

Family 266. ACANTHACEAE

Revisions:

Backer, CA & RC Bakhuizen van den Brink. 1965. Flora of Java 2: 544-593.

Barker, RM. 1986. Journal of the Adelaide Botanic Garden 9: 1-286.

Bremekamp, CEB. 1951. *Philippine Acanthaceae I*. Philippine Journal of Science 80: 11-21.

Bremekamp, CEB. 1955. *The Acanthaceae of the Malesian area. I. General Considerations*. Proceedings Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, series C 58: 162-171.

Bremekamp, CEB. 1955. *A revision of the Malaysian Nelsonieae. [Scrophulariaceae]*. Reinwardtia 3: 157-261.

Bremekamp, CEB. 1955. *Notes on some acanthaceous genera and species of controversial position*. Acta Botanica Neerlandica 5: 644-655, 1 fig.
Aside from some African plants, deals with Stenothyrsus (Hygrophiliinae) and Oreothyrsus with a new Philippine species.

Bremekamp, CEB. 1965. *Delimitation and subdivision of the Acanthaceae*. Bulletin of the Botanical Survey of India 7: 21-30.

Bremekamp, CEB. 1965. *Scrophulariaceae, Nelsonieae, Thunbergiaceae, Acanthaceae*. Dansk Botanisk Arkiv 23: 197-224
List; twenty new species and 3 new genera.

Bremekamp, CEB. and NE Nannenga-Bremekamp. 1948. *A preliminary survey of the Ruelliinae (Acanthaceae) of the Malay Archipelago and New Guinea*. Verhandelingen der Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam sect. II, 45, no. 1: 1-39.

Hsieh, Chang Fu & Huang Tseng Chieng. 1998. Acanthaceae. In Huang, TC (ed.). Flora of Taiwan, 2nd edition, 648-686.

Acanthus Linnaeus

Revision:

Bremekamp, CEB. 1955. *The Acanthaceae of the Malesian area. II. Special part*. Proceedings Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, series C 58: 294-306.

Acanthus ebracteatus Vahl, Symb. 2 (1791) 75, t. 40; --Merr., EPFP 3 (1923) 479.
Andaman Isls to Indochina, Malesia and Palau Isls. LUZON: Quezon, MINDORO, PALAWAN, PANAY, NEGROS, LEYTE, MINDANAO. Along tidal streams, inland borders of mangroves within the influence of salt or brackish water.

Acanthus ilicifolius L., Sp. Pl. (1753) 639; --Merr., Fl. Manila (1912) 441; EPFP 3 (1923) 480.
Acanthus doloariu Blanco, Fl. Filip. (1837) 487. --Type: Merrill Species Blancoanae 636 (US, illustrative specimen). Luzon: Manila, Oct 1913
Tropical Africa and Asia to Polynesia. LUZON: La Union, Pampanga, Bataan, Bulacan,

Rizal. Brackish swamps and tidal streams.

Acanthus volubilis Wall., Pl. As. Rar. 2 (1831) 56, t. 172; --Merr., EPFP 3 (1923) 480.
India through Malesia to tropical Australia. MINDORO, SIBUYAN, PANAY, BASILAN.
Brackish swamps and tidal streams.

Andrographis Wallich ex Nees

Andrographis paniculata Nees in Wall. Pl. As. Rar. 3 (1832) 116.

Asystasia Blume

Asystasia gangetica (L.) T Anders. in Thwaites, Enum. Pl. Zeyl. (1859-64) 235; --Merr., EPFP 3 (1923) 480.

Tropical Africa, Asia, Peninsular Malaysia.

Barleria Linnaeus

Barleria cristata L., Sp. Pl. (1753) 636; --Merr., Fl. Manila (1912) 437; EPFP 3 (1923) 479.
India, China (native), and Peninsular Malaysia (introduced and cultivated). Rather widely cultivated in the Philippines for ornamental purposes but not known to produce seeds.

Barleria prionitis L., Sp. Pl. (1753) 636; --Merr., Fl. Manila (1912) 437; EPFP 3 (1923) 479.
Tropical Africa, Asia and Malasia. An introduced plant in the Philippines. LUZON: Bataan, Bulacan, Rizal, Laguna), MINDORO, CUYO. Thickets and waste places in and about towns at low altitudes.

Beloperone auctt. mal. non Nees = Clinacanthus nutans (Burm.f.) Lindau

Blechum P. Brown

Blechum pyramidatum (Lam.) Urb., Fedde Repert. 15 (1918) 323; --Hsieh, CF and TC Huang in TC Huang (ed.), Fl. Taiwan, ed. 2, 4 (1998) 651, pl. 297, photo 336.

Blechum brownei Juss., Ann. Mus. Hist. Nat. Paris 9 (1807) 270; --Merr., Fl. Manila (1912) 444; EPFP 3 (1923) 471.

Native of the neotropics, now naturalized in S Taiwan, the Philippines, Marianas and Carolines. BATANES, LUZON (Cagayan to Sorsogon), POLILLO, MINDORO, NEGROS, CEBU, LEYTE, MINDANAO: Misamis, Lanao. Waste places, open thickets, on and about old walls, etc., in and about towns at low altitudes. Usually common.

Calophanoides Ridley

Calophanoides addisoniensis (Elmer) Bremek., PJS 80 (1952) 20, *in obs.*; --Hallieracantha addisoniensis (Elmer) Merr., PJS 20 (1922) 457; EPFP 3 (1923) 483; --Hypoestes addisoniensis Elmer, LPB 5 (1913) 1697. --Type: Elmer 12715 (BISH*, MO*, US*, iso). Palawan: Brookes Point, Addison's Peak, Mar 1911.

PALAWAN (Addison's Peak; Ulugan Bay). Low altitude thickets and damp ravines along streams.

Calophanoides loheri (CB Clarke) Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 45 (1948) 58, in obs.; --*Justicia loheri* CB Clarke, Govt. Lab. Publ. (Philip.) 35 (1906) 91; -- Merr., EPFP 3 (1923) 489. --Type:

LUZON: Benguet, Pangasinan, Cagayan, Bulacan, Rizal, Quezon, Camarines, PANAY, SAMAR. Damp shaded ravines along small streams at low and medium altitudes, also in mossy forests up to 2000m altitudes.

Calophanoides pubescens Bremek., PJS 80 (1952) 19. --Type:
LUZON.

Dicliptera Jussieu

Dicliptera clarkei Elmer, LPB 5 (1913) 1689; --Merr., EPFP 3 (1923) 486. --Type: Elmer 21585 (iso in BISH*, F, GH, MO*, NY*, US*). Palawan: Palawan prov., Puerto Princesa, Feb 1911. *Peristrophe orbiculata* Merr., ined. --Voucher: Merrill Phil. Pl. 1377 (NY*). Palawan PALAWAN. Forested ridges and along trails through primary forests up to an altitude of 800m.

Dicliptera contorta (Blanco) Merr., Sp. Blancoanae (1918) 355; EPFP 3 (1923) 486; --*Ruellia contorta* Blanco, Fl. Filip. (1837) 496. --Type: None extant. Merrill Species Blancoanae 802 (US*, illustrative specimen may be designated as Neotype). Luzon: Batangas prov., Bauan, Feb 1915
LUZON: Pangasinan, Zambales, Bulacan, Batangas, GUIMARAS, SIQUIJOR, MINDANAO: Zamboanga. Lowland thickets.

Dicliptera leonotis Dalz. ex CB Clarke in JD Hook., Fl. Brit. Ind. 4 (1885) 553; --Merr., Fl. Manila (1912) 435; EPFP 3 (1923) 486.
India, Philippines. LUZON: Ilocos Norte, Mountain Province, Pangasinan, Rizal. Lowland thickets, ascending to 1200m in Mountain Province.

Dipteracanthus Nees

Dipteracanthus repens (L.) Hassk. In Hoen. & de Vriese. Tijdr. 10 (1843) 127; --Hsieh, CF and TC Huang in TC Huang (ed.), Fl. Taiwan, ed. 2, 4 (1998) 656, pl. 300, photo 338.
Ruellia repens L., Mant. 1 (1767) 89; --Merr., Fl. Manila (1912) 443; EPFP 3 (1923) 476.
India, Myanmar, Hongkong, S Taiwan, Peninsular Malaysia, Philippines. Throughout the archipelago in most provinces. Low and medium altitude grasslands, thickets, rice paddy embankments, etc.

