

22, 1908, at Penonome and vicinity, at 50--1000 feet elevation, in Panama, and deposited in the herbarium of the New York Botanical Garden. Other collections are H. Pittier 6939, collected at the Agricultural Experiment Station at Matias Hernandez in Panama, and J. M. Benitez 9159 from El Zapote, Escuintla, Guatemala.

This species is common in Central America and is well represented in herbaria. It has been often confused with E. rubrinervia H.B.K. in the past, from which species, however, it can be immediately distinguished by the fact that in the latter species the very apex of the calyx is also rounded, but is surmounted by a sharply acute triangular membranous tooth 1.5--2 mm. long (imparting to the calyx-apex a sharply acute appearance when fresh), the seeds are larger and without a distinct dark line extending from the hilum toward the chalaza, and the leaflets are narrower, acuminate or long-acuminate at the apex, cuneate or rarely rounded at the base, and only slightly paler beneath.

**ERYTHRINA EGGERSSII Krukoff & Moldenke, nom. nov.**

Erythrina horrida Eggers, Fl. St. Croix 45. 1879 [not Erythrina horrida Moc. & Sessé ex P. DC. Prodr. 2: 413. 1825].

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ADDITIONAL NOTES ON THE GENUS AEGIPHILA -- IV

Harold N. Moldenke

The following notes constitute a continuation of those published in Phytologia 1: 182--208, 222--240, and 248--272 (1937). Herbarium abbreviations herein employed, in addition to those published in Brittonia 1: 249--250 (1934) and Phytologia 1: 182 and 222 (1937) are: Gt - Botanische Anstalten, Göttingen; Kr - B. A. Krukoff Herbarium, New York Botanical Garden, New York City; and Na - Natal Government Herbarium, Durban, Natal.

The generic name is mis-spelled "Aegiphita" in Fedde, Repert. 42: 248 (1937). To date 205 publications on the genus have been reviewed and the list of contributors to our knowledge of the genus embraces 585 persons. One hundred and forty-nine species and varieties are accepted as valid (including 4 doubtful species) and 246 names have been reduced to synonymy. A complete alphabetic list of the latter will be published in the next installment of these notes, with the disposition which has been made of each for ready reference. The types or original collections on which 140 of the

accepted names and 207 of the rejected names were based, have been examined in the course of this study. In all, 4766 herbarium specimens of the genus, in 51 herbaria, representing 145 accepted species and varieties, and 2708 mounted photographs and illustrations, in 18 herbaria, representing 138 accepted species and varieties, have been examined and annotated. In number of specimens the largest collection of the genus is at Berlin, where there are 529 specimens at the present time; the second largest collection is at New York (518 specimens), followed by Kew (467), Paris (450), United States National Herbarium (404), and the Conservatoire Botanique at Geneva (321). In number of species and varieties represented the best collection is at New York (115), followed by the United States National Herbarium (90), Kew (85), Berlin (82), Conservatoire Botanique at Geneva (68), and Paris (66).

49a. *AEGIPHILA ACULEIFERA* Moldenke.

Additional citations: COSTA RICA: San José: H. Pittier 7584 (E--photo, N--2 photos, S--photo, Z--2 photos).

5a. *AEGIPHILA ALBA* Moldenke.

Additional citations: ECUADOR: Los Ríos: Mexia 6656 (N--photo of type, Z--photo of type).

21a. *AEGIPHILA AUSTRALIS* Moldenke.

Additional citations: BRAZIL: Santa Catharina: Ule 1520 (N--photo of type, Z--photo of type).

3. *AEGIPHILA BOGOTENSIS* (Spreng.) Moldenke.

This binomial is incorrectly accredited to "(H.B.K.) Moldenke" by me in *Phytologia* 1: 188 (1937).

Additional citations: COLOMBIA: Santander Norte: Schlimg 306 (Br.).

120. *AEGIPHILA BRACTEOLOSA* Moldenke.

Additional citations: BRAZIL: Amazonas: Ducke 444 (N, W).

98. *AEGIPHILA CHRYSANTHA* Hayek.

Klug describes this species as a liana and collected it in anthesis in March and April, in forests at an altitude of 200 m. in Loreto, Peru.

Additional citations: PERU: Loreto: Klug 2027 (S).

10. *AEGIPHILA COSTARICENSIS* Moldenke.

This binomial was erroneously cited by the Gray Herbarium Card Index of New Species and Varieties, issue 142, to "Ann. Mo. Bot. Gard. 33: 119. 1933", but this was later rectified on a correction card.

A new synonym is Clerodendron Matudae Standl., Field Mus. Publ. Bot. 17: 206-207 (1937), of which the type was collected on Mt. Orando, Chiapas, Mexico, by Eizi Matuda (No. 572) on December 16, 1936, deposited in the herbarium of the University of Michigan. This constitutes a notable extension in the range of the species.

Additional citations: MEXICO: Chiapas: Matuda 572 (Mi--2, N--fragment & photo, S--photo, Z--photo).

#### 117. AEGIPHILA DEPPEANA Steud.

The species, according to Dugand and Mina, is called "saúco de monte" in Colombia, where it has been collected at an altitude of 100-200 m. The flowers are described as "small, tubular, reddish". The Dugand & Mina collection has been erroneously distributed as A. mollis.

Additional citations: COLOMBIA: Magdalena: Bertero s.n. (N--photo, Z--photo); Department undetermined: Dugand & Mina 950 (N). CULTIVATED: England: P. Miller 8 [Herb. Linnaeus G.810, S.9] (N--photo).

#### 124. AEGIPHILA ELATA Sw.

The Moritz 973 and 1478, cited by me in Phytologia 1: 199 (1937) as from an undetermined state in Venezuela, were actually collected in the State of Trujillo. The Kegel 173 and "Hostmann H.L.B. 903,322-349", cited by Pulle in his Enum. Vasc. Pl. Surin. 403 (1906) are actually A. laevis.

Additional citations: JAMAICA: P. Browne s.n. [Herb. Linnaeus G.810, S.8] (N--photo). MEXICO: Veracruz: Ll. Williams 9143 (N), 9271 (N), 9566 (N).

#### 61. AEGIPHILA FALCATA Donn. Sm.

Additional citations: MEXICO: Chiapas: Matuda 666 (N).

#### 31. AEGIPHILA FERRUGINEA Hayek & Spruce.

The species has been collected by Rimbach in forests, blooming in September.

