettya prostrata* (Cav.) DC.

Macleania arcuata Rusby

Desc. S. Amer. Pl. 76. 1920. Sierra del Libano, 6000 ft, 20 Jan, *Smith 2789* (HOLOTYPE: NY!; ISOTYPE: NY!).

Macleania recurva Rusby

Desc. S. Amer. Pl. 76. 1920. Sierra del Libano, 6000 ft, 22 Jan, *Smith 1964* (HOLOTYPE: NY!; ISOTYPE: CM!).

Macleania robusta Rusby

Desc. S. Amer. Pl. 75. 1920. Sierra del Libano, 6000–7000 ft, 28 Jan, *Smith 1722* (HOLOTYPE: NY!; ISOTYPES: CM!, US).

Psammisia elegans Rusby

Desc. S. Amer. Pl. 78. 1920. Las Nubes, 4500 ft, 2 Dec, *Smith 1554* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

ERYTHROXYLACEAE

Erythroxylon [*Erythroxylum*] *densum* Rusby

Desc. S. Amer. Pl. 33. 1920. 6 mi NE of Masinga, ca 2500 ft, 28 Mar, *Smith 845* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, GH!, MICH, US).

Erythroxylum lineolatum var. *sanctae-martae* O. Schulz

Repert. Spec. Nov. Regni Veg. 30: 180. 1932. 6 mi NE of Masinga, 2500 ft, 28 Mar, *Smith 845* (HOLOTYPE: B?; ISOTYPES: CM!, NY!). = *E. densum* Rusby.

Erythroxylon [*Erythroxylum*] *uniflorum* Rusby

Desc. S. Amer. Pl. 33. 1920. At Masinga Vieja, 800 ft, 25 Apr, *Smith 788* (HOLOTYPE: NY!). = *E. orinocense* Kunth. [Two additional specimens collected at Bonda, 150 ft, 19 Jun (fl) (NY!), and Jul (fr) (NY!), were given the same number.]

EUPHORBIACEAE

Acalypha amplifolia Rusby

Desc. S. Amer. Pl. 46. 1920. Near Valparaiso, 4000 ft, 26 Jan, *Smith 1433* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, NY!, US). = *A. monostachya* Jacq.

Acalypha asterifolia Rusby

Desc. S. Amer. Pl. 48. 1920. Near Masinga, 400 ft, Oct, *Smith 429* pro parte (HOLOTYPE: NY!). [This collection may be conspecific with *A. sanctae-martae* Pax & K. Hoffm. or a mixture with it.]

Acalypha diversifolia var. *caloneura* Pax & K. Hoffm.

Pflanzenr. IV. 147(Heft 85): 108. 1924. Don Amo road, 500 ft, 3 Jan, *Smith 1427* (HOLOTYPE: B?; ISOTYPES: A!, CM!, GH!, NY!, US).

Acalypha salicioides Rusby

Desc. S. Amer. Pl. 46. 1920. Don Amo road, 500 ft, 13 Jan; Near Cacagualito, 1200 ft, 23 Feb; Rio Gairo, 3000 ft, 22 Mar; *Smith 1428* (NY!—2 sheets, both dated 13 Jan). = *A. diversifolia* var. *cadpifolia* (Poeppig & Endl.) Muell. Arg.

Acalypha santae-martae Pax & K. Hoffm.

Pflanzenr. IV. 147(Heft 85): 121. 1924. Near Masinga, 400 ft, Oct, *Smith 429* (HOLOTYPE: B?).

Acalypha subscandens Rusby

Desc. S. Amer. Pl. 47. 1920. Mamatoca, 100 ft, 3 Jun, *Smith 2393* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

Croton bondaensis Rusby

Desc. S. Amer. Pl. 43. 1920. 6 mi N of Bonda, 100 ft, 1 Nov (fl); Masinga, 250 ft, 17 Jul (fr); *Smith 1467* (NY!—2 sheets, one from each locality). = *C. guildingii* Griseb.

Croton cienagensis Rusby

Desc. S. Amer. Pl. 44. 1920. 5 mi E of Cienaga, 11 Sep, *Smith 368* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, MICH). = *C. fragilis* Knuth.

Croton obtusus Rusby

Desc. S. Amer. Pl. 44. 1920. Near the sea at Santa Marta, 13 Sep, *Smith 371* (HOLOTYPE: NY?; ISOTYPES: GH!, MICH, US).

Croton ochromaefolius Rusby

Desc. S. Amer. Pl. 45. 1920. Valparaiso, 4500 ft, 18 Jan, *Smith 1770* (HOLOTYPE: NY!; ISOTYPES: GH!, MICH, US).

Euphorbia chiogenoides Rusby

Desc. S. Amer. Pl. 51. 1920. Near Masinga, 250 ft, 24 Dec, *Smith 77* (HOLOTYPE: NY!, fragment at A!). [Another date, Aug, was given the same number; of the 3 individuals on the single sheet at NY, 1 was collected on one date (sterile) and 2 were collected on the other date (fl).]

Euphorbia sanmartensis Rusby

Desc. S. Amer. Pl. 50. 1920. Sandy seashore at Playa Brava, 9 Feb, *Smith 1919* (HOLOTYPE: NY!, fragment at A!; isotypes: MICH, US).

Euphorbia subtrifoliata Rusby

Desc. S. Amer. Pl. 51. 1920. 8 mi E of Cienaga, 300 ft, 11 Sep, *Smith 359* (HOLOTYPE: NY!). [Another specimen collected at Masinga, 250 ft, 8 Nov, was given the same number.]

Hyeronima nevadensis Cuatrec.

Revista Acad. Colomb. Ci. Exact. 8: 300. 1951. Santa Marta, 4500 ft, *Smith 1952* (HOLOTYPE: F; ISOTYPE: US).

Jatropha longipes Pax

Pflanzenr. IV. 147(Heft 42): 106. 1910. Bonda, 150 ft, Jun, *Smith 1478* (HOLOTYPE: B?; ISOTYPE: US). = *Cnidocolus longipes* (Pax) I. M. Johnston.

Phyllanthus heteromorpha Rusby

Desc. S. Amer. Pl. 42. 1920. 6 mi S of Mamatoca, 400 ft, 11 Apr; Near Masinga, 250 ft, 30 May; *Smith 1716* (NY!—2 sheets, one from each locality). [Another specimen collected near Masinga, 31 Jul (fr) (NY!), was given the same number.]

FABACEAE

Ateleia herbert-smithii Pittier

Contr. U.S. Natl. Herb. 20: 112, f. 51. 1918. 5 mi S of Mamatoca, 24 Nov; 3 mi N of Bonda, 250 ft, 23 Oct; *Smith 817* (HOLOTYPE: US—703851).

Canavalia anomala Piper

Contr. U.S. Natl. Herb. 20: 575. 1925. 3 mi E of Masinga, 600 ft, 3 Feb, *Smith 681* pro parte (HOLOTYPE: NY! [fr & seeds only]). = *C. brasiliensis* f. *anomala* (Piper) J. Sauer.

Canavalia puberula Piper

Contr. U.S. Natl. Herb. 20: 564. 1925. Minca road, 600 ft, 6 Jan, *Smith 2047[a]* pro parte (HOLOTYPE: NY! p.p.). [This collection is a mixture with *C. brasiliensis* Martius ex Benth.]

Lonchocarpus sanctae-marthae Pittier

Contr. U.S. Natl. Herb. 20: 92. 1917. Near Mamatoca, 100 ft, 10 Apr (fl), *Smith 107* (HOLOTYPE: US-600294). [Additional specimens collected at the same locality, 25 Feb (NY!), and near Santa Marta, 19 Aug (NY!), were given the same number.]

Machaerium bondaense Pittier

Contr. U.S. Natl. Herb. 20: 114. 1918. 6 mi N of Bonda, at sea level, 1 Nov (fr), *Smith 264* (HOLOTYPE: NY!). [Additional specimens collected near Masinga, 26 Oct (fl), were given the same number.]

Machaerium glabratum Pittier

Contr. U.S. Natl. Herb. 20: 116. 1918. Near Masinga, below 1000 ft, 26 Oct (fl), *Smith 264* (HOLOTYPE: US-532839; ISOTYPES: A!, GH!, NY!). = *M. microphyllum* (E. Meyer) Standley. [Additional specimens with fruit (CM!, NY!) were given the same number.]