Elytraria Michaux

Elytraria imbricata (Vahl) Pers., Syn. 1 (1805) 23; --Merr., EPFP 3 (1923) 468.
Elytraria tridentata Vahl, Enum. 1 (1804) 107; --Merr., Fl. Manila (1912) 435.
Elytraria amara Blanco, Fl. Filip. ed. 2 (1845) 8. --Type: Merrill Species Blancoanae 362 (US*, illustrative specimen). Luzon: Manila, Dec 1915.
Native of tropical America. LUZON: Ilocos Norte, Pampanga, Rizal, Cavite, Batangas, Camarines. In and about towns at low altitudes, in open waste places, dry thickets, etc.

Gendarussa Nees = *Justicia*

Goldfussia Nees

Goldfussia palawanensis (Elmer) Bremek., Verh. Nederl. Akad. Wetensch., Amst., Afd. Natuurk., sec. 2, 41 (1944) 232.
Strobilanthes palawanensis Elmer, LPB 5 (1913) 1686; --Merr., EPFP 3 (1923) 475. --Type: Elmer 13249.
Palawan: Mt Pulgar (=Thumb Peak).
PALAWAN: Puerto Princesa (Mt Pulgar; Babuyan). Primary forests, altitude 200-500m.

Graptophyllum Nees

Graptophyllum pictum (L.) Griff., Notul. 4 (1854) 139; --Merr., Fl. Manila (1912) 439; EPFP 3 (1923) 481.
Old World tropics, introduced in the neotropics. Apparently introduced in the Philippines where two forms occur, one with dark purple leaves, and one with green leaves blotched with white. Neither is known to produce seeds.

Gymnostachyum Nees

Gymnostachyum affine Nees in DC, Prodr. 11 (1847) 94; --Merr., EPFP 3 (1923) 480. --Type: Cuming 1719. Samar.

var. affine

SAMAR. Lowland forests.

var. loheri CB Clarke, no publ. cit. in --Merr., EPFP 3 (1923) 480. --Type:
LUZON: Abra, Ifugao, Pangasinan, Pampanga, Bataan, Bulacan, BASILAN,
MINDANAO: Zamboanga, Lanao. Lowland primary forests.

Gymnostachyum cumingianum Nees in DC, Prodr. 11 (1847) 94; --Merr., EPFP 3 (1923) 481. --Type: Cuming 589.

LUZON: Laguna. Lowland forests up to 300m altitude; apparently very rare and local.

Gymnostachyum longispicatum Merr., PJS 17 (1920) 314; EPFP 3 (1923) 481. --Type: BS 34999 Ramos & Pascasio (US*, iso). Siargao. Jun 1918.

SIARGAO. Lowland thickets or forests.

Gymnostachyum palawanense Elmer, LPB 5 (1913) 1701; --Merr., EPFP 3 (1923) 481. --Type: Elmer 12741 (BISH*, iso). Palawan: Palawan prov., Puerto Princesa, Mt Pulgar (=Thumb Peak), Mar 1911.

PALAWAN. Lowlands, deforested areas.

Gymnostachyum pictum Elmer, LPB 5 (1913) 1700; --Merr., EPFP 3 (1923) 481. --Type: Elmer 13182 (F, NY*, iso). Palawan:

PALAWAN. Forested ravines along streams, altitude c. 750m.

Gymnostachyum spiciforme (Elmer) Merr., PJS 17 (1920) 314; EPFP 3 (1923) 481; --Justicia spiciformis Elmer, LPB 1 (1908) 349. --Type: Elmer 7347 (NY*, iso). Leyte: Palo, Jan 1906.

LEYTE: Leyte (Palo). Lowland forests.

Gymnostachyum trichosepalum Merr., PJS 27 (1925) 54; EPFP 4 (1925) 254. --Type: Loher

13484. Luzon: Rizal prov., Paningtingan, Mar 1915.
LUZON: Rizal. Known only from the type collection.

Hallieracantha Stapf

Hallieracantha aequifolia (CB Clarke) Merr., PJS 20 (1922) 457; EPFP 3 (1923) 483; --
Polytrema aequifolium CB Clarke ex Merr., PJS 10 c (1915) Bot. 343. --Type BS 357 Bermejos
(NY*, US*, iso). Palawan: Puerto Princesa, Jan 1906.
PALAWAN. Lowland forests.

Hallieracantha brevipetiolata Merr., PJS 20 (1922) 457; EPFP 3 (1923) 483. --Type: BS 39761
Ramos (US*, syntype). Mindoro: Mindoro Occidental prov., Paluan, Apr 1921.
LUZON: Laguna (Mt Makiling), MINDORO: Mindoro Occidental. Lowland dry forests.

Hallieracantha elmeri Merr., PJS 20 (1922) 457; EPFP 3 (1923) 484. --Type: Elmer 12785. Palawan:
Mt Pulgar,
PALAWAN. Lowland forests.

Hallieracantha philippinensis Stapf, J. Linn. Soc. Bot. 38 (1907) 14; --Merr., EPFP 3 (1923) 484.
--Type:
BASILAN, MINDANAO: Zamboanga. Shaded ravines and forests at low altitudes,
ascending to 600m.

Hallieracantha ramosii Quisumb. & Merr., PJS 37 (1928) 199. --Type: BS 46352 Ramos (NY*,
US*, iso) Mindoro: Mindoro Oriental prov., Pinaligpigan near Puerto Galera, forested slopes,
altitude c. 1000m, 9 Dec 1925.
MINDORO: Mindoro Oriental (Puerto Galera). Forest, altitude c. 1000m.

Hallieracantha

Polytrema irosinensis Elmer, LPB 10 (1939) 3676, invalid name, no Latin descr. --Type: Elmer 15491 (NY*,
iso). Luzon: Sorsogon prov., Irosin, Mt Bulusan, loose ground of open places, Nov 1915.
LUZON: Sorsogon (Mt Bulusan).

Hemigraphis Nees

Hemigraphis bakeri Merr., PJS 10 c (1915) Bot 348; EPFP 3 (1923) 471. --Type: Baker 3272 (not
seen). Luzon: Quezon prov., hills near Malimao, 7 May 1914.
Hemigraphis mindorensis Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944)
113. --Type: Merrill 1785 (US*, iso). Mindoro: Mindoro Oriental prov., Baco River, Apr 1903.
Hemigraphis panayensis (Merr.) Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41
(1944) 112; --*Ruellia panayensis* Merr., PJS 10 c (1915) Bot. 347; --Merr., EPFP 3 (1923) 476.
--Type: BS 21236 Escritor (US*, iso). Panay: Capiz prov., Jun 1913. According to Merrill (1915),
the Panay origin of the type is uncertain and may have been collected in the adjacent island of
Romblon. Romblon at that time was under the administrative jurisdiction of the province of Capiz.
LUZON: Quezon, MINDORO: Mindoro Oriental (Baco River), PANAY: Capiz, SAMAR.
Lowland streamside forests and possibly thickets..

Hemigraphis barcatanensis Elmer, LPB 7 (1915) 2543; --Merr., EPFP 3 (1923) 471. --Type:
Elmer 11070 (BISH*, MO*, US*, iso). Mindanao: Davao, Mt Apo, Todaya, forested ravines, altitude
c. 450m, Jul 1909.
MINDANAO: Davao (Mt Apo). Known only from the type collection.

Hemigraphis benguetensis (as 'benguettensis' in IK) Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 107. --Type: Elmer 8469 (L*, holo). Luzon: Benguet prov., Baguio, Mar 1907.
LUZON: Benguet (Baguio).

Hemigraphis blumeana (Nees) Boerl.,
Hemigraphis hirsuta (Vahl) T Anders., J. Agr. Hort. Soc. Ind. 2, 1 (1868) 270; --Merr., EPFP 3 (1923) 472.
Hemigraphis hirsuta var. crenata Elmer, LPB 5 (1913) 1693. --Type: Elmer 12678 (iso in BISH*, F, GH, MO* 2 sheets, NY, US*). Palawan: Palawan prov., Brookes Point, Addison Peak, Feb 1911.
Peninsular Malaysia, Java, Borneo, Philippines. LUZON: Benguet, Nueva Vizcaya, Quezon, PALAWAN. Forests at low and medium altitudes.