Additional citations: ECUADOR: Chimborazo: Rimbach 616 [Mus. Yale School of Forestry 31,994] (N--2, S).

#### 63. AEGIPHILA FILIPES Mart. & Schau.

Krukoff, on the label of the collection cited below, describes the species as a shrub 18 feet tall, with a stem one inch in diameter.

Additional citations: BRAZIL: Amazonas: Krukoff 8042 (N).

#### 62. AEGIPHILA GLANDULIFERA Moldenke.

Klug has collected the species in forests, at an altitude of 220 meters, in full anthesis in April.

Additional citations: PERU: Loreto: Klug 3016 (S).

62b. *AEGIPHILA GLANDULIFERA* var. *PYRAMIDATA* L. C. Rich. & Moldenke.

The Moritz 364, cited by me in *Phytologia* 1: 204 (1937) as from an undesignated State of Venezuela, was actually collected in the State of Monagas.

Additional citations: BRAZIL: Pará: L. C. Richard s.n. (E--photo of type, S--photo of type, W--photo of type).

19. *AEGIPHILA GRAVEOLENS* Mart. & Schau.

Additional citations: BRAZIL: São Paulo: Lund 796 [Macbride photos 7880] (N--photo of type, Z--photo of type).

115a. *AEGIPHILA HOEHNEI* Moldenke.

Additional citations: BRAZIL: Amazonas: Kuhlmann, Com. Rondon 2277 [Herb. Inst. Biol. S. Paulo 33,425] (E--photo of type, N--photo of type, S--photo of type, W--photo of type, Z--photo of type).

42. *AEGIPHILA INTEGRIFOLIA* (Jacq.) Jacks.

The Mexia 4203 and 4500 cited by me as this species in *Brittonia* 1: 339 (1934) and *Phytologia* 1: 228 (1937) seem to represent *A. Sellowiana* instead.

Additional citations: BRITISH GUIANA: M. R. Schomburgk 404, in part (Br). PERU: San Martín: Klug 3468 (S).

44. *AEGIPHILA INTERMEDIA* Moldenke.

Additional citations: BRAZIL: Amazonas: Ducke 136 (W).

82. *AEGIPHILA KILLIPPII* Moldenke.

This specific name already occurs in some herbaria misspelled "Killippii".

53. *AEGIPHILA LAETA* H.B.K.

The Saer 602, cited by me in *Phytologia* 1: 229 (1937) as from an undetermined State of Venezuela, is actually from the State of Lara, and the Mocquerys 1018, cited by me on the same page, was actually collected in the State of Zulia.

Additional citations: COLOMBIA: Caldas: Bonpland 1664 (E--photo of type, S--photo of type, W--photo of type).

78. *AEGIPHILA LAEVIS* (Aubl.) Gmel.

The species has been described as a shrub or tree 6-20 feet tall in the forests of Surinam. It is often confused with *A. elata*. The Kegel 173 and 687 and "Hostmann H.L.B. 903, 322-349" cited by Pulle in his *Enum. Vasc. Pl. Surin.* 403 (1906) as *A. elata* are actually *A. laevis*. An additional synonym is *Aegiphila laevis* f. *angustifolia* Wullschl., in herb.

Additional citations: SURINAM: Kegel 173 (Gt), 687 (Gt); Wullschißgel 405 (Gt), 1983 (Gt).

76. AEGIPHILA LAXIFLORA Benth.

The Otto 1092 cited by me in Brittonia 1: 391 (1934) and in Phytologia 1: 231 (1937) as from an undetermined State of Venezuela, was actually collected in the State of Bolívar.

67. AEGIPHILA LONGIFOLIA Turcz.

Additional citations: COLOMBIA: Santander Sur: Schlimgen 688 (Br--isotype).

71. AEGIPHILA MARTINICENSIS Jacq.

The Otero 308, cited below, definitely represents the "variabilis" form of the species -- almost all of the several hundred calyxes on the specimen are deeply lobed!

Additional citations: PORTO RICO: Otero 199 (Kr), 308 (Kr). DOMINICA: G. P. Cooper 60 (N), 167 (N). MARTINIQUE: Stehlé 2127 (N).

83. AEGIPHILA MOLLIS H.B.K.

Elias 1458, erroneously distributed under this name, is (at least insofar as the New York specimen is concerned) a species of Phoradendron, while Dugand & Mina 950, also distributed as A. mollis, is actually A. Deppeana.

Additional citations: COLOMBIA: Cundinamarca: Bonpland s.n. (E--photo, S--photo, W--photo). VENEZUELA: Amazonas: Bonpland 983 (E--photo, S--photo, W--photo). BOLIVIA: Santa Cruz: Steinbach 14,781 (S).

13. AEGIPHILA MONSTROSA Moldenke.

Additional citations: MEXICO: Oaxaca: Ll. Williams 9120 (N).

7a. AEGIPHILA MORTONI Moldenke.

Additional citations: PERU: Cuzco: Cook & Gilbert 1234 (N--photo of type, Z--photo of type).

69. AEGIPHILA PANAMENSIS Moldenke.

Hayes describes the species as a shrub 12--15 feet tall, with light sulphur-colored flowers.

Additional citations: COSTA RICA: Alajuela: Brenes 4030 (N), 4345b (N); San José: Skutch 2680 (S). PANAMA: Canal Zone: Hayes s.n. [Panama, Dec. 7, 1862; Natal Herb. 10,208] (Na.).

34. AEGIPHILA PARAGUARIENSIS Briq.

Additional citations: BRAZIL: São Paulo: Carvalho s.n. [Herb. Inst. Biol. S. Paulo 748] (W).

## 64. AEGIPHILA PERUVIANA Turcz.

Klug has collected the species at an altitude of 1100--1600 meters in San Martín, Peru.

Additional citations: PERU: San Martín: Klug 3511 (S).

## 60. AEGIPHILA PLICATA Urb.

The isotype of A. plicata, cited below, from the De Candolle Herbarium, was mounted on the same sheet there with an isotype of A. trifida Sw.

Additional citations: JAMAICA: Bertero 2105 (N--photo of isotype, Z--photo of isotype).