Machaerium intermedium Pittier

Contr. U.S. Natl. Herb. 20: 118. 1918. Agua Dulce, 2200 ft, 8 Jun, *Smith 2038* (HOLOTYPE: GH!; ISOTYPES: CM!, GH!, NY!). = *M. seemanii* Benth.

Machaerium milleflorum Pittier

Contr. U.S. Natl. Herb. 20: 119. 1918. Bonda, 150 ft, 5 Feb (fl), *Smith 2033* (HOLOTYPE: US-704057; ISOTYPES: A!, GH!, NY!). [Another specimen, the "same vine" collected in Oct (sterile) (NY!), was given the same number.]

Phaseolus peduncularis var. *pusillus* Hassler

Candollea 1: 436. 1923. *Smith 2052* (HOLOTYPE: G [fr]).

Pterocarpus floribundus Pittier

Contr. U.S. Natl. Herb. 20: 123. 1918. Forest 4 mi N of Bonda, 150 ft, 18 Mar (fl), *Smith 2030* (HOLOTYPE: US-704056; ISOTYPES: A!, GH!, NY!). = *P. rohrii* Vahl. [Another specimen collected at the same locality, 6 Jun (fr) (NY!), was given the same number.]

Pterocarpus heterophyllus Pittier

Contr. U.S. Natl. Herb. 20: 123. 1918. Bonda, below 2000 ft, Oct-Nov, *Smith 16* (HOLOTYPE: US-703743; ISOTYPES: A!, GH!).

FLACOURTIACEAE

Casearia chlorophoroidea Rusby

Desc. S. Amer. Pl. 63. 1920. Near Calavasa, 1000 ft, 18 May, *Smith 800* (HOLOTYPE: NY!; ISOTYPES: GH!, MICH, US). = *C. sylvestris* Swart.

Casearia herbert-smithii Rusby

Desc. S. Amer. Pl. 63. 1920. Near Minca, 2000 ft, 5 Jul, *Smith 1768* (HOLOTYPE: NY!; ISOTYPES: A!, GH!, MICH, US). = *C. sylvestris* Swart.

Casearia onacaensis Rusby

Desc. S. Amer. Pl. 62. 1920. "Probably" from Onaca, ca 2500 ft, Dec, *Smith 906* (HOLOTYPE: NY!). = *C. sylvestris* Swart.

Hasseltia lateriflora Rusby

Desc. S. Amer. Pl. 62. 1920. Sierra del Libano, 6000 ft, 21 Jan, *Smith 1915* (HOLOTYPE: NY!; ISOTYPES: A!, GH!). [Another specimen collected at Valparaiso, 4500 ft, 19 Jan (NY!), was given the same number.]

GESNERIACEAE

Besleria debilis Rusby

Desc. S. Amer. Pl. 122. 1920. Near Valparaiso, ca 4000 ft, 21 Mar, *Smith 1399* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US). = *B. laxiflora* Benth.

Besleria tenuifolia Rusby

Desc. S. Amer. Pl. 123. 1920. Near the coast at Don Diego, 12 May, *Smith 2672* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US). = *B. laxiflora* Benth.

Columnnea latifolia Rusby

Desc. S. Amer. Pl. 126. 1920. Sierra del Libano, 6000 ft, May, *Smith 1403* (HOLOTYPE: NY!).

Columnnea sanmartensis Rusby

Desc. S. Amer. Pl. 127. 1920. Sierra del Libano, 5500 ft, 7 Mar, *Smith 1394* (HOLOTYPE: NY!).

Gesneria onacaensis Rusby

Desc. S. Amer. Pl. 123. 1920. Above Onaca, 3500 ft, 18 Aug, *Smith 1386* (HOLOTYPE: NY!). [Another specimen collected at Las Nubes, 4500 ft, 18 Dec (NY!), was given the same number.]

Phinaea albiflora Rusby

Desc. S. Amer. Pl. 124. 1920. Sierra Onaca, 4000–5000 ft, 22 Aug, *Smith 2506* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, US).

HIPPOCRATEACEAE

Hippocratea foliosa Rusby

Desc. S. Amer. Pl. 54. 1920. Near Bonda, Aug, *Smith 893* (HOLOTYPE: NY!; ISOTYPES: A!, GH!, US). = *Prionostemma aspera* (Lam.) Miers.

HYMENOPHYLLACEAE

Trichomanes rhipidophyllum Slosson

Bull. Torrey Bot. Club 40: 687. 1914. Onaca, 2500 ft, 24 Aug, *Smith 2445* (HOLOTYPE: NY!; ISOTYPES: NY!, US).

LAMIACEAE

Hyptis colombiana Epling

Repert. Spec. Nov. Regni Veg. Beih. 85: 257. 1936. Road to Onaca, 2000 ft, 1 Dec, *Smith 1490* (HOLOTYPE: US—533573; ISOTYPES: CM!, G, GH!, K, MICH, MO, S).

Hyptis diffusa Epling

Repert. Spec. Nov. Regni Veg. Beih. 85: 242. 1936. Minca road, 1000 ft, 22 Nov, *Smith 1373* (HOLOTYPE: US—533500; ISOTYPES: GH!, NY!). [Another specimen collected near Onaca, 2000 ft, 4 Dec (NY!), was given the same number.]

Salvia libanensis Rusby

Desc. S. Amer. Pl. 110. 1920. Sierra del Libano, ca 6000 ft, Mar, *Smith 1380* (NY; ISOSYNTYPES: A!, CM!, GH!, MICH, NY, US).

Salvia multispicata Rusby

Desc. S. Amer. Pl. 111. 1920. Near Jiracasaca, 2500 ft, *Smith 1371* (HOLOTYPE: NY!; ISOTYPES: CM!, US).

Salvia secundiflora Rusby

Desc. S. Amer. Pl. 111. 1920. 5 mi N of Bonda, ca 100 ft, 22 Oct, *Smith 567* (HOLOTYPE: NY!; ISOTYPES: GH!, MICH, US).

Salvia tenuistachya Rusby

Desc. S. Amer. Pl. 109. 1920. Jiracasaca, 2500 ft, 2 Dec, *Smith 1370* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

Salvia viridifolia Rusby

Desc. S. Amer. Pl. 110. 1920. Las Nubes, 4500 ft, 15 Dec, *Smith 1381* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

Stachys hebens Epling

Repert. Spec. Nov. Regni Veg. Beih. 80: 35. 1934. Las Nubes, 4500 ft, 15 Dec, *Smith 1362* pro parte (HOLOTYPE: US—533495). [This number is a mixture with *S. remota* Epling; specimens collected from the Sierra del Libano, 6000 ft, Jan, were given the same number.]

Stachys remota Epling

Repert. Spec. Nov. Regni Veg. Beih. 85: 10. 1935. [Las Nubes], 4500 ft, [15 Dec], *Smith 1362* pro parte (HOLOTYPE: US; ISOTYPE: NY!). [This number is a mixture with *S. hebens* Epling; specimens collected from the Sierra del Libano, 6000 ft, Jan, were given the same number.]

LAURACEAE

Nectandra amplifolia Rusby

Desc. S. Amer. Pl. 20. 1920; non *N. amplifolia* Mez, 1892. Near Las Partidas, 3700 ft, 17 Mar, *Smith 1763* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, GH!, MICH, US). = *N. maguireana* Allen.

Ocotea alloiophylla Rusby

Desc. S. Amer. Pl. 21. 1920. 5 mi SE of Don Amo, 2500 ft, 7 Mar, *Smith 2104* (HOLOTYPE: NY; ISOTYPES: CM!, MICH, US).

Ocotea flavescens Rusby

Desc. S. Amer. Pl. 20. 1920. Near Valparaiso, 4500 ft, 25 Feb, *Smith 1762* (HOLOTYPE: NY!; ISOTYPES: CM!, MICH, US).

Ocotea flexuosa Rusby

Desc. S. Amer. Pl. 21. 1920. Mountains above Don Amo estate, ca 2500 ft, 14 Jan, *Smith 1764* (HOLOTYPE: NY!; ISOTYPES: CM!, MICH, US).