Hemigraphis ciliata S Moore, xxxx
Hemigraphis oblongibractea Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 108. --Type: BS 11188 McGregor (L*, holo; iso US*). Luzon: Nueva Vizcaya prov., Dupax, Mar-Apr 1912.
Hemigraphis halconensis Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 105. --Type: BS 10687 Ramos & Edaño (L*, holo; iso US*). Mindoro: Mindoro Oriental prov., Mt Halcon, Mar 1922.
LUZON: Nueva Vizcaya, MINDORO: Mindoro Oriental (Mt Halcon).

Hemigraphis colorata (Blume) Hallier f., Nov Act. Acad. Nat. Cur. 70 (1897) 199; --Merr., Fl. Manila (1912) 443; EPFP 3 (1923) 471.
Native of Java. Widely cultivated as an ornamental.

Hemigraphis culionensis Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 102.
CULION

Hemigraphis cumingiana (Nees) Fern.-Villar, Novis. App. (1880) 153; --Merr., EPFP 3 (1923) 471; --Hsieh, CF and TC Huang in TC Huang (ed.). Fl. Taiwan, ed. 2, 4 (1998) 656.
Lanyu, Philippines, Sulawesi. LUZON: Cagayan, Ilocos Norte, Apayao, Quezon, PANAY. Lowland primary forests.

Hemigraphis diffusa Bremek., PJS 80 (1952) 14.
PALAWAN

Hemigraphis diversifolia Elmer ex Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 104. Bulusan, loose soil of more or less shaded places, Dec 1915.
Hemigraphis proteus Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 104. --Type: BS 20480 Ramos (L*, holo; iso US*): Luzon: Laguna prov., San Antonio, Feb 1913.
Hemigraphis subtinctoria Elmer, LPB 10 (1939) 3674, invalid name, no Latin descr. --Type: Elmer 15430 (U*, holo; iso L*, MO*, US*). Luzon: Sorsogon prov., Irosin, Mt Bulusan, Jul 1916.
LUZON: Laguna (San Antonio), Sorsogon (Mt Bulusan).

Hemigraphis fruticulosa CB Clarke, PJS 1 (1906) Suppl. 247; --Merr., EPFP 3 (1923) 472. --Type: Merrill 4465 (US*, iso). Luzon: District of Lepanto (=vicinity of present-day Mountain Province and Ilocos Sur provincial borders): Cervantes to Mankayan, Nov 1905.
LUZON: Ilocos Norte, Ilocos Sur, Mountain Province, Benguet, Cagayan, Bulacan, Rizal. Low to medium altitudes, on cliffs, ravines and steep banks.

Hemigraphis hirsutissima Merr., PJS 13 c (1918) Bot 60; EPFP 3 (1923) 472. --Type: BS 27258 Ramos (US*, iso). Luzon: Ilocos Norte prov., Burgos, Feb-Mar 1917.
LUZON: Ilocos Norte. Low altitude streams, on boulders.

Hemigraphis lanaensis Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 122.

MINDANAO: Lanao.

Hemigraphis lancibractea Bremek., PJS 80 (1952) 16. --Type: PNH 3329 Edaño (A* holo; iso U*). Mindoro: Mindoro Oriental prov., Mt Halcon, along Catuiran River, on forested slope, altitude 833m, 22 Feb 1948.

MINDORO: Mindoro Oriental (Mt Halcon). Forested slopes, altitude 833m.

Hemigraphis linearifolia Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 105. --Type: BS 8237 Merrill (L*, holo). Mindanao: Zamboanga, Nov-Dec 1911.

MINDANAO: Zamboanga.

Hemigraphis longipetiolata Merr., PJS 29 (1926) 488. --Type: BS 43111 Ramos (UC*, holo; iso US*). Bohol: Kalingohan, open forest on rocky slopes, altitude 1000ft, 17 Aug 1923.

BOHOL. Open forest on rocky slopes (judging from the locality, possibly on limestone), altitude c. 300m.

Hemigraphis mediocris Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 107. --Type: BS 11351 McGregor (L*, holo). Luzon: Nueva Vizcaya prov., Dupax, Mar-Apr 1912.

LUZON: Nueva Vizcaya (Dupax).

Hemigraphis nummularifolia Merr., PJS 14 (1919) 455; EPFP 3 (1923) 472. --Type: BS 33031 Ramos (P*, iso). Luzon: Ilocos Norte prov., between Bangui and Claveria, on dry open banks, 30 Aug 1918.

LUZON: Ilocos Norte, MINDANAO: Surigao.. Open dry places at low altitudes.

Hemigraphis pachyphylla Merr., PJS 20 (1922) 453; EPFP 3 (1923) 472. --Type: BS 33794 Ramos & Edaño (US*, iso). Luzon: Camarines Norte prov., Paracale, Dec 1918.

LUZON: Camarines Norte, Albay (Mt Malinao, PNH 34442 Edano). Thickets and recent clearings at low altitudes.

Hemigraphis palawanensis Bremek., PJS 80 (1952) 15. --Type: PNH 167 Edaño (U*, holo). Palawan: Puerto Princesa, Bacungan, 26 Mar 1947.

var. palawanensis

PALAWAN.

var. hirsuta Bremek., xxx --Type: PNH 298 Edaño (A*, holo). Palawan: Puerto Princesa, Babuyan, low altitude forest, Mar 1947.

Hemigraphis parvifolia Bremek., PJS 80 (1952) 18. --Type: PNH 10504 Mendoza & Convocar (A*, holo) Mindanao: Surigao del Norte prov., Mt Kabatuan, on rocks along forested slopes, altitude 680m, 22 Mar 1949.

MINDANAO: Surigao del Norte

Hemigraphis pauciflora Merr., PJS 13 c (1918) Bot 61; EPFP 3 (1923) 473. --Type: BS 27543 Ramos (US*, iso). Luzon: Ilocos Norte prov., Bangui, along streams in forest at low altitudes, 9 Mar 1917.

LUZON: Ilocos Norte. Low altitude forests along streams.

Hemigraphis polillensis Bremek., PJS 80 (1952) 17. --Type: PNH 8953 RB Fox (A*, iso). Polillo: NE part, Karlagan, forest, 19 Nov 1948.

POLILLO.

Hemigraphis primulifolia (Nees) Fern.-Villar, Novis. App. (1880) 153; --Merr., EPFP 3 (1923) 473; --Hsieh, CF and TC Huang in TC Huang (ed.). Fl. Taiwan, ed. 2, 4 (1998) 658, pl. 301, photo 339; --Ruellia primulifolia Nees in DC, Prodr. 11 (1847) 144.

Hemigraphis oblongifolia Merr., PJS 11 c (1916) Bot 204; EPFP 3 (1923) 472. --Type: BS 24240 Ramos (L*, GH*, US*, iso). Samar: Catubig River, Feb-Mar 1916.

Hemigraphis reptans (Forst.) Anders. ex Hemsl. var. *primulifolia* (Nees) Hallier f., Nov Act. Acad. Nat. Cur. 17 (1897) 208; --Merr., Fl. Manila (1912) 443.

Hemigraphis rapifera Hallier f. ex Koord. in Meded. Lands Plant. 19 (1898) 555; --Merr., EPFP 3 (1923) 473. --Type from Sulawesi.

S Taiwan, Lanyu, Philippines, Sulawesi, Seram, Seram Laut, Kai Isls.

BABUYAN ISLS, LUZON: Mountain Province, Pangasinan, Cagayan, Nueva Vizcaya, Nueva Ecija, Zambales, Bataan, Pampanga, Rizal, Cavite, Laguna, Quezon, Sorsogon, ALABAT, BALABAC, PANAY, NEGROS, SAMAR, MINDANAO. Low and medium altitude streams and gullies, cliffs, old clearings, etc. Very close and perhaps not distinct from *H. reptans* Anders. If so, the latter name has priority.

Hemigraphis reptans (Forst.) Ander. ex Hemsley, Bot. Voy. Challenger 1 (1884) 173; --Hsieh, CF and TC Huang in TC Huang (ed.). Fl. Taiwan, ed. 2, 4 (1998) 658; --Ruellia reptans Forst., Fl. Ins. Austr. Prodr. (1786) 44.