## 91. AEGIPHILA QUINDUENSIS (H.B.K.) Moldenke.

This binomial appears mis-spelled "Aegiphita quinduensis" in Fedde, Repert. 42: 248 (1937). The reference given by me in Brittonia 1: 415 (1934) for Petitia tenuifolia should read "Willd. ex Schult. in Roem. & Schult. Syst. Veg. Mant. 3: 50. 1827 [not P. tenuifolia Willd. ex Walp. Repert. 4: 72, in syn. 1845]" and the reference for Petitia quinduensis should be dated "1818".

## 44a. AEGIPHILA SALTICOLA Moldenke.

Additional citations: BRAZIL: Pará: Mexia 5922 (S--isotype).

## 63a. AEGIPHILA SCANDENS Moldenke.

Additional citations: BRAZIL: Acre Territory: Ule 9721 (E--photo of type, S--photo of type, W--photo of type).

## 108a. AEGIPHILA SCHIMPFFII Moldenke.

Additional citations: ECUADOR: Province undetermined: Schimpff 1003 (E--photo of type, N--photos of type & of isotype, Z--photos of type & of isotype).

## 39. AEGIPHILA SELLOWIANA Cham.

Mexia 4203 and 4500, cited by me under A. integrifolia in Brittonia 1: 339 (1934) and Phytologia 1: 228 (1937), seem, rather, to represent A. Sellowiana and they are therefore now cited here below.

Additional citations: BRAZIL: Minas Geraes: Mexia 4203 (B, Bm, Cb, D, E, G, I, N, P, S, W), 4500 (A, B, Bm, Cb, D, E, G, I, Kr, N, P, S, W).

## 94. AEGIPHILA SMITHII Moldenke.

Miss Mexia describes the species as a common woody vine, climbing up medium-sized trees, blooming in February, with white flowers, inhabiting cut-over woods at an altitude of about 110 m.

Additional citations: PERU: Loreto: Mexia 6499 (S).

## 14. AEGIPHILA SORDIDA Moldenke.

Additional citations: PERU: Loreto: Killip & Smith 27,793 (W).

## 123. AEGIPHILA SUFFLAVA Moldenke.

Klug collected the species in a forest at an altitude of 200 meters, blooming in March and April, and describes it as a liana with yellow flowers.

Additional citations: PERU: Loreto: Klug 2076 (S), 2574 (N).

## 123a. AEGIPHILA SUFFLAVA var. KLUGII Moldenke, var. nov.

Haec varietas a forma typica speciei recedit per omnes partes densiore strigoso-pubescentibus (pilis elongatis valde adpressis sufflavis) et calicibus usque ad 7 mm. longis et 5.5 mm. latis extus glandulis rotundatis ornatis.

This variety differs from the typical form of the species in being more densely strigose-pubescent throughout, with longer and decidedly appressed yellowish hairs, and having larger calyxes (to 7 mm. long and 5.5 mm. wide), which are marked with several rounded glands near the apex outside, often a gland on every lobe.

The type of this variety was collected by Guillermo Klug (No. 2511) in a forest, altitude 100 meters, at Mishuyacu, near Iquitos, Loreto, Peru, in February, 1932, deposited in the Britton Herbarium of the New York Botanical Garden, and is named in his honor. It is described as a liana.

Citations: PERU: Loreto: Klug 2511 (N--type).

## 56. AEGIPHILA TRIFIDA Sw.

The isotype cited below, from the De Candolle Herbarium, was mounted on the same sheet there with an isotype of A. plicata Urb.

Additional citations: JAMAICA: Swartz s.n. [Jamaica] (N--photo of isotype, Z--photo of isotype).

## 57. AEGIPHILA VERTICILLATA Vell.

Additional citations: BRAZIL: Minas Geraes: Riedel 313 (L--3); Schwacke 9941 (Cb), 13,726 (Cb); Warming s.n. [Lagoa Santa] (Cp--3); Widgren 1222 (Br), s.n. [Minas Geraes] (Br, S); São Paulo: Burchell 4068 (K), 4105 (K); Campos Novae 933 (Vu); Gehrt s.n. [Herb. Inst. Biol. S. Paulo 5489] (N); Glaziou 8184 (Op, P, Z--photo); Guillemin 515 (Z--photo); Lund 820 (Bm, Cp--2, Dc), s.n. [Taubaté, November '33] (Dc); Martius 480 [Herb. Monac. 1045] (Mu), s.n. [Herb. Monac. 1046 & 1047] (Mu--2); Riedel & Luschnath 1453 (L--2); Saint-Hilaire C'. 1016 (P--3); Schwacke 6594 (Cb); Sellow 2267 (B, Z--2 photos), 5122 (B--2, N--2 photos, Z--2 photos); Usteri 20 (B), 21 (B); Paraná: Dusén 7236 (E, W), 14,871 (W),

15,982 (B, E, N--2 photos, Z--2 photos), s.n. [Jaguarahyva, May 1914] (B, Cb, G, K); Jönsson 405a (A--photo, B--photo, D --photo, F--photo, K--photo, N--photo, P--photo, S--photo, U --photo, V--photo, W--photo, X--photo, Z--photo); State undetermined: Raben 876 (Br); Sellow s.n. [Brasilia] (B, Br, K -3). PARAGUAY: Hassler 11,260 (Z--photo).

#### 45. AEGIPHILA VILLOSA (Aubl.) Gmel.

An additional synonym is Manabea tomentosa Perrottet, in herb. The generic name Manabea is sometimes mis-spelled "Monobeia". On page 343 of my monograph I stated that the lower surface of the leaf-blades is tomentose. This is an error of terminology. Actually the lower leaf-surfaces are villous with long straight hairs. The type specimen was collected near Cayenne, French Guiana, and is deposited in the herbarium of the British Museum (Natural History) in London.

Additional citations: BRITISH GUIANA: Jenman 4068 (N, N--photo, U, Z--2 photos), 6689 (U), 6869 (K, Z--photo). FRENCH GUIANA: Aublet s.n. [Cayenne] (Bm--type); Benoist 1306 (P--3); Collector undesignated 354 (Us), 359 (Us); Leblond 269 (P); Leprieur s.n. [Guiana française, 1838] (Le, P--2), s.n. [Guyane française, 1840] (Cb); J. Martin s.n. [Cayenne] (Bm, P--2); Mélinon 128 (K, P), 145 (Cb, N--photo, P, Z--photo), 372 (B--4, Bm, K, N--2 photos, P, Z--3 photos), 439 (P); Perrottet s.n. [1820] (Cb--3); Poiteau s.n. (Dc, P, Z--2 photos); L. C. Richard s.n. [Guian. fr.] (N--photo, P--2, Z --photo); Sagot 472 (A--photo, B--photo, Bm, Cb--2, D--photo, F--photo, G--photo, K, N--photo, P--3, Ut, V, W--photo, Z--photo), s.n. [Cayenne, Mars 1859] (P); Von Rohr s.n. [Cayenne] (Bm); Wachenheim 175 (P). ILLUSTRATIONS: Aubl. Hist. Pl. Guian. 1: 61. 1775 (P); Lamarck, Illustr. pl. 70, f. 2. 1791 (B).