LORANTHACEAE

Aetanthus ovalis Rusby

Desc. S. Amer. Pl. 13. 1920. Sierra del Libano, 6000 ft, 18 May, *Smith 1494* (HOLOTYPE: NY!; ISOTYPES: A!, MICH, US).

LYTHRACEAE

Amman[n]ia pedunculata Rusby

Desc. S. Amer. Pl. 68. 1920. Near Cienaga, near sea level, 10 Sep, *Smith 548* (HOLOTYPE: NY!; ISOTYPES: GH!, MICH, US). = *A. latifolia* L.

Grislea compacta Rusby

Desc. S. Amer. Pl. 68. 1920. Near the Minca road, 1000 ft, 6 Jun, *Smith 1875* (HOLOTYPE: NY!; ISOTYPES: GH!, MICH, US).

MALPIGHIACEAE

Banisteria elegans subsp. *cordata* var. *ciliata* Niedenzu

Malpigh. Amer. 2: 16. 1912. Near Agua Dulce, 2500 ft, 1 Jun, *Smith 1509* (HOLOTYPE: B destroyed, fragment NY!; ISOTYPES: CM!, GH!, MICH, MO, NY!, P, US; see B. Gates, *Flora Neotropica* 30: 134. 1982). = *Banisteriopsis elegans* (Triana & Planchon) Sandw.

Byrsonima crassifolia var. *lanceolata* Cuatrec.

Webbia 13: 611. 1958. Near Bonda, 450 ft, *Smith 316* (HOLOTYPE: US—532881; ISOTYPES: A!, F, GH!, MO).

Byrsonima herbert-smithii Rusby

Desc. S. Amer. Pl. 37. 1920. Las Nubes road, 3500 ft, 5 Dec, *Smith 1502* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, GH!, MICH, US).

Stigmaphyllon ruizianum var. *subglabratum* Niedenzu

Malpigh. Amer. 2: 26. 1912. Las Nubes, 4500 ft, 20 Dec, *Smith 2070* (HOLOTYPE: B?; ISOTYPES: GH!, NY, US). = *S. bogotense* Triana & Planchon. [Another specimen collected on Sierra del Libano, 6000 ft, 23 Jan (NY), was given the same number.]

Tetrapteris alloicarpa Rusby

Desc. S. Amer. Pl. 39. 1920. Near Bonda, 150 ft, 10 Jul (fl), *Smith 343* (HOLOTYPE: NY!; ISOTYPES: A!, GH!, US). [Another specimen collected at the same locality, 4 Jan (fr) (NY!), was given the same number.]

Tetrapteris tenuistachys Rusby

Desc. S. Amer. Pl. 39. 1920. Don Amo road, 500 ft, 1 Feb, *Smith 1511* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, MICH, US).

MALVACEAE

Pseudabutilon smithii Hochr.

Annuaire Conserv. Jard. Bot. Genève 20: 119. 1917. Near Mamatoca, below 100 ft, 22 Nov, *Smith 489* (HOLOTYPE: G?; ISOTYPES: A!, GH!, MICH, US).

Wissadula fadyenii R. E. Fries

Kongl. Svenska Vetensk. Acad. Handl. 43: 30. 1908. Cienaga, 7–9 Sep, *Smith 496* (B, BM, US).

MARATTIACEAE

Danaea grandifolia L. Underw.

N. Amer. Fl. 16: 18. 1909. Valparaiso, 4000 ft, Feb, *Smith 992* (HOLOTYPE: NY!; ISOTYPES: NY!, US). [Another specimen collected in Mar (NY!) was given the same number.]

MELASTOMATACEAE

Graffenrieda santamartensis Wurd.

Brittonia 28: 138. 1976. Ridges below Valparaiso, 4000 ft, 18 Mar, *Smith 1843* (HOLOTYPE: NY!; ISOTYPES: F, NY!, US).

Miconia pulvinata Gleason

Bull. Torrey Bot. Club 52: 386. 1925. Las Partidas, 3500 ft, 25 Jan, *Smith 1841* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, US).

Miconia smithii Cogn. ex Gleason

Bull. Torrey Bot. Club 52: 383. 1925. Sierra del Libano, 6000 ft, 27 Feb, *Smith 1846* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

Monochaetum cinereum Gleason

Amer. J. Bot. 16: 515. 1929. Las Nubes, 4500 ft, 18 Dec, *Smith 762* (HOLOTYPE: NY!; ISOTYPES: CM!, F, G, GH!, MICH, NY!, US, W).

Monochaetum laxifolium Gleason

Amer. J. Bot. 16: 521. 1929. Las Nubes, 4500 ft, 15 Dec, *Smith 774* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, F, G, GH!, M, MICH, US, W).

Monochaetum rotundifolium Cogn. ex Gleason

Bull. Torrey Bot. Club 52: 333. 1925. San Lorenzo Ridge, ca 7000 ft, 27 Feb, *Smith 1851* (HOLOTYPE: NY!). [Additional specimens "with larger leaves," collected at the same locality but at ca 6000 ft (GH!, NY!), were given the same number.]

Monochaetum tetrandrum Gleason

Amer. J. Bot. 16: 519. 1929. Las Nubes, 4500 ft, 16 Dec, *Smith 761* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, F, G, GH!, NY!, US, W).

MELIACEAE

Guarea smithii C. DC.

Annuaire Conserv. Jard. Bot. Genève 10: 150. 1907. Sierra del Libano, 6000 ft, 21 Jan, *Smith 1550* (HOLOTYPE: G; ISOTYPES: A!, CM!, NY!—2 sheets, US).

Guarea trichilioides var. *colombiana* C. DC.

Annuaire Conserv. Jard. Bot. Genève 10: 138. 1907. Santa Marta, 2500 ft, *Smith 407* (HOLOTYPE: G; ISOTYPE: GH!).

Trichilia oblanceolata Rusby

Desc. S. Amer. Pl. 36. 1920. Near Cacagualito, 1200 ft, 18 Jan, *Smith 447* pro parte (HOLOTYPE: NY!). = *T. pleeana* (Adr. Juss.) C. DC. [Two additional specimens collected at Cacagualito, 1500 ft, 9 Aug (NY!), and Calavasa, 800 ft, 16 Dec (NY!), were given the same number; see *T. smithii*.]

Trichilia smithii C. DC.

Annuaire Conserv. Jard. Bot. Genève 10: 163. 1907. Cacagualito, 1500 ft, 9 Aug, *Smith 447* pro parte (HOLOTYPE: G; ISOTYPES: GH!, NY!, US). = *T. pleeana* (Adr. Juss.) C. DC. [Additional specimens were given the same number; see *T. oblanceolata*.]

MIMOSACEAE

Acaciella martensis Britton & Killip

Ann. New York Acad. Sci. 35: 140. 1936. Onaca, 2500 ft, 7 Feb, *Smith 295[a]* (fr) (HOLOTYPE: NY!). [Additional specimens collected from the Cuaco Mountains, 4500 ft, 27 Sep (fl), were given the same number.]

Albizia colombiana Britton

In: Britton & Killip, Ann. New York Acad. Sci. 35: 131. 1936. 5 mi E of Bonda, 500 ft, 3 Aug, *Smith 38* (HOLOTYPE: NY!). [Another specimen collected 2 mi N of Bonda, 250 ft, 8 Jul (NY!), was given the same number.]

Albizia marthae Britton & Killip

Ann. New York Acad. Sci. 35: 133. 1936. Near Bonda, below 500 ft, 1 Sep, *Smith 296* (HOLOTYPE: US—532868; ISOTYPES: NY!—2 sheets). = *Pithecellobium marthae* (Britton & Killip) Niez. & Nevl. [Another specimen collected at Bonda, 150 ft, 11 Jan (fr) (NY!), was given the same number.]

Desmanthus multiglandulosus Britton & Killip

Ann. New York Acad. Sci. 35: 148. 1936. Playa Brava, 17 Nov, *Smith 2063* (HOLOTYPE: NY; ISOTYPES: CM!, US). = *D. virgatus* Willd.