Hemigraphis parabolica (Nees) Fern.-Villar, Novis. App. (1880) 153; --Merr., EPFP 3 (1923) 472. --Type: Cuming 571. Luzon: Laguna prov.

Hemigraphis cardiophylla Quisumb., PJS 41 (1930) 359, t. 24. --Type: BS 44041 Ramos & Edaño.

S Ryukyus, Lanyu, Philippines, Sulawesi, Waigeo. LUZON: Apayao, Zambales, Bataan, Rizal, Laguna, Quezon, NEGROS, CEBU, SAMAR, TAWI-TAWI, MINDANAO.

Lowland and medium altitude forests, shaded cliffs and small stream embankments, etc. Common.

Hemigraphis rhytiphylla (Nees) Fern.-Villar, Novis. App. (1880) 153; --Merr., EPFP 3 (1923) 473. --Type: Cuming 1076 (L*, WU*, iso).

LUZON: Ilocos Norte, Ilocos Sur, La Union, Abra, Benguet, Pangasinan. Low and medium altitudes, ascending to 1000m, in open places, steep banks, thickets, etc.

Hemigraphis rivularis Merr., PJS 29 (1926) 488. --Type: BS 43268 Ramos (UC*, holo; iso US*). Bohol: Bohol prov., Batuan River, in the bed of small streams in forests, altitude c. 300m, Sept 1923.

BOHOL. Known only from the type collection.

Hemigraphis rosmarinifolia Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 115. --Type: BS 13207 Foxworthy & Ramos (L*, holo). Luzon: Quezon prov., Quinatacutan, Mar 1911.

LUZON: Quezon.

Hemigraphis samarensis Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 109. --Type:

SAMAR

Hemigraphis setosa Elmer, LPB 1 (1908) 348; --Merr., EPFP 3 (1923) 474. --Type: Elmer 7248. Leyte.

PANAY, LEYTE, SAMAR. Low altitudes, in forests and along streams.

Hemigraphis simulans Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 106. --Type: BS 22084 Ramos (L*, holo). Luzon: Camarines Sur prov., Mt Isarog, Nov-Dec 1913.

LUZON

Hemigraphis strigosa (Nees) Fern.-Villar, Novis. App. (1880) 153; --Merr., EPFP 3 (1923) 474; --*Ruellia strigosa* Nees in DC, Prodr. 11 (1847) 148. --Type:

Hemigraphis lanceolata Merr., PJS 20 (1922) 451; EPFP 3 (1923) 472. --Type: BS 5413 Merrill (US*, iso). Balut Island, Oct 1906.

LUZON: Mountain Province, Nueva Vizcaya, Pangasinan, Rizal, Laguna, Quezon, POLILLO, ALABAT, CATANDUANES, PANAY, NEGROS, MINDANAO, BALUT. Low and medium altitude forests, open steep slopes and cultivated places.

Hemigraphis sublobata Elmer, LPB 2 (1909) 591; --Merr., EPFP 3 (1923) 474. --Type: Elmer 9665 (L*, MO*, US*, iso). Negros: Negros Oriental prov., Cuernos Mtns, Mar 1908.

NEGROS: Negros Oriental, SAMAR, MINDANAO: Zamboanga, Lanao del Sur (Camp Keithley), Surigao. Forests along streams up to 900m.

Hemigraphis tayabensis Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 119. --Type: BS 13103 Foxworthy & Ramos (L*, holo). Luzon: Quezon prov., Guinayangan, Feb 1911.

LUZON: Quezon

Hemigraphis tenuispica Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 114. --Type: 75387 Ramos & Edaño (U*, holo). Catanduanes. Jul-Sept 1928.

CATANDUANES.

Hemigraphis viridis Merr., PJS 13 c (1918) Bot 59; EPFP 3 (1923) 474. --Type: BS 27587 Ramos (L*, US*, iso). Luzon: Ilocos Norte prov., Bangui, Feb-Mar 1917.

LUZON: Ilocos Norte. Low altitude forests.

Hemigraphis zwickeyae Moylan, Kew Bull. 57 (2002) 805, pl. 8. --Type: AL Zwickey 353 (GH, holo; iso US*). Mindanao: Lanao prov., vicinity of Abaga. altitude below 400m, 13 Oct 1938.

Insufficiently known:

Hemigraphis decipiens (Nees) Fern.-Villar, Novis. App. (1880) 153; --Merr., EPFP 3 (1923) 471.

LUZON: Sorsogon.

Hemigraphis luzona (Nees) Fern.-Villar, Novis. App. (1880) 153; --Merr., EPFP 3 (1923) 472; --*Ruellia luzona* Nees in DC, Prodr. 11 (1847) 151.

"In insula Luzona (Haenke)" --Nees, loc. cit. Only known from description.

Possible ined. names (not listed in IPNI):

Hemigraphis apayaensis Bremek. --Type: PNH 19758 Edaño (L*, holo). Luzon: Apayao prov., Mt Magnas, summit, alt. 900m, Jun 1953.

LUZON: Apayao.

Hygrophila R Brown

Hygrophila phlomoides Nees in Wall., Pl. As. Rar. 3 (1832) 80; --Merr., Fl. Manila (1912) 442; EPFP 3 (1923) 469.

India to Peninsular Malaysia and Java. LUZON: Pangasinan, Zambales, Bulacan, Rizal, Laguna. Lowlands, in open grasslands, fallow rice paddies, etc.

Hygrophila quadrivalvis Nees in Wall., Pl. As. Rar. 3 (1832) 80; --Merr., EPFP 3 (1923) 469. India to Indochina, Peninsular Malaysia, Java, Borneo, Philippines. LUZON: Bulacan, Rizal. Low and medium altitude open grasslands, fallow rice paddies, etc. Apparently very close to *H. phlomooides* Nees.

Hygrophila salicifolia (Vahl) Nees in Wall., Pl. As. Rar. 3 (1832) 81; --Merr., EPFP 3 (1923) 470 ('salifolia'); --Hsieh, CF and TC Huang in TC Huang (ed.). Fl. Taiwan, ed. 2, 4 (1998) 661, pl. 302; photo 341.

Hygrophila ringens R Br. ex Steudel, Nomen. Ed. 2, 1 (1840) 783. --Type: Merrill Species Blancoanae 781 (US, illustrative specimen). Luzon: Batangas prov., Bauan, Feb 1915.

Hygrophila angustifolia R Br., Prodr. (1810) 479; --Merr., Fl. Manila (1912) 442.

India to China, Taiwan, Japan, Peninsular Malaysia, Philippines. Open wet places, especially near the sea.

Hypoestes R Brown

Hypoestes cinerea CB Clarke, Govt. Lab. Publ. (Philip.) 35 (1906) 89; --Merr., EPFP 3 (1923) 486. LUZON: Benguet, Nueva Vizcaya, Pangasinan, Bataan, Pampanga, Bulacan, Rizal, MINDORO. Low and medium altitude primary forests, ascending to 1200m.

Hypoestes confertiflora Merr., PJS 20 (1922) 451; EPFP 3 (1923) 487. --Type: BS 4756 Ramos (US*, iso) Luzon: Zambales prov., Sta Maria, open places at low altitudes, Dec 1907. LUZON: Zambales. Open places at low altitudes.

Hypoestes cumingiana Benth. & Hook., Gen. Pl. 2 (1873) 1122; --Fern.-Villar, Novis. App. (1880) 157; --Merr., EPFP 3 (1923) 487; --Hsieh, CF and TC Huang in TC Huang (ed.). Fl. Taiwan, ed. 2, 4 (1998) 661, pl. 303. --Type: Cuming 1015.

Hypoestes linearis Elmer, LPB 2 (1908) 517. --Type: Elmer 7830 (MO*, NY*, US*, iso). Luzon: Quezon prov., Lucban, May 1907.

S China, S Taiwan, Philippines. LUZON: Ilocos Norte, Abra, La Union, Mountain Province, Benguet, Pangasinan, Rizal, Laguna. Low and medium altitude thickets and forests, often along streams.

Hypoestes floribunda R Br., Prodr. (1810) 474; --Merr., EPFP 3 (1923) 487.