#### 111. AEGIPHILA VILLOSISSIMA Moldenke.

Additional citations: BRAZIL: Matogrossos: Krukoff 1400 (N--photo of type & of 2 isotypes, W--photo of type, Z--photo of type & of 2 isotypes).

#### 96. AEGIPHILA VITELLINIFLORA Klotzsch.

Klug describes the species as a liana, with yellow flowers, and collected it in forests at an altitude of 200 meters, blooming from March to July. An additional synonym is Aegiphila compacta Mart., in herb. The species is said to also inhabit thickets. It has been confused by some with A. filipes; Bowie & Cunningham confused it with A. foetida and Zuccarini confused it with A. martinicensis! The type specimen of A. cuspidata Mart. is deposited in the Munich herbarium. The "Hoehne s.n. [Inst. Biol. 20,562]" cited by me on page 473 of my monograph is actually A. lanceolata; its be-

ing referred to A. vitelliniflora was through a typographic error. The "Instituto Biológico de Defesa Agrícola e Animal, São Paulo" citations listed on page 474 will hereafter for convenience be referred to as "Herb. Inst. Biol. S. Paulo". The Nos. 20,099 and 20,562 cited in this list as A. vitelliniflora are actually A. lanceolata. On page 423 the "Cult. Hort. Berol. s.n. (B--type, B--isotype, B--cotype?)" should read as follows: "Cult. Hort. Berol. s.n. [Jun. 1831] (B); Lystler s.n. [Cult. Hort. Berol. Sept. 1839] (B--type & iso-type)".

Additional citations: PERU: Loreto: Klug 2104 (A, B, E, G, K, Mi, S, W), 2204 (B, Cb, E, G, K, S, W). BRAZIL: Rio Grande do Norte: Schott 4917 (V-2); Pernambuco: G. Gardner s.n. [1838] (Bm, Z--photo); Pickel 1084 (B, I); Bahia: Blanchet 163 (Cb), 1294 (Cb), 3269 (Bm, Br, Cb-3, F, P, V, X, Z--photo); Luschnath s.n. [Herb. Martius 1041; Herb. Monac. 1014] (A--photo, Br, Dc, F--photo, G--photo, K, Le, Mu, N--photos, Z--2 photos); Minas Geraes: Clausen s.n. (Cb); Warming 291 (Cp), s.n. [Lagoa Santa] (Bm, Cp-2, F, P); Matto-grosso: Gaudichaud 60 (P); Rio de Janeiro: Barboza s.n. [1846] (Br--2); Burchell 2625 (K, Le); Gaudichaud 107 (Cb, Dc, P); Glaziou 807 (Br--2, Cp, P, Z--photo), 8831 (Cb--2, Cp, K, N--photo, P-2, Z--photo); Miers s.n. [Magde to Frei-chal, 1 May 1838] (Bm); Rudio s.n. (N--photo, Z--photo); Schüch s.n. [Sebastianopolis] (A--photo, B--photo, D--photo, F--photo, G--photo, Mu, N--photo, S--photo, V-3, W--photo, Z--2 photos); Sellow 346 (B, N--photo, Z--photo), 1020 (B), s.n. (Z--2 photos); Vauthier 15 (Cb); Weddell 578 (Cb, P); São Paulo: Riedel & Lund 0,39 (L); Rio Grande do Sul: Blanchet 904 [Herb. Monac. 1015] (Bm, Br, Cb, Mu); State undetermined: Bowie & Cunningham 336 (Bm--fruit), 496 (Bm); Herb. Imp. Vien. 152 (K); Mendonga 477 (B); Raben s.n. (Cp); Swainson s.n. (K). BOLIVIA: Santa Cruz: D'Orbigny 509 (Z--photo), 554 (Z--photo). CULTIVATED: Germany: Collector un-designated s.n. [H.B. 30] (B); Cult. Hort. Berol. s.n. [Jun. 1831] (B, N--photo, Z--2 photos); Herb. Zuccarini s.n. [Herb. Monac. 1016] (Mu); Lystler s.n. [Cult. Hort. Berol. Sept. 1839] (A--photo of isotype, B--photo of isotype, D--photo of isotype, F--photo of isotype, N--photo of isotype, S--photo of isotype, W--photo of isotype, Z--photos of type & of isotype). LOCALITY OF COLLECTION UNDESIGNATED: Herb. Caes. Petrop. s.n. [Herb. Martius] (Br). ILLUSTRATIONS: Martin f. I, II, & III (B); Martius, Fl. Bras. 9, tab. (B).

The geographic distribution of the species and varieties of Aegiphila:

CUBA: A. aurea [Havana] -- A. elata [Pinar del Río, Havana, Santa Clara, & Oriente] — A. martinicensis.

CAYMAN ISLANDS: A. caymanensis — A. elata — A. martinicensis.

JAMAICA: A. elata — A. foetida — A. martinicensis — A. martinicensis var. oligoneura — A. nervosa — A. obtusa — A. plicata — A. punctata — A. Swartziana — A. trifida — A. uniflora.

HISPANIOLA: A. elata [Haiti & Dominican Republic] — A. nervosa [Haiti].

PORTO RICO, MARTINIQUE: A. elata — A. martinicensis — A. martinicensis var. oligoneura.

ST. THOMAS, ST. JOHN, ST. CROIX, ST. EUSTACHE, ANTIGUA, GUadeloupe, ST. LUCIA, GRENADA: A. martinicensis.

ST. KITTS, MONTSERRAT, DOMINICA, ST. VINCENT: A. martinicensis — A. martinicensis var. oligoneura.

BARBADOS: A. barbadensis — A. martinicensis.

TOBAGO: A. obovata — A. perplexa.