Leucaena colombiana Britton & Rose

In: Britton & Killip, Ann. New York Acad. Sci. 35: 146. 1936. N of Bonda, 22 Oct, *Smith 37* (HOLOTYPE: NY!, fragment at US).

Mimosa martensis Britton & Rose

In: Britton & Killip, Ann. New York Acad. Sci. 35: 152. 1936. Near Masinga, 17 Nov (fl), *Smith 714* (HOLOTYPE: NY!). [Another specimen collected on the seashore, 4 inches [miles?] S of Gaira, 8 Nov (fr) (NY!), was given the same number.]

Pithecellobium pittieri Britton & Killip

Ann. New York Acad. Sci. 35: 125. 1936. 3 to 5 mi S of Gaira, near the sea, 8 Nov, *Smith 28[a]* (HOLOTYPE: GH!). [Another locality or taxon may have been given the same number as this specimen was designated 28a by Britton and Killip.]

Pithecellobium subglobosum Pittier

Contr. U.S. Natl. Herb. 20: 463. 1922. Santa Marta, 15 Sep (fl), *Smith 309[a]* (HOLOTYPE: GH!). [Another specimen collected 5 mi S of Gaira, 8 Nov (fr) (NY!), was given the same number.]

MORACEAE

Sahagunia colombiana Rusby

Desc. S. Amer. Pl. 10. 1920. Don Amo road, 500 ft, 13 Jan, *Smith 424* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, NY!, US). = *Clarisia biflora* Ruiz & Pavon subsp. *biflora*.

MUSACEAE

Bihai revoluta Griggs

Bull. Torrey Bot. Club 42: 322. 1915. Manzanares, 3500 ft, 1 Mar, *Smith 2302* (HOLOTYPE: NY; ISOTYPES: CM!, MO, US).

MYRSINACEAE

Icacorea granatensis Rusby

Desc. S. Amer. Pl. 79. 1920. Near Bonda, below 1500 ft, Aug, *Smith 432* (HOLOTYPE: NY!; ISOTYPES: A!, GH!, MICH, US).

Icacorea herbert-smithii Rusby

Desc. S. Amer. Pl. 80. 1920. Near Calavasa, May (fl), *Smith 859* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, GH!, MICH, US).

Icacorea sanmartensis Rusby

Desc. S. Amer. Pl. 80. 1920. Las Nubes, 4500 ft, 3 Dec, *Smith 781* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, GH!, MICH, US).

Parathesis emarginata Lundell

Wrightia 3: 64. 1963. Cacagualito, 1500 ft, 15 May, *Smith 444* (HOLOTYPE: F; ISOTYPES: A!, CM!, GH!, LL, MICH, NY!, US). = *P. reticulata* var. *sinuata* Lundell.

Parathesis pyramidalis Lundell

Wrightia 3: 70. 1963. Below Valparaiso, 3000–4000 ft, Mar, *Smith 1726* (HOLOTYPE: NY!, photo at LL; ISOTYPES: A!, CM!, GH!, MICH, MO, US).

Parathesis reticulata Lundell

Wrightia 3: 71. 1963. Near Valparaiso, 3000–4500 ft, Mar–May (fl), *Smith 1725* (HOLOTYPE: NY!, photo & fragment at LL; ISOTYPES: A!, CM!, GH!, MICH, US).

Parathesis reticulata var. *sinuata* Lundell

Wrightia 3: 72. 1963. Don Amo road, 400 ft, 8 Apr, *Smith 1724* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, F, GH!, MO, S, US).

MYRTACEAE

Mitropsidium oblanceolatum Burret

Notizbl. Bot. Gart. Berlin-Dahlem 156: 487. 1941. 4 mi E of Bonda, 250 ft, 20 Jul, 3 Aug, *Smith 403* (B?).

Myrcianthes sessilis McVaugh

Fieldiana, Bot. 29: 495. 1963. Masinga, rare below 1500 ft, 22 Dec, *Smith 776* (HOLOTYPE: GH; ISOTYPES: A, CM!, F, GH, MICH, NY, PH, US).

NYCTAGINACEAE

Allionia craterimorpha Rusby

Desc. S. Amer. Pl. 15. 1920. Near Bonda, 150 ft, 15 Oct, *Smith 569* (HOLOTYPE: NY!; ISOTYPES: CM!, MICH, US).

Torrubia uberrima Standley

Field Mus. Nat. Hist., Bot. Ser. 11: 88. 1931. Near mouth of the Buritaca River, 23 Sep, *Smith 1873* (HOLOTYPE: F; ISOTYPES: CM!, MICH, NY!, US).

OPILIACEAE

Agonandra granatensis Rusby

Desc. S. Amer. Pl. 14. 1920. On trail from Don Amo to the Sierra Nevada, 2000 ft, 12 Mar, *Smith 1950* (HOLOTYPE: NY; ISOTYPES: A!, CM!, GH!, MICH, US).

ORCHIDACEAE

Elleanthus smithii Schltr.

Repert. Spec. Nov. Regni Veg. Beih. 7: 46. 1920. Top of Sierra de Onaca, 6500 ft, 26 Aug, *Smith 2497* (HOLOTYPE: B?; ISOTYPES: CM!, NY!, US).

Epidendrum macroceras Schltr.

Repert. Spec. Nov. Regni Veg. Beih. 7: 138. 1920. 4000 ft, Aug, *Smith 2418* (HOLOTYPE: B?).

Epidendrum smithii Schltr.

Repert. Spec. Nov. Regni Veg. Beih. 7: 149. 1920. *Smith 2257* (HOLOTYPE: B?; ISOTYPE: US).

Govenia platyglossa Schltr.

Repert. Spec. Nov. Regni Veg. Beih. 7: 157. 1920. Near Onaca, 2500 ft, 16 Aug, *Smith 2490* [2450 in publication] (HOLOTYPE: B?; ISOTYPES: CM!, GH!, NY!, US).

Habenaria herminioides Kränzlin

Kongl. Svenska Vetensk. Handl. 46: 11. 1911. *Smith 2375* (HOLOTYPE: B?; ISOTYPES: CM!, GH!, US).

Habenaria smithii Schltr.

Repert. Spec. Nov. Regni Veg. Beih. 7: 38. 1920. *Smith 2358* (HOLOTYPE: B?; ISOTYPES: CM!, GH!, US).

Physurus procerus Schltr.

Repert. Spec. Nov. Regni Veg. Beih. 7: 73. 1920. *Smith 2278* (HOLOTYPE: B?; ISOTYPE: US).

Pleurothallis leptantha Schltr.

Repert. Spec. Nov. Regni Veg. Beih. 7: 107. 1920. *Smith 2554* (HOLOTYPE: B?; ISOTYPES: CM!, US).

Pleurothallis schistopetala Schltr.

Repert. Spec. Nov. Regni Veg. Beih. 7: 113. 1920. *Smith 2482* (HOLOTYPE: B?; ISOTYPES: CM!, US).

Pleurothallis smithii Schltr.

Repert. Spec. Nov. Regni Veg. Beih. 7: 114. 1920. *Smith 2362* (HOLOTYPE: B?; ISOTYPES: CM!, US).

Prescottia smithii Schltr.

Repert. Spec. Nov. Regni Veg. Beih. 7: 52. 1920. *Smith 2277* (HOLOTYPE: B?; ISOTYPES: CM!, US).

Scaphyglottis sanctae-martae Schltr.

Repert. Spec. Nov. Regni Veg. Beih. 7: 122. 1920. *Smith 2363* (HOLOTYPE: B?; ISOTYPES: CM!, MICH, US).

OXALIDACEAE

Oxalis coarctata Knuth

Notizbl. Bot. Gart. Berlin-Dahlem 7: 291. 1919. 8 mi E of Bonda, 2000 ft, 5 Jan, *Smith 1354* (HOLOTYPE: B?; ISOTYPES: CM!, GH!, NY, US).

PIPERACEAE

Peperomia angulata var. *parvifolia* C. DC.

Annuaire Conserv. Jard. Bot. Genève 21: 244. 1920. Near "Escalena de los Studios" [possibly Escalera de los Indios], 600–2500 ft, Apr–Jun, *Smith 2111* (HOLOTYPE: G; ISOTYPES: CM!, GH!, MICH, US).

Peperomia angustata var. *santamartae* C. DC.