Malaya and tropical Australia. LUZON: Ilocos Norte, Mountain Province, Benguet, Ifugao, Cagayan. Mostly in medium altitude thickets and forests, chiefly along streams.

Hypoestes halconensis Merr., PJS 26 (1925) 490; EPFP 4 (1925) 251. --Type: BS 40715 Ramos & Edaño (US*, iso). Mindoro: Mindoro Occidental prov., Paluan, Mar 1922.

MINDORO: Mindoro Occidental. On forested slopes, 1000m.

Hypoestes malaccensis Wight, Icon. 4 (xxxx) t. 1555.

Hypoestes laxiflora Nees in DC, Prodr. 11 (1847) 508; --Merr., EPFP 3 (1923) 487. --Type: Cuming 1019 (NY, iso)

Peninsular Malaysia, Java, Philippines, Moluccas, tropical Australia. LUZON: Abra, Mountain Province, La Union, Zambales, Rizal. Low and medium altitude forests and thickets.

Hypoestes merrillii CB Clarke ex Elmer, LPB 5 (1913) 1697; --Merr., EPFP 3 (1923) 487. --Type: Merrill 794 (not seen). Palawan

PALAWAN, SIBUTU. Lowland forests.

Hypoestes mindorensis Merr., PJS 20 (1922) 448; EPFP 3 (1923) 487. --Type: BS 39702 Ramos (US*, iso). Mindoro: Mindoro Occidental prov., Paluan, dry forests at low altitudes, Apr 1921.
MINDORO: Mindoro Occidental. Lowland dry forests.

Hypoestes palawanensis CB Clarke, PJS 1 (1906) Suppl. 246; --Merr., EPFP 3 (1923) 488. --Type: BS 316 Bermejos (NY*, US*, iso). Palawan, Jan 1906.
LUZON: Cagayan, PALAWAN. Low and medium altitude forested talus slopes, forested ridges, etc. ascending to 800m.

Hypoestes subcapitata CB Clarke, Govt. Lab. Publ. (Philip.) 35 (1906) 90; --Merr., EPFP 3 (1923) 488. --Syntypes:
LUZON: Pangasinan, Zambales, Bataan. Low altitude forests near streams.

Hypoestes tenuis Merr., PJS 20 (1922) 450; EPFP 3 (1923) 488. --Type: FB 16693 Bacani (US*, iso). Luzon: Cagayan prov., between Mision and San Vicente, near the seashore, Mar 1909.
LUZON: Cagayan. Near seashore.

Hypoestes vidalii CB Clarke, Govt. Lab. Publ. (Philip.) 35 (1906) 90; --Merr., EPFP 3 (1923) 488. *Hypoestes acutior* CB Clarke, Govt. Lab. Publ. (Philip.) 35 (1906) 90. --Type: BS 62 Foxworthy (NY*, US*, syntypes). Luzon: Rizal prov., Jan 1906.
LUZON: Cagayan, Nueva Ecija, Rizal, Laguna, Quezon, MINDORO, MINDANAO: Zamboanga, Lanao del Sur. Low and medium altitude primary forests.

Hypoestes *nom. Nov*

Hypoestes axillaris Merr., PJS 20 (1922) 449; EPFP 3 (1923) 486. --Type: Merrill 5473 (not seen). Mindanao: Zamboanga, in shaded ravines at low altitudes, Oct 1906.
Mindanao: Zamboanga, in shaded ravines at low altitudes.

This needs a new name; antedated by *H. axillaris* Benoist in Lecomte, N, t. Syst. 1 (1910) 224

Jacobinia Nees ex Moric. =Justicia

Justicia Linnaeus

Justicia dispar Merr., PJS 13 c (1918) Bot. 62; EPFP 3 (1923) 489. --Type: BS 26499 Ramos & Edaño (US*, iso). Luzon: Nueva Ecija prov., Mt Umingan (=Mingan Mtns), Aug-Sept 1916.
LUZON: Nueva Ecija (Mingan Mtns), PANAY. Low and medium altitude forests.

Justicia gendarussa Burm.f., Fl. Ind. (1768) 10; --Merr., Fl. Manila (1912) 436; EPFP 3 (1923) 489; --Hsieh, CF and TC Huang in TC Huang (ed.). Fl. Taiwan, ed. 2, 4 (1998) 665, pl. 304; --Type: Merrill Species Blancoanae 263 (US, illustrative specimen). Palawan: Taytay, Apr 1913.
Gendarussa vulgaris Nees in DC, Prodr. 11 (1847) 410.
India to S China, Taiwan, Peninsular Malaysia, Java and the Philippines, but in many regions planted only. N LUZON (Cagayan) to PALAWAN and MINDANAO, in most islands and provinces. Chiefly along streams at low and medium altitudes in both secondary and primary forests, sometimes in thickets in and about towns, rarely planted.

Justicia glabra Koenig ex Roxb., Hort. Beng. (1814) 4, *nom. nud.*, Fl. Ind. 1 (1820) 132; --Merr., EPFP 3 (1923) 489.
India, Sri Lanka, Java, Philippines. LUZON: Ilocos Norte, Laguna, Quezon, PANAY, GUIMARAS. Low and medium altitude thickets and forests.

Justicia procumbens L., Sp. Pl. (1753) 15; --Merr., Fl. Manila (1912) 436; EPFP 3 (1923) 490; --Hsieh, CF and TC Huang in TC Huang (ed.). Fl. Taiwan, ed. 2, 4 (1998) 665.
Rostellularia procumbens (L.) Nees in Wall., Pl. As. Rar. 3 (1832) 101; --Nees in DC, Prodr. 11 (1847) 371.

var. procumbens

India, Indochina, Taiwan, Ryukyus, Japan, Peninsular Malaysia, Philippines, Australia. BATANES and N LUZON to MINDANAO, in most islands and provinces. Open waste places at low and medium altitudes.

Justicia quadrifaria Wall., Cat. (1828) 2479; --Hsieh, CF and TC Huang in TC Huang (ed.). Fl. Taiwan, ed. 2, 4 (1998) 669.

India, China, Taiwan, Philippines. PALAWAN: Aborlan (Tarateon and Malasgao River).

Justicia tenuis Merr., PJS 4 c (1909) Bot. 321; EPFP 3 (1923) 490. --Type: FB 15536 Merritt & Darling (NY, syntype). Luzon: Ilocos Norte prov., Nov 1908.

LUZON: Ilocos Norte. Open places at low altitudes.

Lepidagathis Willdenow

Lepidagathis amaranthoides Elmer, LPB 5 (1913) 1695; --Merr., EPFP 3 (1923) 476. --Type: Elmer 12615 (US*, iso). Palawan: Brooks Point, Addison Peak, Feb 1911.

BUSUANGA, PALAWAN, LEYTE (Ormoc, Mt Janagdan), MINDANAO: Davao (Magdug River). Lowland forests.

Lepidagathis cinerea Merr., PJS 5 c (1910) Bot. 387; EPFP 3 (1923) 476. --Type: FB 16078 Curran, Merritt & Zschokke (US, paratype). Luzon: Benguet prov., Jan 1909.

LUZON: Mountain Province, Benguet. Open grassy slopes, altitude 1000-2000m.

Lepidagathis clarkei Merr., PJS 10 c (1915) Bot. 344; EPFP 3 (1923) 476. --Type: RS Williams 37 (not seen). Luzon: Bataan prov., Lamao River, damp shaded banks along stream, altitude c. 150m, Oct 1903.

LUZON: Bataan. Shaded places along mountain streams, altitude 100-400m.

Lepidagathis dispar CB Clarke ex Merr., PJS 5 c (1910) Bot. 386; EPFP 3 (1923) 476. --Type: Elmer 6059 (NY, US, syntypes). Luzon: Benguet prov., Baguio, Apr 1904.

LUZON: Mountain Province, Benguet, Nueva Ecija, Rizal. Low and medium altitude thickets, open sites and stream banks.

Lepidagathis humilis Merr., PJS 10 c (1915) Bot. 346; EPFP 3 (1923) 477. --Type: RS Williams 2955 (NY, type). Mindanao: Davao del Sur prov., Sta. Cruz, 19 Jun 1905.

LUZON: Ilocos Norte, LEYTE, SAMAR, MINDANAO: Davao. Lowland forests.