TRINIDAD: A. elata — A. integrifolia — A. laxiflora — A. macrantha — A. martinicensis — A. obovata — A. perplexa.

MEXICO: A. costaricensis [Chiapas] — A. Deppeana [Tamaulipas, Nayarit, Hidalgo, Veracruz, Oaxaca, & Chiapas] — A. elata [Veracruz, Oaxaca, & Tabasco] — A. falcata [Chiapas] — A. monstrosa [Oaxaca].

GUATEMALA: A. elata [Alta Verapaz & Izabal] — A. falcata [Quezaltenango, Retalhuleu, Suchitepéquez, & Escuintla] — A. fasciculata [Alta Verapaz] — A. Hastingsiana — A. laxicupulis [Chiquimula & Santa Rosa] — A. monstrosa [El Petén, Alta Verapaz, & Izabal].

BRITISH HONDURAS: A. elata — A. monstrosa — A. pauciflora.

HONDURAS: A. elata [Santa Bárbara, Cortés, Yoro, & Atlántida] — A. monstrosa [Cortés, Yoro, & Atlántida].

SALVADOR: A. laxicupulis [Ahuachapán, Cuscatlan, & San Vicente] — A. martinicensis var. oligoneura [La Paz].

NICARAGUA: A. laxicupulis [Matagalpa] — A. magnifica [Chinandega & Chontales] — A. paniculata [Segovia].

COSTA RICA: A. aculeifera [Alajuela, San José, & Cartago] — A. anomala [Alajuela & Limón] — A. costaricensis [Guanacaste & Puntarenas] — A. Deppeana [Guanacaste & San José] — A. elata [Puntarenas, Alajuela, Limón, & San José] — A. falcata [Cartago] — A. glandulifera [Alajuela] — A. magnifica [Guanacaste & San José] — A. odontophylla [Guanacaste & Heredia] — A. panamensis [Alajuela, San José, & Cartago] — A. Standleyi [San José] — A. Valerii [Guanacaste].

PANAMA: A. cephalophora [Canal Zone] — A. costaricensis [Bocas del Toro] — A. Deppeana [Chiriquí, Veraguas, & Canal Zone] — A. elata [Panamá] — A. falcata [Bocas del Toro] — A. filipes [Panamá] — A. glandulifera [Canal Zone] — A. laeta [Taboga Island] — A. magnifica [Panamá] — A.

martinicensis [Bocas del Toro] -- A. mollis [Canal Zone]  
 -- A. panamensis [Bocas del Toro, Canal Zone, Colon, & Panama] -- A. paniculata [Bocas del Toro, Canal Zone, & Panama] -- A. pendula [Canal Zone].

COLOMBIA: A. aculeifera [El Cauca] -- A. bogotensis [Santander Norte, Tolima, Cundinamarca, El Cauca, & Nariño] -- A. caucensis [Caldas] -- A. Deppeana [Magdalena, Bolívar, & Cundinamarca] -- A. elata [Magdalena, Bolívar, El Valle, & Cundinamarca] -- A. filipes [Magdalena] -- A. glandulifera [Antioquia, Santander Sur, Chocó, & Tolima] -- A. glandulifera var. pyramidata [Méta] -- A. Goudotiana [Cundinamarca] -- A. grandis [Tolima & Cundinamarca] -- A. guianensis [Cundinamarca & Méta] -- A. hirsutissima [Bolívar] -- A. integrifolia [Magdalena, Boyacá, Méta, & El Cauca] -- A. Killipii [Santander Norte] -- A. laeta [Magdalena, Santander Sur, & Caldas] -- A. laevis [Antioquia] -- A. Lehmannii [Boyacá, Chocó, & El Cauca] -- A. longifolia [Santander Sur] -- A. martinicensis [Antioquia & Méta] -- A. membranacea [Chocó & Méta] -- A. mollis [Magdalena, Atlántico, Bolívar, El Valle, Tolima, Cundinamarca, & El Cauca] -- A. mollis var. intermedia [Magdalena & Bolívar] -- A. montana [Huila] -- A. novogranatensis [Antioquia & El Cauca] -- A. paniculata [Santander Sur] -- A. Pernellii [Tolima] -- A. puberulenta [Bolívar] -- A. quinduensis [Tolima & Cundinamarca] -- A. racemosa [El Valle] -- A. reticulata [Cundinamarca] -- A. sessiliiflora [Antioquia] -- A. sylvatica [Santander Sur] -- A. ternifolia [Cundinamarca] -- A. truncata [Cundinamarca].

VENEZUELA: A. elata [Trujillo, Carabobo, & Aragua] -- A. Fendleri [Aragua] -- A. floribunda [Aragua] -- A. glandulifera var. pyramidata [Monagas] -- A. guianensis [Amazonas] -- A. hirsutissima [Miranda] -- A. integrifolia [Zulia & Amazonas] -- A. laeta [Zulia, Lará, & Anzoategui] -- A. laxiflora [Bolívar] -- A. Lewisiana [Federal District] -- A. macrophylla -- A. martinicensis [Zulia & Mérida] -- A. membranacea [Falcon] -- A. mollis [Lará, Carabobo, Aragua, Federal District, Miranda, Guarico, Sucre, Anzoategui, Monagas, Bolívar, & Amazonas] -- A. parviflora [Bolívar] -- A. pendula [Zulia] -- A. perplexa [Delta Amacuro] -- A. quinduensis [Carabobo & Federal District] -- A. racemosa [Zulia] -- A. ternifolia -- A. verrucosa [Aragua].

BRITISH GUIANA: A. bracteolosa -- A. elata -- A. Gleasonii -- A. guianensis -- A. integrifolia -- A. laevis -- A. laxiflora -- A. macrantha -- A. racemosa -- A. roraimensis -- A. villosa.

SURINAM: A. elata -- A. laevis -- A. membranacea -- A. racemosa.

FRENCH GUIANA: A. Deppeana -- A. elata -- A. glandulifera

var. pyramidata -- A. integrifolia -- A. laevis -- A. macrantha -- A. martinicensis -- A. membranacea -- A. racemosa -- A. villosa.

ECUADOR: A. alba [Guayas & Los Ríos] -- A. bogotensis [Carchi, Pichincha, & Los Ríos] -- A. chrysanthia [Manabi & Guayas] -- A. ferruginea [Carchi, Imbabura, Pichincha, & Chimborazo] -- A. glandulifera [Napo-Pastaza] -- A. glomerata [Manabi] -- A. integrifolia [Napo-Pastaza] -- A. monticola [Pichincha & Chimborazo] -- A. Pavoniana [Guayas] -- A. pendula [Oriente] -- A. Rimbachii -- A. Schimpfii.