Candollea 1: 306. 1923. Near Cacagualito, 1500 ft, 22 Dec, *Smith 1254* [designated as type by Trelease & Yuncker, Piperac. N. South Amer. 532. 1950.] (HOLOTYPE: G?; ISOTYPES: CAL, CM!, F, G, GH!, MICH, MO, NY!, PH, U, US). = *P. viridispa* Trel.

Peperomia blanda var. *magnifolia* C. DC.

Annuaire Conserv. Jard. Bot. Genève 21: 245. 1920. Sierra de Onaca, 6000 ft, *Smith 2536* (HOLOTYPE: G; ISOTYPE: NY). = *P. blanda* var. *langsдорffii* (Miq.) Henschen.

Peperomia herbert-smithii Trel. & Yuncker

Piperac. N. South Amer. 630. 1950. Sierra del Libano, 6000 ft, Feb, *Smith 1911* pro parte (HOLOTYPE: US-704031; ISOTYPES: CAL p.p., GH p.p., MO, PH p.p.). [This collection is a mixture with *P. tovariana* var. *subcaespitosa* Trel. & Yuncker; see Trelease & Yuncker, p. 631.]

Peperomia heydei var. *brevipedunculata* C. DC.

Annuaire Conserv. Jard. Bot. Genève 21: 247. 1920. Near Onaca road, 1200 ft, 5 Dec, *Smith 1241* (HOLOTYPE: G; ISOTYPES: CM!, GH!, NY!, US).

Peperomia longipes C. DC.

Annuaire Conserv. Jard. Bot. Genève 21: 248. 1920. Sierra de Onaca, 4500–5000 ft, Aug, *Smith 2527* (HOLOTYPE: NY; ISOTYPES: CM!, GH, US). = *P. venezueliana* C. DC.

Peperomia puberulilimba C. DC.

Annuaire Conserv. Jard. Bot. Genève 21: 245. 1920. Sierra del Libano, 5000–6000 ft, 6 Mar, *Smith 1259* (HOLOTYPE: G; ISOTYPES: CM!, F, GH!, MO, NY!, PH, US).

Peperomia velutina var. *lanceolata* C. DC.

Annuaire Conserv. Jard. Bot. Genève 21: 246. 1920. Minca estate, 2600 ft, 7 Aug, *Smith 2735* (HOLOTYPE: G; ISOTYPES: MICH, NY!, US). [Additional specimens collected at 2200 ft, Jul (GH!, US), were given the same number.]

Piper arboreum var. *giganteum* Trel. & Yuncker

Piperac. N. South Amer. 374. 1950. Valparaiso, 4500 ft, 24 Feb, *Smith 1230* pro parte (HOLOTYPE: NY!; ISOTYPES: F, GH, MO, PH, US p.p.). [This collection is a mixture with *P. aequale* var. *santa-martanum* (C. DC.) Trel. & Yuncker; see Trelease & Yuncker, p. 375.]

Piper puberulibracteum C. DC.

Annuaire Conserv. Jard. Bot. Genève 21: 232. 1920. Sierra del Libano, 6000 ft, 23 Jan (fl); Valparaiso, 4500 ft, 24 Feb (fr); *Smith 1237* (HOLOTYPE: G).

Piper salisanum var. *parvifolium* C. DC.

Annuaire Conserv. Jard. Bot. Genève 21: 234. 1920. Near Bonda, 250 ft, Jul, *Smith 1227* (HOLOTYPE: G; ISOTYPES: CM!, NY!, US). = *P. taboganum* C. DC.

Piper santa-martanum C. DC.

Annuaire Conserv. Jard. Bot. Genève 21: 231. 1920. Las Nubes road, 3500 ft, 6 Feb, *Smith 1230* pro parte (HOLOTYPE: NY; ISOTYPES: A, US p.p.). = *P. aequale* var. *santa-martanum* (C. DC.) Trel. & Yuncker. [This collection is a mixture with *P. arboreum* var. *giganteum* Trel. & Yuncker; see above.]

Piper scutilimbum C. DC.

Annuaire Conserv. Jard. Bot. Genève 21: 242. 1920. Near Valparaiso, 4000–5000 ft, 13 Mar, *Smith 1235* (HOLOTYPE: G; ISOTYPES: A!, GH!, NY!, US).

Piper subcrenulatum C. DC.

Annuaire Conserv. Jard. Bot. Genève 21: 229. 1920. Sierra del Libano, 5500–6000 ft, 7 Mar, *Smith 1233* (HOLOTYPE: NY!—see Trelease & Yuncker, Piperac. N. South Amer. 214. 1950; ISOTYPES: A!, CM!, G, GH!, MICH, NY!, US).

Piper villibracteum C. DC.

Annuaire Conserv. Jard. Bot. Genève 21: 233. 1920. Minca, 2000 ft, Jul, *Smith 384* (HOLOTYPE: G; ISOTYPES: A!, CAL, CM!, F, GH!, MO, NY, PH, U, US). = *P. bredemeyeri* Jacq.

POACEAE

Axonopus columbiensis Henrard

Blumea 5: 278. 1942. Near Bonda, 150 ft, 22 Sep, *Smith 183* (HOLOTYPE: L?; ISOTYPES: NY!, US). = *A. centralis* Chase.

Digitaria adscendens var. *rhachiseta* Henrard

Monogr. Digitaria 11. 1950. 100 ft, *Smith 180* (HOLOTYPE: L?; ISOTYPE: US). [Additional specimens collected at Playa Brava, 29 Oct (NY!), and Bonda, 150 ft, 7 Oct (NY!), were given the same number.]

POLYGALACEAE

Monnina sanmartensis Ferreyra

Smithsonian Misc. Collect. 121: 33. 1953. Sierra del Libano, 6000 ft, Mar, *Smith 1480* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, F, GH, NY!, US).

Polygala smithii S. F. Blake

Bull. Torrey Bot. Club 51: 84. 1924. Near Agua Dulce, 2000–2500 ft, 8 Jun, *Smith 1309* (HOLOTYPE: NY!). [Another specimen collected at the same locality, Oct (US—533456), was given the same number; see Blake, p. 85.]

Polygala subsecunda S. F. Blake

Bull. Torrey Bot. Club 51: 87. 1924. Near Escalera de los Indios, 800 ft, Aug, *Smith 575* (HOLOTYPE: US—533071; ISOTYPES: CM!, NY!).

PROTEACEAE

Roupala discolor Rusby

Desc. S. Amer. Pl. 12. 1920. Valley near Jiracasaca, 13 Jan, *Smith 901* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, GH!, MICH, US). = *R. montana* Aublet.

RHAMNACEAE

Rhamnus atroviridis Rusby

Desc. S. Amer. Pl. 54. 1920. San Lorenzo Ridge, 7000–7500 ft, 27 Feb, *Smith 1701* pro parte (HOLOTYPE: NY!). = *R. goudotiana* Triana & Planchon. [This collection is a mixture with *Stephanopodium aptotum* Wheeler (Dichapetalaceae).]

ROSACEAE

Osteomeles intermedia Pittier

Contr. U.S. Natl. Herb. 20: 107. 1918. Sierra del Libano, 5500 ft, 19 Jan, *Smith 1751* (HOLOTYPE: US—533720; ISOTYPES: CM!, NY!).

RUBIACEAE

Borreria herbert-smithii Rusby

Desc. S. Amer. Pl. 144. 1920. Cuaco Mountains, 4500 ft, 27 Apr, *Smith 321* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, MICH, US). = *B. laevis* (Lam.) Griseb.

Chomelia longicaudata Rusby

Bull. Torrey Bot. Club 52: 139. 1925. Bonda, 150 ft, 10 Jul, *Smith 392* (HOLOTYPE: NY!; ISOTYPE: NY!). = *C. spinosa* Jacq. [Additional specimens collected in Sep (A!, GH!) were given the same number.]

Coussarea grandifolia Rusby

Desc. S. Amer. Pl. 144. 1920. Valparaiso, 4000–5000 ft, 11 Apr, *Smith 1830* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, GH!, MICH, NY!, US).