Lepidagathis inaequalis CB Clarke ex Elmer, LPB 5 (1913) 1695; --Merr., EPFP 3 (1923) 477; --Hsieh, CF and TC Huang in TC Huang (ed.). Fl. Taiwan, ed. 2, 4 (1998) 671, photo 345. --Type: Cuming 497 (K, cited by Merrill). Luzon: Laguna prov.

Ryukyu Isls, Lanyu, Philippines. LUZON: Bulacan, Laguna, Sorsogon.

According to Merrill (1923), Elmer 13028 (US*) from Mt Pulgar (=Thumb Peak), Palawan does not represent Clarke's species. It is erroneously labeled as an isotype in US.

Lepidagathis incurva D Don, Prodr. Fl. Nepal. (1825) 119; --Merr., EPFP 3 (1923) 477.

India to China, Peninsular Malaysia, Philippines. LUZON: Ilocos Sur, Rizal, Laguna,

PALAWAN, BALABAC. Low and médium altitude forests and thickets.

Lepidagathis laxa Nees in DC, Prodr. 11 (1847) 251; --Merr., EPFP 3 (1923) 477. --Type: Cuming 1717 (not seen). Samar.

CATANDUANES, MINDORO, SAMAR. Lowland forests.

Lepidagathis macgregorii Merr., PJS 10 c (1915) Bot. 346; EPFP 3 (1923) 477. --Type: RC McGregor 128 (not seen). Mindoro: Mindoro Oriental prov., Baco River, 15 Mar 1905.

MINDORO: Mindoro Oriental (Baco River). Lowland forests.

Lepidagathis microphylla Merr., PJS 13 c (1918) Bot. 63; EPFP 3 (1923) 477. --Type: BS 27518 Ramos (US*, iso). Luzon: Ilocos Norte prov., Bangui, dry open hills at low altitudes. 10 Mar 1917.

LUZON: Ilocos Norte. Dry open slopes at low altitudes.

Lepidagathis mindorensis Merr., PJS 10 c (1915) Bot. 343; EPFP 3 (1923) 477. --Type: BS 6702 CB Robinson (US*, iso). Mindoro: Mindoro Oriental prov., Bulalacao, rocky soils along stream, altitude 50m, Mar 1909.

MINDORO: Mindoro Oriental (Bulalacao). Along streams at low altitudes.

Lepidagathis palawanensis Merr., PJS 10 c (1915) Bot. 342; EPFP 3 (1923) 477. --Type: Merrill 9760 (US*, iso). Palawan: Taytay, dry thickets along trail at sea-level, Apr 1913.

PALAWAN. Lowland thickets.

Lepidagathis psilantha Nees in DC, Prodr. 11 (1847) 251; --Merr., EPFP 3 (1923) 478. --Type: Cuming 1013 (WU*, iso). Luzon: Pangasinan prov.

LUZON: Pangasinan. Low altitudes. Probably in thickets or forests.

Lepidagathis secunda (Blanco) Nees in DC, Prodr. 11 (1847) 259; --Merr., Fl. Manila (1912) 442; EPFP 3 (1923) 478; --Hsieh, CF and TC Huang in TC Huang (ed.). Fl. Taiwan, ed. 2, 4 (1998) 673; --Ruellia secunda Blanco, Fl. Filip. (1837) 495. --Type: Merrill Species Blancoanae 702 (US, illustrative specimen). Luzon: Bulacan prov., Ipo, December 1914.

Taiwan (Xiaoliuqiu Is), Philippines. LUZON: Ilocos Norte, Ilocos Sur, La Union, Pangasinan, Pampanga, Bulacan, Rizal, Laguna. Low altitudes, in dry thickets and open dry places, etc.

Lepidagathis spicifera Elmer, LPB 7 (1915) 2547; --Merr., EPFP 3 (1923) 478. --Type: Elmer 13383 (NY*, iso). Mindanao: Agusan del Norte prov., Cabadbaran, Mt Urdaneta, July 1912.

MINDANAO: Agusan del Norte. Shaded places along streams, altitude c. 350m.

Lepidagathis stenophylla Merr., PJS 29 (1926) 486. --Type: BS 43317 Ramos (not seen). Bohol: Sevilla River, on rocks along mountain streams, altitude c. 300m, Sept 1923.

BOHOL. Low altitude streams subject to periodic flash-flooding.

Lepidagathis subglabra Merr., PJS 7 c (1912) Bot. 103; EPFP 3 (1923) 478. --Type: BS 507 Vanoverbergh (US*, iso). Luzon: Mountain Province, Malamey, in forest, altitude c. 1600m, 10 May 1910.

var. subglabra

LUZON: Mountain Province. Forests, altitude c. 1600m.

var. lancifolia Merr., EPFP 3 (1923) 478. --Type: BS 27028 Ramos (US*, isosynotype). Luzon: Abra prov., Mt Posuey, Feb 1917.

LUZON: Abra, Mountain Province. Forests, altitude 300-1600m.

Lepidagathis subinterrupta Merr., PJS 10 c (1915) Bot. 345; EPFP 3 (1923) 478. --Type: BS 8024 Ramos (not seen). Luzon: Isabela prov., San Luis, boulders along shaded streams, May 1909.
LUZON: Isabela. Boulders along shaded streams at low and medium altitudes.

Lepidagathis tenuis CB Clarke, Govt. Lab. Publ. (Philip.) 35 (1906) 92; --Merr., EPFP 3 (1923) 478. --Type:
LUZON: Benguet, Ifugao, Nueva Vizcaya, MINDANAO: Zamboanga, Lanao del Sur, Davao. Steep stream gullies at low and medium altitude.

Nomaphila Blume (=Hygrophila)

Nomaphila corymbosa Blume, Bijdr. (1826) 804; --Merr., EPFP 3 (1923) 470.
Malesia. LUZON: Pampanga, SAMAR, MINDANAO: Misamis. Open rather wet places, apparently rare and local in the Philippines.

Nomaphila stricta Nees, Prodr. (DC) 11 (1847) 84, excl. syn.
Extra-Phil. Distribution? PALAWAN (Quezon, sitio Bongalon)

Oreothyrsus Lindau

Oreothyrsus samarensis Bremek., Acta Bot. Neerl. 4 (1955) 651. --Type: PNH 15323 Edano (U*, iso). Samar: Western Samar prov., Mt. Sarauag, along forest edge, altitude 100m, 8 Dec 1951.
SAMAR: Western Samar. Low altitude forest edge.

Pachystachys Nees =Justicia

Peristrophe Nees

Peristrophe caudatifolia Merr., PJS 27 (1925) 54; EPFP 4 (1925) 254. --Type: Loher 12196. Luzon: Rizal prov., Montalban, Jul 1908.
LUZON: Rizal. Known only from the type collection.

Peristrophe cordatibractea Merr., PJS 20 (1922) 455; EPFP 3 (1923) 484. --Type: BS 39392 Ramos (US*, iso). Mindoro altitude c. 700m, Apr 1921.
MINDORO: Mindoro Occidental. Low to medium altitude forests along streams.

Peristrophe lancifolia Merr., PJS 5 c (1910) Bot. 229; EPFP 3 (1923) 484. --Type: FB 19258 Curran (NY*, US*, iso). Luzon: Bataan prov., Balanga Mtns, Jan 1910.
LUZON: Zambales, Bataan, Quezon. Low altitude forests.

Peristrophe sibulanensis (Elmer) Merr., EPFP 3 (1923) 485. --Type: Elmer 11152 (GH*, MO*, NY*, US*, iso). Mindoro
MINDANAO: Davao (Mt Apo). Ravine thickets along streams, altitude c. 500m.

Peristrophe roxburghiana (Sult.) Bremek., Act. Bot. Neerl. 5 (1955) 656; --Hsieh, CF and TC Huang in TC Huang (ed.). Fl. Taiwan, ed. 2, 4 (1998) 674, pl. 308, photo 347.
Peristrophe bivalvis (L.) Merr., Interpret. Herb. Amb. (1917) 476; EPFP 3 (1923) 484.
E India, S and C China, Taiwan, Peninsular Malaysia, Java, Philippines. LUZON:

Mountain Province, Benguet, CORON, PALAWAN, CABESA, BOHOL, LEYTE, SIASI, MINDANAO: Lanao, Surigao. Coconut groves and thickets at low and medium altitudes, often cultivated or semi-cultivated in S Philippines, in Benguet ascending to 1600m.