PERU: A. bracteolosa [Loreto] -- A. chrysanthia [Loreto] -- A. cordata [Loreto] -- A. cordifolia [Amazonas & Huanuco] -- A. cuneata [Loreto] -- A. elegans [Loreto & Junín] -- A. filipes [Loreto] -- A. glabrata [Junín] -- A. glandulifera [Loreto] -- A. insignis [Ancachs] -- A. integrifolia [San Martín, Loreto, Huanuco, & Junín] -- A. longipetiolata [Loreto] -- A. membranacea [Loreto] -- A. Mortoni [Cuzco] -- A. multiflora [Huanuco & Pufio] -- A. ovata [Junín] -- A. peruviana [San Martín & Loreto] -- A. pulcherrima [Junin] -- A. Smithii [San Martín, Loreto, & Junín] -- A. sordida [Loreto] -- A. sufflava [Loreto] -- A. sufflava var. Klugii [Loreto] -- A. triflora [Loreto] -- A. velutinosa [Cuzco] -- A. vitelliniflora [Loreto].

BRAZIL: A. australis [Santa Catharina] -- A. brachiata [Rio de Janeiro, Paraná, Santa Catharina, & Rio Grande do Sul] -- A. bracteolosa [Amazonas & Pará] -- A. brasiliensis [Rio de Janeiro] -- A. Candelabrum [Mato Grosso] -- A. capitata [São Paulo] -- A. casseliaeformis [São Paulo] -- A. chrysanthia [Pernambuco & Bahia] -- A. conturbata [Maranhão] -- A. cordata [Acre Territory] -- A. coriacea -- A. crenata [Minas Gerais, São Paulo, & Paraná] -- A. cuneata [Acre Territory] -- A. dentata [São Paulo] -- A. elegans [Amazonas] -- A. filipes [Amazonas, Pará, & Acre Territory] -- A. fluminensis [Bahia, Rio de Janeiro, São Paulo, & Paraná] -- A. glandulifera [Amazonas & Pará] -- A. glandulifera var. paraensis [Pará] -- A. glandulifera var. pyramidata [Pará] -- A. gloria [Bahia] -- A. Goeldiana [Pará] -- A. graveolens [Bahia, Rio de Janeiro, & São Paulo] -- A. guianensis [Pará] -- A. Hassleri [Paraná] -- A. Hoechnei [Amazonas] -- A. integrifolia [Amazonas, Pará, Bahia, Minas Gerais, Goyaz, Mato Grosso, Rio de Janeiro, & São Paulo] -- A. intermedia [Amazonas, Pará, & Maranhão] -- A. laevis [Bahia, Mato Grosso, & Rio de Janeiro] -- A. lanata [Goyaz] -- A. lanceolata [Pará, Minas Gerais, Espírito Santo, Rio de Janeiro, & São Paulo] -- A. Lhotzkiana [Ceará, Paraíba, Bahia, Minas Gerais, Goyaz, Espírito Santo, São Paulo, & Paraná] -- A. Luschnathii [Bahia, Minas Gerais, Rio de Janeiro, São Paulo, & Santa

Catharina] -- A. macrantha [Pará] -- A. mediterranea [Rio de Janeiro & São Paulo] -- A. medullosoa [Rio de Janeiro] -- A. novofriburgensis [Rio de Janeiro] -- A. obducta [Amazonas, Minas Geraes, Rio de Janeiro, São Paulo, Paraná, & Santa Catharina] -- A. paraguariensis [Minas Geraes, Goyaz, Mattogrossos, Rio de Janeiro, São Paulo, & Paraná] -- A. parviflora [Pará] -- A. pernambucensis [Pernambuco & Rio de Janeiro] -- A. racemosa [Amazonas, Pará, Pernambuco, Bahia, & Rio de Janeiro] -- A. Riedeliana [Bahia, Minas Geraes, Rio de Janeiro, São Paulo, Santa Catharina, & Rio Grande do Sul] -- A. salticola [Pará] -- A. scandens [Acre Territory] -- A. Sellowiana [Pará, Pernambuco, Bahia, Minas Geraes, Goyaz, Mattogrossos, Espírito Santo, Rio de Janeiro, São Paulo, Paraná, & Rio Grande do Sul] -- A. splendens [Minas Geraes] -- A. Spruceana [Amazonas] -- A. Surfaceana [Amazonas & Pará] -- A. verticillata [Minas Geraes, Mattogrossos, Rio de Janeiro, São Paulo, & Paraná] -- A. villosissima [Mattogrossos] -- A. virgata [Rio de Janeiro] -- A. vitelliniflora [Pará, Rio Grande do Norte, Pernambuco, Bahia, Minas Geraes, Mattogrossos, Rio de Janeiro, São Paulo, & Rio Grande do Sul].

BOLIVIA: A. boliviiana [Santa Cruz] -- A. breviflora [El Beni] -- A. Buchtienii [La Paz] -- A. chrysanthia [Santa Cruz] -- A. elata [Santa Cruz] -- A. elegans [La Paz] -- A. elongata [La Paz] -- A. filipes [El Beni] -- A. Herzogii [Santa Cruz] -- A. hirsuta [La Paz] -- A. integrifolia [El Beni, La Paz, & Santa Cruz] -- A. mollis [Santa Cruz] -- A. multiflora [El Beni & Cochabamba] -- A. ovata [La Paz] -- A. peruviana [El Beni] -- A. Sellowiana [El Beni, La Paz, & Santa Cruz] -- A. setiformis [La Paz] -- A. spicata [La Paz] -- A. vitelliniflora [Santa Cruz].

PARAGUAY: A. brachiata -- A. Candelabrum -- A. Hassleri -- A. lanceolata -- A. paraguariensis -- A. platyphylla -- A. verticillata -- A. vitelliniflora.

URUGUAY: A. Hassleri.

ARGENTINA: A. Hassleri [Misiones & Corrientes].