Faramea cestroides Standley

Publ. Field Columbian Mus., Bot. Ser. 7: 71. 1930. Sierra del Libano, 6000 ft, 26 Jan, *Smith 1776* (HOLOTYPE: F—138636; ISOTYPES: CM!, GH!, MO, NY!, US).

Gonzalagunia acutifolia Rusby

Desc. S. Amer. Pl. 131. 1920. Calavasa, 600 ft, 28 Dec; Cacagualito, 1000 ft, May; *Smith 99* (HOLOTYPE: NY!—1 sheet with one individual, locality unknown).

Guettarda discolor Rusby

Desc. S. Amer. Pl. 134. 1920. Sierra del Libano, 5500 ft, 2 Mar, *Smith 1809* (HOLOTYPE: NY!; ISOTYPE: CM!). = *G. crispiflora* subsp. *discolor* (Rusby) Steyerem.

Guettarda roupalaefolia Rusby

Desc. S. Amer. Pl. 135. 1920. 3 mi NE of Masinga, 500 ft, 12 Jun; Minca, 2000 ft, July; *Smith 441* (NY!—2 sheets, one from each locality). [Another specimen (possibly of a separate taxon—see Rusby, p. 136) collected at Masinga, 500 ft, Nov (fr) (NY!), was given the same number.]

Hamelia pedicellata Wernham

J. Bot. 49: 212. 1911. Bonda, 150 ft, Nov (fl); Cacagualito, 1800 ft, 15 Nov (fl); Near Minca, 2000 ft, 4 Jun (fr), *Smith 394*; Near the coast at Don Diego, 28 Sep, *Smith 1817* (BM; ISOSYNTYPES: NY!—4 sheets, one from each locality).

Hoffmannia pauciflora Standley

Publ. Field Columbian Mus., Bot. Ser. 4: 282. 1929. Near Valparaiso, 4000 ft, 3 Mar, *Smith 1814* (HOLOTYPE: F—138663; ISOTYPES: A!, CM!, GH!, NY!, US).

Hoffmannia striata Rusby

Desc. S. Amer. Pl. 134. 1920. Sierra del Libano, 5500 ft, May, *Smith 2409* (HOLOTYPE: NY!).

Hoffmannia viridis Rusby

Desc. S. Amer. Pl. 134. 1920. Don Amo estate, 3000 ft, 18 Jan, *Smith 2649* (HOLOTYPE: NY!; ISOTYPE: CM!).

Manettia pectinata Sprague

Bull. Herb. Boissier 5: 836. 1905. Las Nubes, 4500 ft, 16 Dec, *Smith 1665* (HOLOTYPE: K; ISOTYPES: A!, CM!, GH!, NY!, US).

Manettia sanctae-martae Wernham

J. Bot. 57(suppl.): 41. 1919. 6 mi E of Bonda, 1000 ft, 6 Aug, *Smith 391* (HOLOTYPE: BM; ISOTYPES: CM!, GH!, K, NY!). = *M. reclinata* L.

Manettia smithii Sprague

Bull. Herb. Boissier 5: 267. 1905. Campo Alegre, 1500 ft, 22 Sep, *Smith 1393* (HOLOTYPE: K; ISOTYPES: A!, CM!, GH!, NY!). [Additional specimens collected at the same locality, 1 Feb (fl) (US), were given the same number.]

Mapourea [*Mapouria*] *biacuminata* Rusby

Desc. S. Amer. Pl. 136. 1920. Minca, 2000 ft, 31 May (fl); Escalera de los Indios, 2 Aug (fr); *Smith 1826* (NY! in fr). = *Psychotria anceps* Kunth.

Mapourea [*Mapouria*] *latifolia* Rusby

Desc. S. Amer. Pl. 137. 1920. Cacagualito, 1500 ft, May, *Smith 1805* (HOLOTYPE: NY!). = *Psychotria trichotoma* M. Martens & Galeotti. [Another specimen collected at Don Diego, near the coast, 17 May (NY!), was given the same number.]

Palicourea abbreviata Rusby

Desc. S. Amer. Pl. 141. 1920. Top of San Lorenzo Ridge, 7500 ft, 10 Mar, *Smith 1815* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!).

Palicourea caloneura Rusby

Desc. S. Amer. Pl. 142. 1920. Extreme top of San Lorenzo Ridge, 7250 ft, 27 Feb, *Smith 1808* (HOLOTYPE: NY!). [Additional specimens collected in Jan were given the same number.]

Palicourea leuconeura Standley

Publ. Field Columbian Mus., Bot. Ser. 7: 137. 1930. Above Valparaiso, 5000 ft, 27 May, *Smith 1822* (HOLOTYPE: F-138670; ISOTYPES: CM!, GH!, MO, NY!, PH, US).

Palicourea populifolia Rusby

Desc. S. Amer. Pl. 141. 1920. Above Las Nubes, 5000 ft, 17 Dec, *Smith 1833* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

Posoqueria platysiphonia Rusby

Desc. S. Amer. Pl. 132. 1920. Near Valparaiso, 4000 ft, 5 Jul, *Smith 1655* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

Psychotria albacostata Rusby

Desc. S. Amer. Pl. 138. 1920. Las Nubes, 3000–5000 ft, 5 Dec; Manzanares, 3500 ft, 1 Mar, *Smith 1806* (NY!—2 sheets, one from each locality). = *P. macrophylla* subsp. *albacostata* (Rusby) Steyerem.

Psychotria horizontalis var. *psilophylla* Steyerem.

Mem. New York Bot. Gard. 23: 472. 1972. Near Masinga Vieja, 1000–1500 ft, May, *Smith 393* (HOLOTYPE: NY!; ISOTYPE: GH!). [Additional specimens collected at Campo Alegre, 1500 ft, 24 Aug (fr) and near Onaca, 2000 ft, 10 May, were given the same number.]

Psychotria indulgens Rusby

Desc. S. Amer. Pl. 139. 1920. Valparaiso, 4500 ft, 11 Apr, *Smith 1828* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, GH!, MICH, US). = *P. sanmartensis* Rusby.

Psychotria sanmartensis Rusby

Desc. S. Amer. Pl. 139. 1920. Las Partidas, 3500 ft, 18 Mar, *Smith 1829* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

Rondeletia colombiana Rusby

Desc. S. Amer. Pl. 129. 1920. Sierra de Onaca, 5000 ft, 22 Aug, *Smith 1813* pro parte (HOLOTYPE: NY!; ISOTYPE: GH!). = *Arachnothryx colombiana* (Rusby) Steyerem. [Another taxon collected at Las Nubes (see *R. ovata* Rusby) was given the same number.]

Rondeletia ovata Rusby

Desc. S. Amer. Pl. 129. 1920. Las Nubes, 4500 ft, 16 Dec, *Smith 1813* pro parte (HOLOTYPE: NY!; ISOTYPE: A!). = *Arachnothryx ovata* (Rusby) Steyerem. [Another taxon collected at Sierra de Onaca (see *R. colombiana* Rusby) was given the same number.]

Rondeletia purdiei var. *glabrior* Steyerem.

Mem. New York Bot. Gard. 17: 243. 1967. Near Masinga, 250 ft, 17 Jul, *Smith 320* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, GH!, US).

Rudgea longirostris Rusby

Desc. S. Amer. Pl. 143. 1920. Sierra del Libano, 6000 ft, 10 Jan, *Smith 1819* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, GH!, MICH, US). = *Psychotria longirostris* (Rusby) Standley.

Rudgea marginata Standley

Publ. Field Columbian Mus., Bot. Ser. 7: 154. 1930. Near Masinga, 250 ft, Aug (fr), *Smith 314* (HOLOTYPE: F-137376; ISOTYPES: A!, GH!). [Additional specimens collected 8 Nov (fr) were given the same number.]

Sickingia myriantha Standley

Publ. Field Columbian Mus., Bot. Ser. 7: 27. 1930. Las Nubes road, 4000 ft, 3 Dec, *Smith 1810* (HOLOTYPE: F-138660; ISOTYPES: GH!, NY!, US). = *Simira myriantha* (Standley) Steyerem.

SAPINDACEAE

Serjania colombiana Radlk.