Pseuderanthemum Radlkofer

Pseuderanthemum bicolor (Schrank) Radlk., --LH Bailey, Gent. Herb. 1 (1923) 130; --Merr., EPFP 4 (1925) 247.

Pseuderanthemum pulchellum (Hort.) Merr., PJS 7 c (1912) Bot. 248; Fl. Manila (1912) 438; EPFP 3 (1923) 482.

Peninsular Malaysia. Introduced in other tropical countries.

N LUZON (Cagayan) to PALAWAN and MINDANAO. In most or all islands and provinces. Lowland thickets, often common.

Pseuderanthemum confusum Merr., PJS 30 (1926) 427. --Type: BS 44296 Ramos & Edaño (NY*, iso). Tawi-Tawi, damp forest along small streams at low altitudes, Aug 1924.

Borneo (Sabah), Banguay, Philippines.

TAWI-TAWI. Lowland streamside forests.

Pseuderanthemum curtatum (CB Clarke) Merr., Interpret. Herb. Amb. (1917) 475; EPFP 3 (1923) 482; --*Eranthemum curtatum* CB Clarke, Govt. Lab. Publ. (Philip.) 35 (1906) 89. --Type:

BATAN, BABUYAN ISLS to PALAWAN and MINDANAO. Low and medium altitude primary forests.

Pseuderanthemum depauperatum Merr., PJS 11 c (1916) Bot. 315; EPFP 3 (1923) 482. --Type: Merrill 5346.

Moluccas (Amboin), PALMAS.

Low altitude cliffs. Palmas island is actually part of Indonesia, but as it is an islet of the SE coast of Mindanao (Cape San Agustin), the species is presumed to occur also in the Philippines proper.

Pseuderanthemum diversifolium (Miq.) xxx

Extra-Philippine distribution?

Palawan records based on Elmer 12628 (F, GH) from Addison's Peak, and Ebaló & Conklin 1379 (Aborlan, Mt Apis).

Pseuderanthemum fruticosum (Elmer) Merr., EPFP 3 (1923) 482. --Type: Elmer 9619 (A*, NY*, US*, iso). Negros: Negros Oriental prov., Cuernos Mtns.

NEGROS: Negros Oriental (Cuernos Mtns), MINDANAO: Davao del Sur (Mt Apo).

Forested ravines, altitude c. 750m.

Pseuderanthemum minutiflorum (Elmer) Merr., EPFP 3 (1923) 482; --*Eranthemum minutiflorum* Elmer, LPB 5 (1913) 1687. --Type: Elmer 13084 (A*, BISH*, F, GH, MICH*, MO*, NY*, US*, iso). Palawan: Palawan prov., Puerto Princesa, Mt Pulgar (=Thumb Peak), Apr 1911.

PALAWAN. Lowland secondary forests along streams. Possibly not a true *Pseuderanthemum*.

Cultivated:

Pseuderanthemum

Pseuderanthemum reticulatum Radlk., Sitzb. Math.-Phys. Cl. Akad. Wiss. Muench. 13 1833 (1884) 286
Eranthemum purpureum Hort.

Eranthemum albomarginatum Hort.

Odontonema nitidum Merr., Fl. Manila (1912) 437, EPFP 3 (1923) 483, *non* Kuntze

Ptyssiglottis T Anderson

Ptyssiglottis dispar Hallier *f.*, Nova Acta Nat. Cur. 70 (xxxx) 220

Calophanoides pulgarensis (Elmer) Bremek., PJS 80 (1952) 11; --Hypoestes pulgarensis Elmer, LPB 5 (1913) 1698. --Type: Elmer 12785 (iso in BISH*, F, GH*, MO*, NY*, US*).

Hallieracantha pulgarensis Elmer, LPB 5 (1913) 1692; --Merr., EPFP 3 (1923) 484. --Type: Elmer 13061 (iso in BISH*, F, L*, NY). Palawan: Mt Pulgar, forest at altitude of c. 250 ft, Mar 1911.

Borneo. PALAWAN (Mt Pulgar; Aborlan, Mt Apis).

Ptyssiglottis undulata (Merr.) B Hansen, Opera Bot. 34 (1992) 34; --Hallieracantha undulata Merr., PJS 29 (1926) 4 forests, altitude c. 600m, Sept 1923.

Polytrema macgregorii Elmer, LPB 10 (1934) 3677, not validly published, no Latin description. --Type: Elmer 15352 (L*, NY*, iso). Luzon: Sorsogon prov., Irosin, Mt Bulusan, Nov 1915.

LUZON: Laguna (BS 22915 McGregor, cited by Elmer), Sorsogon (Mt Bulusan), BOHOL (Sevilla).

Rhaphidospora Nees

Rhaphidospora luzonensis (CB Clarke) Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 45 (1948) 49; --Justicia luzonensis CB Clarke, Govt. Lab. Publ. (Philip.) 35 (1906) 91; --Merr., EPFP 3 (1923) 489. --Syntypes:

LUZON: Cagayan (Penablanca), Isabel (San Mariano), Zambales, Bataan, Rizal, Laguna, Quezon, Sorsogon, MINDORO, CATANDUANES, PANAY: Capiz (Jamindan), BOHOL (BS 43198 Ramos), LEYTE, SAMAR. Low and medium altitude forests, often along streams.

Rhinacanthus Nees

Rhinacanthus nasuta (L.) Kurz, J. As. Soc. Beng. 39² (1870) 79; --Merr., Fl. Manila (1912) 438; EPFP 3 (1923) 488.

India to Malaya, probably a native of India. Certainly introduced in the Philippines.

LUZON: Rizal, Cavite, Laguna. Thickets, hedges and waste places in and about towns.

Rhyticalymma Bremek. (=Justicia)

Rhyticalymma vidalii (CB Clarke ex Merr.) Bremek., PJS 80 (1952) 12; --Justicia vidalii CB Clarke, PJS 1 (1906) Suppl. 248; --Merr., EPFP 3 (1923) 490. --Type: BS 288 J Bermejós (GH, NY*, iso). Palawan. Jan 1905.

PALAWAN, BALABAC. Lowland forests.

Rostellularia Reichenbach = Justicia

Ruellia Linnaeus

Ruellia luzoniensis Merr., PJS 30 (1926) 426. --Type: BS 44627 Ramos & Edaño (NY*, US*, iso).
Luzon: Zambales prov., Anuling, in forests along streams at low altitude, Nov 1924.
LUZON: Zambales

Ruellia philippinensis Elmer, LPB 5 (1913) 1690; --Merr., EPFP 3 (1923) 476. --Type: Elmer 12922.
PALAWAN, BASILAN. Lowland thickets on stream banks.

Ruellia tuberosa L., Sp. Pl. (1753) 635; --Quisumb., PJS 41 (1930) 361.
Native of tropical America. Occasional as an escape from gardens in Manila and neighboring areas. Naturalized in some parts of the Old World tropics.

Rungia Nees

Rungia diversiformis Nees *in* DC, Prodr. 11 (1847) 472; --Merr., EPFP 3 (1923) 485.
LUZON: Pangasinan, Zambales, Bataan, Bulacan, Rizal, Laguna, PALAWAN. Thickets and along streams in ravines at low and medium altitudes.

Rungia lepida CB Clarke, PJS 1 (1906) Suppl. 248; --Merr., EPFP 3 (1923) 485. --Type: Merrill 4450 (NY*, US*, iso). Luzon: Ilocos Sur prov. (in area formerly under the old District of Lepanto), Suyoc to Cervantes, Oct 1905.
LUZON: Abra, Ilocos Sur, Mountain Province, Pangasinan. On banks and open grasslands at low and medium altitude, ascending to 1300m.

Rungia membranacea Merr., PJS 11c (1915) Bot. 205; --Merr., EPFP 3 (1923) 485. --Type: BS 24515 Ramos (US*, iso). Samar: Catubig River at Tagabiran, low altitude open forest, Feb 1916.
SAMAR. Lowland forests.