CULTIVATED: A. Deppeana [England] -- A. elata [Florida, Cuba, & Austria] -- A. integrifolia [Haiti] -- A. lanceolata [Brazil] -- A. Luschnathi [France] -- A. martinicensis [England, France, Netherlands, Belgium, Germany, & Ceylon] -- A. martinicensis var. oligoneura [British Guiana & Belgium] -- A. mediterranea [Cameroons] -- A. obducta [Brazil & France] -- A. obovata [British Guiana & England] -- A. Sellowiana [Brazil] -- A. vitelliniflora [Germany].

An alphabetized list of citations (additional to those published in Brittonia 1: 472-477. 1934), including corrections:

Ackermann s.n. [1831] (*Sellowiana*); Acufia s.n. [Herb. Rog 4232] (*elata*); Aitken 1082 (*racemosa*); Alexander, D. W., s.n. [Trin. Bot. Gard. Herb. 5022] (*perplexa*); Alexander, R. C., s.n. [Jamaica, 1850] (*foetida*), s.n. [Moneague] (*elata*), s.n. [Pleasant Valley, Moneague, 10 Apr. 1850] (*foetida*), s.n. (*elata*); Allen, C., 416 (*laeta*); André K. 1554 (*mollis*), K. 1556 (*mollis*); Appun 1204 (*roraimensis*, type coll.); Archer 392 (*sessiliflora*, type coll.); Arechavaleta 43 (*Hasslerii*), B (*Hasslerii*), s.n. (*Hasslerii*); Aublet s.n. [Cayenne] (*villosa*, type coll.), s.n. (*integritifolia*, type coll. of *Manabea arborescens*), s.n. (*laevis*, type coll.); Aviles 988 (*cephalophora*).

Badier 176 (*martinicensis*); Bailey & Bailey 575 (*lanceolata*), 662 (*cephalophora*); Baker, C. F., 204 (*magnifica*, type coll.); Balansa 2094 (*lanceolata*); Bang, M., 671 (*integritifolia*), 878a, in part (*setiformis*, type coll.), 878a, in part (*spicata*, type coll.), 1732 (*setiformis*, type coll. of *densiflora*); Barboza s.n. [1846] (*Luschnathii*), s.n. [1846] (*vitelliniflora*); Barclay 632 (*glomerata*), 2498 (*laeta*); Bartlett, H. H., 11,941 (*monstrosa*), 13,011 (*monstrosa*); Baudin s.n. (*martinicensis*); Bélanger 260 (*martinicensis*), 290 (*martinicensis*), 571 (*martinicensis*); Benoist 740 (*membranacea*), 786 (*membranacea*), 787 (*membranacea*), 1306 (*villosa*); Benzon 127 (*martinicensis*), 3713 (*martinicensis*); Bernulli 748 (*laxicupula*); Berro 1019 (*Hasslerii*), 5087 (*Hasslerii*); Bertero 35, in part (*elata*), 2046 (*martinicensis*), 2104 (*elata*), 2105 (*plicata*, type coll.), s.n. [S. D.; Herb. Monac. 1019] (*elata*), s.n. [Majo Jun. 1831] (*plicata*), s.n. (*Dappeana*, type coll. of *Berteriana*), s.n. (*elata*); Berthoud-Coulon 196 (*laevis*), 550 (*racemosa*); Beyrich s.n. (*Luschnathii*); Biolley 7409 (*falcata*); Blanchet 46 (*Lhotzkiana*), 79 (*Lhotzkiana*), 163 (*vitelliniflora*), 231 (*graveolens*), 354 (*Lhotzkiana*), 682 (*fluminensis*), 729 (*Lhotzkiana*), 862 (*laevis*), 904 (*vitelliniflora*), 1064 (*Lhotzkiana*), 1294 (*vitelliniflora*), 1398 (*gloriosa*, type coll.), 1600 (*laevis*), 1603 (*fluminensis*), 1998 (*gloriosa*), 2064 (*Lhotzkiana*), 3397 (*Lhotzkiana*), 3451 (*graveolens*), s.n. [1834] (*fluminensis*), s.n. [1857] (*Lhotzkiana*), s.n. (*Lhotzkiana*), s.n. (*racemosa*), s.n. (*Sellowiana*); Boldinh 189 (*martinicensis*), 246 (*martinicensis*), 386a (*martinicensis*), 410 (*martinicensis*), 894 (*martinicensis*); Bonpland 755 (*Hasslerii*), 956 (*integritifolia*), 983 (*mollis*, type coll. of *salutaris*), 1664 (*laeta*, type coll.), 5864 (*quinduensis*), s.n. (*mollis*); Boog s.n. (*mediterranea*); Bowie & Cunningham 336 (*vitelliniflora*), 496 (*vitelliniflora*), s.n. [Road to Sta. Amaro, near Sta. Paulo] (*obducta*), s.n. (*obducta*); Brade 7464 (*Sellowiana*), 10,542 (*obducta*); Brenes 105 (*panamensis*), 105a (*panamensis*), 110 (*panamensis*), 180 (*panamensis*), 301 (*aculeifera*), 3574 (*panamensis*), 4030 (*panamensis*),

4320 (panamensis), 4345b (panamensis), 4395 (panamensis), 5709 (aculeifera), 6193 (elata), 6652 (anomala), 14,313 (panamensis), 15,661 (anomala), s.n. [Herb. Inst. Physico-geogr. Nat. Costaric. 14,484] (glandulifera); British Guiana Bot. Gard. s.n. [May, 1905] (obovata); Britton & Cowell 594 (martinicensis); Britton & Harris 10,726 (elata); Broadway, W. E., 142 (martinicensis), 1410 (martinicensis), 2584 (obovata), 2973 (obovata), 3157 (obovata), 3334 (elata), 4243 (perplexa), 6349 (obovata), 6396 (obovata), 9064 (obovata), 9128 (obovata), s.n. [Mount Parnassus, June, 1906] (martinicensis), s.n. [Oct. 31, 1905; Hort. Thenensis I.4507] (martinicensis), s.n. [Year 1906?] (martinicensis), s.n. [Manzanilla, Aug. 1918] (integrifolia), s.n. [Trin. Bot. Gard. Herb. 7164] (integrifolia); Broadway, Mrs. W. E., s.n. [St. Ann's] (laxiflora, type coll. of trinitensis); Browne, P., s.n. [Herb. Linnaeus G.810, S.8] (elata, type coll. of Knoxia 2); "B. S." s.n. (martinicensis); Buchtien 1645 (elongata, type coll.), 1715 (hirsuta, type coll.), 1717 (Buchtienii, type coll.), 2992 (multiflora), s.n. [XI.1910] (multiflora); Bunbury 297 (obducta), 463 (obducta); Burchell 9 (pernambucensis), 1985 (Riedeliana), 2581 (integrifolia), 3418, in part (integrifolia), 3418, in part (Sellowiana), 3547 (capitata, type coll.), 4105 (verticillata), 4604 (Sellowiana), 8345 (paraguariensis), 9645 (lanceolata); Buswell s.n. [Gov't. Grounds, July 22, 1934] (elata).