Bot. Jahrb. Syst. 37: 149. 1905. Bonda, 150 ft, 13 Aug; Bonda, 29 Dec; Above Masinga, 500 ft, 26 Oct; *Smith 1544* (B?; ISOSYNTYPES: NY!—3 sheets, one from each locality and date). [Another specimen collected 5 mi E of Cienaga, 400 ft, 12 Sep (NY!), was given the same number.]

Serjania grandidens Radlk.

Bot. Jarb. Syst. 37: 144. 1905. 5 mi N of Bonda, 100 ft, 19 Oct (fl), *Smith 1538* (HOLOTYPE: B?; ISOTYPES: GH!, MPU!, NY!; P. Acevedo-Rodriguez, pers. comm.).

SAPOTACEAE

Sideroxylon colombianum Standley

Trop. Woods 22: 13. 1930. Bonda, 250 ft, Aug, *Smith 456* (HOLOTYPE: F—137514; ISOTYPES: BM, BR, CM!, COL, K, MO, NY, U, US; T. Pennington, pers. comm.). = *Pradosia colombiana* (Standley) Penn.

SCHIZAEACEAE

Anemia sanctae-martae Christ

Bull. Herb. Boissier 7: 791. 1907. 4 mi inland from Playa Brava, 500 ft, 23 Oct, *Smith 1114* (HOLOTYPE: "herb. H. H. Smith"; ISOTYPES: NY!—2 sheets, US).

SCROPHULARIACEAE

Alonsoa serrata Pennell

Proc. Acad. Nat. Sci. Philadelphia 72: 167. 1920. "Probably from Valparaiso, 4500 ft, about Apr.," *Smith 1497* (HOLOTYPE: NY; ISOTYPES: F, GH!, NY, US). = *A. meridionalis* (L.) Kuntze.

Fagelia nevadensis Pennell

Proc. Acad. Nat. Sci. Philadelphia 72: 176. 1920. Las Nubes, 4500 ft, 15 Dec, *Smith 1404* (HOLOTYPE: NY!; ISOTYPES: F, GH!, MICH, NY, US). = *Calceolaria nevadensis* (Pennell) Standley.

Russelia colombiana Pennell

Proc. Acad. Nat. Sci. Philadelphia 72: 176. 1920. Agua Dulce road, 1500 ft, 22 Nov, *Smith 1361* (HOLOTYPE: NY!; ISOTYPES: F, GH!, US). = *R. sarmentosa* Jacq.

SIMAROUBACEAE

Picramnia villosa Rusby

Desc. S. Amer. Pl. 34. 1920. Near Valparaiso, ca 4000 ft, 3 Mar, *Smith 1740* (HOLOTYPE: NY!; ISOTYPES: CAS!, CM!, F!, GH!).

SOLANACEAE

Bassovia calceolarioides Rusby

Desc. S. Amer. Pl. 117. 1920. Sierra del Libano, 6000 ft, 8 Mar, *Smith 1184* (HOLOTYPE: NY!). = *Witheringia riparia* Kunth. [Additional specimens collected at the same locality, Jan (fl), were given the same number.]

Bassovia ferruginea Rusby

Desc. S. Amer. Pl. 117. 1920. Sierra del Libano, 6000 ft, 23 Jan, *Smith 1182* (HOLOTYPE: NY!; ISOTYPES: A!, CM!, GH!, MICH, US). = *Lycianthes ferruginea* Rusby; non Bitter, 1920. = *L. rufinervia* Rusby.

Cestrum glabrum Francey

Candollea 6: 363. 1935. Las Nubes, 4500 ft, 20 Dec, *Smith 2609* (B?, NY!); *Smith 1895* (F).

Cestrum grandifolium Francey

Candollea 6: 263. 1935. Las Nubes, 4500 ft, 6 Feb, *Smith 1733* (HOLOTYPE: B?; ISOTYPES: CM!, US).

Cestrum imbricatum Rusby

Desc. S. Amer. Pl. 119. 1920. Summit of San Lorenzo Ridge, 7000 ft, 25 Jan, *Smith 1896* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!).

Cyphomandra bassovioides Rusby

Desc. S. Amer. Pl. 116. 1920. Sierra del Libano, 6000 ft, 20 Jan, *Smith 1181* (HOLOTYPE: NY; ISOTYPES: A!, CM!, GH!, MICH, US).

Cyphomandra chlorantha Rusby

Desc. S. Amer. Pl. 116. 1920. Valparaiso, 4500 ft, 26 Jan, *Smith 1180* (HOLOTYPE: NY; ISOTYPES: A!, CM!, GH!, MICH, US).

Lycianthes herbert-smithii Rusby

Bull. Torrey Bot. Club 53: 213. 1926. Sierra del Libano, 6000 ft, 26 Jan, *Smith 1179* (HOLOTYPE: NY!; ISOTYPES: CM!, US).

Lycianthes reticularis Rusby

Bull. Torrey Bot. Club 53: 210. 1926. Quebrado del Cabo, 100 ft, 26 Aug, *Smith 1876* (HOLOTYPE: NY!).

Lycianthes sanctae-marthae Bitter

Abh. Naturwiss. Vereine Bremen 24: 377. 1920. Don Diego, near sea level, 22 May (fr), *Smith 1189* (HOLOTYPE: B?; ISOTYPES: GH!, NY!). [Another specimen collected 2 mi from coast near Mindihuaaca, 40 mi E of Santa Marta, 5 Oct (sterile) (NY!), was given the same number.]

Physalis cuneata Rusby

Desc. S. Amer. Pl. 118. 1920. Near Playa Brava, 17 Nov, *Smith 1482* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

Physalis petiolaris Rusby

Desc. S. Amer. Pl. 118. 1920. Near Bonda, 150 ft, 9 Nov, *Smith 1171* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

Saracha sanctae-martae Bitter

Repert. Spec. Nov. Regni Veg. 18: 99. 1922. Las Nubes, 4500 ft, Jan, *Smith 1145* (HOLOTYPE: B?; ISOTYPES: CM!, GH!, NY!). [Another specimen collected in Dec (US) was given the same number.]

Solanum auctosepalum Rusby

Desc. S. Amer. Pl. 114. 1920. Near mouth of Río Buritaca, 50 mi E of Santa Marta, 25 Sep, *Smith 1150* [1154 in publication] (HOLOTYPE: NY!; ISOTYPES: A!, CM!, NY!, US).

Solanum ellipsoideibaccatum Bitter

Repert. Spec. Nov. Regni Veg. 11: 486. 1913. Bonda, 150 ft, 12 Nov, *Smith 1153* (HOLOTYPE: B; ISOTYPES: CM!, NY, US). = *Cyphomandra allophylla* (Miers) Hemsley.

Solanum penduliflorum Rusby

Desc. S. Amer. Pl. 113. 1920. Don Diego, ¼ mi from coast, 5 May, *Smith 2661* (HOLOTYPE: NY!; ISOTYPE: CM!).

Solanum sanctae-marthae Bitter

Repert. Spec. Nov. Regni Veg. 12: 60. 1913. Sierra del Libano, 6000 ft, 22 Jan, *Smith 1858* (HOLOTYPE: S, photo at GH; ISOTYPES: A!, CM!, F, G-DC, GH!, K, MICH, NA, NY!, P, PH, S, US, photos of F, G-DC, K, NA, P, PH, S, US at GH).

Solanum scorpioideum Rusby

Desc. S. Amer. Pl. 113. 1920. Las Nubes, 4500 ft, 8 Dec, *Smith 1144* (HOLOTYPE: NY!; ISOTYPES: A!, GH!). [Another specimen collected at Sierra del Libano, 6000 ft, was given the same number.] = *S. hispidum* Pers.

Solanum tetrapetalum Rusby

Desc. S. Amer. Pl. 112. 1920. Sierra del Libano, 6000 ft, 23 Jan (fl?); 18 Mar (fr?); *Smith 1175* (NY?; ISOSYNTYPES (fl): CM!, F, K, MICH, US, photos of F, K, US at GH).

STERCULIACEAE

Ayenia acuminata Rusby

Desc. S. Amer. Pl. 56. 1920. Bonda, 150 ft, Jul–Aug, *Smith 358* (HOLOTYPE: NY!; ISOTYPES: MICH, US).