Caley s.n. [Jan. 1823] (martinicensis); Campos Novae 933 (verticillata); Cardenas 16, special (breviflora, type coll.); Carleton 422 (monstrosa, type coll.); Carvalho s.n. [Herb. Inst. Biol. 748] (paraguariensis); Casaretto 926 (obducta), 2022 (Lhotzkiana), 2624 (verticillata); Castelnau s.n. [Río Ucayali] (integrifolia); Chaffanjon 245 (mollis); Chamberlain s.n. [25 Juli 1817; Herb. Monac. 1023] (fluminensis); Chrysler 1636 (elata); Clausen 8 (obducta), 53, in part (Luschmathi), 134 (novofriburgensis, type coll.), 352 (Lhotzkiana), 630 (lanceolata), 652 (obducta), s.n. [Curvello] (Lhotzkiana), s.n. [Aug.--April, 1840] (Lhotzkiana), s.n. [Aug.--April, 1840] (obducta), s.n. [Aug.--April, 1840] (Sellowiana), s.n. [Aug.--April, 1840] (verticillata), s.n. (Lhotzkiana), s.n. (vitelliniflora); Collector indig. Suriname 82 (laevis), 87 (racemosa); Collector undesignated 23 (obducta), 285 (fluminensis), 354 (villosa), 359 (villosa), 404 (paraguariensis), 426 (martinicensis), 3653 (Sellowiana), s.n. [Hb. Portenschlag] (elata), s.n. [Cayenne] (laevis), s.n. [Aug. 1824] (martinicensis), s.n. ["Bois de Calme"] (nervosa), s.n. [H. B. 30] (vitelliniflora), s.n. (fluminensis), s.n. (integrifolia), s.n. (laevis), s.n. (martinicensis), s.n. (racemosa); Cook & Collins 291 (martinicensis); Cook & Gilbert 1234 (Mortoni, type coll.), 1382 (velutinosa, type coll.); Cooper, G. P., 60 (martinicensis), 80 (martinicensis).

sie), 167 (martinicensis); Crüger s.n. [17 Aug. '46] (integrifolia), s.n. (laxiflora); Cult. Hort. Berol. s.n. [Jun. 1831] (vitelliniflora); Cult. Hort. Schönb. s.n. (elata); Cult. Palm Stove Kew s.n. (martinicensis).

Dahlgren & Sella 524 (racemosa); Damazio 1786 (obducta), 1926 (Sellowiana); Dancer s.n. (elata); Dannouze s.n. (laxiflora); Dawe 192 (bogotensis), 472 (glandulifera, type coll.); De la Ossa s.n. [1825] (martinicensis); Department of Forestry 2850 (racemosa); Desclussaux s.n. [Herb. Jussieu 5035a] (elata); Desportes s.n. [Herb. Jussieu 5035b & 5041] (elata); Diels 942 (glandulifera); Distin s.n. (foetida); Dombey 251 (multiflora), s.n. [Páson Huara-huari] (multiflora), s.n. (integrifolia); Don, G., s.n. (elata); D'Orbigny 1086 (mollis), 1094 (Sellowiana); Drake s.n. (racemosa); Duchassaing s.n. [Panama] (panamensis); Ducke 136 (intermedia), 444 (bracteolosa), 544 (intermedia), 6739 (integrifolia), 7351 (bracteolosa), s.n. [Herb. Rio de Janeiro 18,949] (macrantha, type coll.); Dugand 101 (mollis), 469 (mollis), 639 (mollis); Dugand & Mina 950 (Deppeana); Dusén 9382 (Hasleria), 10,541 (crenata, type coll.), s.n. [May 5, 1911?] (crenata), s.n. [Jaguarahyva, May 1914] (verticillata); Duss 303 (martinicensis), 2389, in part (martinicensis).

Edwall s.n. [Herv. Geogr. e Geol. 4362; Herb. Inst. Biol. 15,614] (dentata, type coll.); Eggers 501, in part (martinicensis), 5184b (elata), 6617, in part (martinicensis), 6617, in part (martinicensis var. oligoneura), 7153 (martinicensis), s.n. [Balao, 31/12/1891] (alba), s.n. [Decbr. 1882] (martinicensis); Ekman H.8971 (nervosa, type coll. of subopposita), H.12,310 (elata), H.13,279 (elata); Elias 617 (puberulenta, type coll.), 1102 (mollis); Estebom 7 (laevis).

Fawcitt s.n. [May, 1888] (elata); Fendler 571 (perplexa), 592 (perplexa), 841 (verrucosa), 844 (Lewisiana, type coll.), 845 (floribunda, type coll.), 2032 (Fendleri, type coll.); Fiebrig 5201 (Candelabrum), 5631 (paraguariensis), 6241 (lanceolata, type coll.); Finlay s.n. [Trin. Bot. Gard. Herb. 2386] (obovata), s.n. [Trin. Bot. Gard. Herb. 2389] (obovata, type coll. of dubia), s.n. [Trin. Bot. Gard. Herb. 2391] (laxiflora); Fleischmann 520 (integrifolia); Focke 396 (elata); Forsström s.n. (martinicensis); Forster s.n. ["India"] (martinicensis); Forsyth s.n. (martinicensis); Fox 463 (obducta); Frambach 123 (Sellowiana); Freyreiss s.n. (coriacea, type coll.), s.n. (Luschnathia); Funck & Schlim 81 (martinicensis).

Gabriel s.n. [1802] (laevis); Galsotti 1268 (Deppeana), 7238 (elata); Gardner, G., 100 (mediterranea, type coll. of cestrifolia), 3401 (paraguariensis), 5830 (obducta, type coll. of lanuginosa), s.n. [1838] (vitelliniflora); Gaudichaud 60 (vitelliniflora), 110 (Luschnathia), 265 (obducta), 468, in part (fluminensis), 468, in part (Luschnathia).