Waltheria subcordata Standley

Contr. U.S. Natl. Herb. 18: 117. 1916. Masinga, 500 ft, 25 Oct, *Smith 493* (HOLOTYPE: US; ISOTYPES:

A, F, MO, NY; J. Saunders-Scherrer, pers. comm.). [Another specimen collected at Bonda, 250 ft, 13 May (NY), was given the same number.]

THYMELAEACEAE

Schoenobiblus coriaceus Domke

Notizbl. Bot. Gart. Berlin-Dahlem 11: 355. 1932. Las Nubes, 4500 ft, 5 Dec, *Smith 795* (HOLOTYPE: B?; ISOTYPES: F, GH!, NY!, US, photo of F at GH).

TILIACEAE

Heliocarpus declinus Hochr.

Annuaire Conserv. Jard. Bot. Genève 20: 117. 1914. Campo Alegre, 2000 ft, 1 Feb, *Smith 1908* (HOLOTYPE: G?; ISOTYPES: A!, GH!, NY!, US).

URTICACEAE

Myriocarpa magnifica Rusby

Desc. S. Amer. Pl. 11. 1920. Near Cacagualito, 1500 ft, 23 Dec, *Smith 1422* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, NY!, US).

Pilea apiculata Killip

Contr. U.S. Natl. Herb. 26: 390. 1936. Río Piedras, near Santa Marta, 2000 ft, 7 Mar, *Smith 1430* (HOLOTYPE: US; ISOTYPE: NY!). [Additional specimens collected at Cacagualito, 1500 ft, 8 Aug (NY!, US), were given the same number.]

Pilea rhombifolia Killip

J. Wash. Acad. Sci. 13: 357. 1923. Sierra del Libano, 6000 ft, 25 Mar, *Smith 1446* (HOLOTYPE: US; ISOTYPES: CM!, GH!, NY!, PH, US).

Pouzolzia petiolata Rusby

Desc. S. Amer. Pl. 9. 1920. Near Bonda, 150 ft, 25 Jul, *Smith 1435* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, US).

Pouzolzia platyphylla Rusby

Desc. S. Amer. Pl. 9. 1920. 7 mi E of Cienaga, near sea level, 11 Sep, *Smith 1429* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!).

Pouzolzia scaberrima Killip

J. Wash. Acad. Sci. 24: 43. 1934. Agua Dulce road, ca 1800 ft, 22 Nov, *Smith 1436* (HOLOTYPE: US—703919; ISOTYPES: A!, B, BM, CM!, F, GH!, K, NY!, US).

VERBENACEAE

Aegiphila mollis var. *intermedia* Mold.

Repert. Spec. Nov. Regni Veg. 33: 133. 1933. 5 mi E of Bonda, 500–1500 ft, 20 Aug, *Smith 329* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!, MICH, US).

Aegiphila stricta Rusby

Desc. S. Amer. Pl. 107. 1920. Cacagualito, 1500 ft, 9 Aug, *Smith 330* pro parte (HOLOTYPE: NY!). = *A. laeta* Kunth. [Another specimen (possibly a separate taxon, see Rusby, p. 108) collected near the mouth of the Buritaca River, 26 Sep (GH!), was given the same number.]

Vitex berteroaana Pittier

Contr. U.S. Natl. Herb. 20: 485. 1922. Bolivar(?), *Smith 2107* (HOLOTYPE: US—704075; ISOTYPES: A!, GH!). = *V. compressa* Turcz.

VIOLACEAE

Calceolaria curvirostra Rusby

Desc. S. Amer. Pl. 60. 1920. 1 mi from coast at Don Diego, 8 May, *Smith 2731* (HOLOTYPE: NY!; ISOTYPES: GH!, US). = *Hybanthus prunifolius* G. Schulze.

Calceolaria hirsuta Rusby

Desc. S. Amer. Pl. 60. 1920. 4 mi NE of Masinga, 500 ft, 8 Nov, *Smith 2018* (HOLOTYPE: NY!; ISOTYPE: US). = *Hybanthus calceolaria* (L.) G. Schulze.

Rinorea dichotoma Rusby

Desc. S. Amer. Pl. 61. 1920. Above Valparaiso, 5000 ft, *Smith 1492* (HOLOTYPE: NY!; ISOTYPES: A!, GH!). [Another specimen collected at Valparaiso, 25 Feb (NY!), was given the same number.]

Rinorea melanodonta S. F. Blake

Contr. U.S. Natl. Herb. 20: 511. 1924. Near Masinga Vieja, 800 ft, 3 Feb, *Smith 1756* (HOLOTYPE: US—533722; ISOTYPES: A!, GH!, NY!).

VISCACEAE

Dendrophthora stricta Rusby

Desc. S. Amer. Pl. 13. 1920. Ridge of Horqueta Mountain, 7500 ft, 28 Dec, *Smith 1289* (HOLOTYPE: NY!; ISOTYPES: CM!, GH!). [Another specimen collected from the top of San Lorenzo Ridge, 7500 ft, 10 Mar (NY!), was given the same number.]

Phoradendron degenianum Trel.

Phoradendron 119, pl. 174. 1916. 5 mi N of Bonda, 100 ft, 25 Dec, *Smith 1285* (HOLOTYPE: BP; ISOTYPES: A!, CM!, GH!, NY!, US).

Phoradendron exiguum Trel.

Phoradendron 81, pl. 106. 1916. Near Bonda, *Smith 1281* (HOLOTYPE: G?; ISOTYPE: NY!). [Another specimen collected at Onaca, 2500 ft (NY!), was given the same number.]

Phoradendron herbert-smithii Trel.

Phoradendron 80, pl. 105. 1916. Near Bonda, 150 ft, 20 Aug, *Smith 1283* (B, G). [Another specimen collected at Mamatoca, 100 ft, 8 Mar (NY!), was given the same number.]

Phoradendron sanctae-martae Trel.

Phoradendron 105, pl. 149. 1916. Near Bonda, 250 ft, 20 Aug, *Smith 1284* (HOLOTYPE: US; ISOTYPES: GH!, NY!, US).

VOCHYSIACEAE

Vochysia aurantiaca Stafleu

Recueil Trav. Bot. Néerl. 41: 487. 1948. Near Valparaiso, *Smith 1877* (HOLOTYPE: NY!; ISOTYPES: A!, BM, BR, G, GH!, K, L, P, S, U, US).

ZINGIBERACEAE

Renealmia pilosa Gleason

Bull. Torrey Bot. Club 52: 193. 1925. Don Amo, 1600 ft, 18 Jun, *Smith 2318* (HOLOTYPE: NY—2 sheets!; ISOTYPES: CM!, GH!, US).

Acknowledgments

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BOOK REVIEW

Where the Gods Reign: Plants and Peoples of the Colombian Amazon. By Richard Evans Schultes. Synergetic Press, P.O. Box 689, Oracle, AZ 85623. ISBN 0-907791-13-1. 1988. 312 pp. \$20 (paper).

This is a magnificent book and a must for the library of any Amazon oriented person. It is a collection of 140 black-and-white photographs taken by the author in the Colombian Amazon between 1941 and 1954. Each photograph is accompanied by a brief text by the author and a relevant and carefully selected quotation from famous Amazon explorers such as Richard Schomburgk, Richard Spruce, Alfred Russell Wallace, and Theodor Koch-Grünberg. The text contains a mass of fascinating and interesting information about Amazonia, its people, its plants, and its animals. As would be expected from the author much of the text presents ethnobotanical information about several tribes of Indians.

The joy of this book is that it presents pictures of the pristine Amazon forest and of people who were not influenced by western civilization at the time they were photographed. Alas, so much of what is presented has disappeared with the development of the region. It is wonderful that Richard Evans Schultes has documented the primeval forest in such a beautiful way. His photography is superb and this book will stand as a work of art as well as an addition to the popular literature on the Amazon. I have rarely enjoyed anything so much as the opportunity to look through the photography in this book. It brought back many reminiscences of my own experiences in Amazonia. We can hope that this book will help to inspire people to greater efforts to protect the Amazon forest and the pitiful remnants of the great people that inhabited the region.

Where the Gods Reign is a great book by one of the greatest Amazon explorers of this century. The author's love of the forests and the peoples are an inspiration to all of us.—GHILLEAN T. PRANCE, New York Botanical Garden.