Rungia parviflora Nees *in* Wall., Pl. As. Rar. 3 (1832) 110; --Merr., EPFP 3 (1923) 485.
India to China, Peninsular Malaysia, Philippines. LUZON: Mountain Province, Benguet. Open grassy slopes, altitude 1500-1900m.

Rungia philippinensis CB Clarke, Govt. Lab. Publ. (Philip.) 35 (1906) 92; --Merr., EPFP 3 (1923) 485. --Type: Cuming 1276.
LUZON: Benguet, Cagayan, Nueva Vizcaya, MINDANAO: Lanao. Forests and thickets, mostly at medium altitudes.

Rungia podostachya Bremek., PJS 81 (1952) 134. --Type: PNH 11542 Edaño (L*, holo; iso in U*).
Mindanao: Davao Oriental prov., Mt. Kampalili, forested slopes, altitude 700m, 22 Mar 1949.
MINDANAO: Davao Oriental.

Semnostachya Bremekamp

Semnostachya antonii (Elmer) Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 206; --Strobilanthes antonii Elmer, LPB 7 (1915) 2550; --Merr., EPFP 3 (1923) 475. --Type: Elmer 13610 (BISH*, MICH*, NY*, US*, iso). Mindanao: Agusan del Norte prov., Cabadbaran, Mt Urdaneta, Aug 1912.
MINDANAO: Bukidnon, Agusan del Norte. Primary forests, altitude c. 1050m.

Semnostachya halconensis (Merr.) Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 208; --Strobilanthes halconensis Merr., PJS 2 c (1907) Bot. 302; --Merr., EPFP 3 (1923) 475. --Type: BS 5586 Merrill (US*, iso). Mindoro: Mindoro Oriental prov.,

Mt. Halcon, Nov 1906.

MINDORO: Mindoro Oriental (Mt Halcon). Primary forests, altitude c. 900m.

Semnostachya leytensis Bremek., PJS 81 (1952) 133. --Type: PNH 12154 Edaño (L*, isotype?).
Leyte: Leyte prov., Ormoc, Mt Mamban, altitude 1163m, Apr 1950.

LEYTE.

Semnostachya merrillii (CB Clarke) Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 208; --Strobilanthes merrillii CB Clarke, Govt. Lab. Publ. (Philip.) 35 (1906) 92; --Merr., EPFP 3 (1923) 475. --Syntypes:

LUZON: Bataan (Mt Mariveles). Ridges on mossy forests, altitude 1000-1300m.

Semnostachya pachys (CB Clarke ex Merr.) Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41 (1944) 208; --Strobilanthes pachys CB Clarke ex Merr., PJS 20 (1922) 456; --Merr., EPFP 3 (1923) 475. --Type: Vidal 3012 (K, holo). Luzon: Caraballo Sur mtns, according to Merrill (1922) probably collected along trail between Dupax (in Nueva Vizcaya) and Carranglan (Nueva Ecija).

LUZON: Nueva Vizcaya, Quezon. Forests, altitude c. 900m.

Staurogyne Wallich

Revision:

Bremekamp, CEB. 1955. *A revision of the Malaysian Nelsonieae. [Scrophulariaceae]*.
Reinwardtia 3: 157-261.

Staurogyne athroantha Bremek., Reinwardtia 3 (1955) 238. --Type: Merrill 1215 (L*, iso). Palawan:
Taytay, May 1913.

PALAWAN.

Staurogyne capillipes Bremek., Reinwardtia 3 (1955) 243. --Type: Merrill 7238 (L*, holo). Palawan.
Sept 1910.

PALAWAN.

Staurogyne debilis (T Anders.) CB Clarke ex Merr., PJS 2 c (1907) Bot. 302; EPFP 3 (1923) 467; --Ebermaiera debilis T Anders., J. Linn. Soc. Bot. 9 (1867) 452; --Vidal, Phan. Cuming., Philip. (1885) 132. --Type: Cuming 1373 (not seen). Luzon: Albay prov.

Staurogyne debilis var. angustifolia Bremek., xxx; --Type: BS 46127 Reillo (L*, holo). Basilan, Aug-Sept 1912.

Staurogyne debilis var. ciliata (Elmer) Bremek., xxx; --Staurogyne ciliata Elmer, LPB 7 (1915) 2548; --Merr., EPFP 3 (1923) 467. --Type: PNH 11357 (U*). Mindanao: Davao Oriental prov., Mt Mayo, altitude 1700m, 4 Apr 1949.

Staurogyne debilis var. longifolia Bremek., xxxxx. --Type: PNH 3371 Edaño (U*, holo). Mindoro: Mindoro Oriental prov., Mt Halcon, altitude 533m, 19 Jan. 1948.

Staurogyne debilis var. pubifolia Bremek., xxx. --Type: Elmer 8708 (L*, holo). Luzon: Benguet prov., Baguio. Mar 1907.

LUZON: Apayao, Benguet, Cagayan, Bulacan, Rizal, Laguna, Camarines, Quezon, Albay, Sorsogon, POLILLO, ALABAT, CATANDUANES, MINDORO, BUSUANGA, PALAWAN, PANAY, NEGROS, LEYTE, SAMAR, BASILAN, MINDANAO: Agusan, Davao Oriental. Low and medium altitudes, chiefly along streams in shaded ravines, ascending to 1700m.

Staurogyne merrillii Bremek., Reinwardtia 3 (1955) 242. --Type: Merrill 7225 (L*, holo). Palawan.
Sept 1910.

PALAWAN.

Staurogyne neesii (Vidal) Merr., EPFP 3 (1923) 468. --Type: Cuming 1083
LUZON: Zambales. Low altitudes, along streams.

Staurogyne nudispica (CB Clarke) Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd.
5 (1913) 1700; --*Ruellia nudispica* CB Clarke, PJS 1 (1906) Suppl. 248; --Merr., EPFP 3 (1923)
PALAWAN. Low altitude forests and thickets.

Natuurk., sect. 2, 41 (1
476. --Type: BS 351 B

Staurogyne ophiorrhizoides Elmer, LPB 4 (1912) 1488; --Merr., EPFP 3 (1923) 468. --Type:
Elmer 12364 (US*, NY*, iso; L, type status not certain). Sibuyan: Magallanes (=Magdiwang),
Mt Giting-giting. "Moist, rock-clayey soil of densely wooded gulches along trail to España at 1750ft,
south of ridge summit". Apr 1910.
SIBUYAN: Mt Giting-giting, forests, c. 530m.

Staurogyne palawanensis (Elmer) Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd.
1701; --Merr., EPFP 3 (1923) 481. --Type: Elmer 12741 (NY*, US*, iso). Palawan: Puerto
Princesa, Mt. Pulgar (=Thumb Peak), "open places among woods at 250 ft." Mar 1911.
PALAWAN. Low altitude open deforested area.

Natuurk., sect. 2, 41 (1

Staurogyne panayensis Bremek., Reinwardtia 3 (1955) 214.

Staurogyne rivularis Merr., PJS 7 c (1912) Bot. 248; Fl. Manila (1912) 435; EPFP 3 (1923) 468.
--Type: Merrill 7396 (L*, US*, iso). Luzon: Manila, Masambong, along small streams on ledges
subject to overflow in high water, Dec 1910.
LUZON: Rizal. Low altitudes, on ledges along small streams.

Staurogyne samarensis Bremek., Reinwardtia 3 (1955) 213. --Type: BS 17534 Ramos (L*,
holo). Samar, Mar-Apr 1914.
SAMAR.

Staurogyne setigera Kuntze, Rev. Gen. (1891) 497.

var. grandis Bremek., xxx

Staurogyne balabacensis Quisumb., PJS 41 (1930) 358, t. 23. --Type: BS 49718 Ramos & Edano (NY,
iso). Balabac: Katakupan, along streams in damp forests at low altitudes, 25 Nov 1927.

Extra-Philippine distribution?

BALABAC.

Staurogyne subcapitata Bremek., Reinwardtia 3 (1955) 190.
LUZON

Staurogyne elmeri Co, *nomen novum*

Staurogyne subcordata (Elmer) Bremek., Verh. Nederl. Akad. Wetensch. Amst., Afd. Natuurk., sect. 2, 41
(1944) 113, *in adnot.*, *non* Benoist (1933); --*Gymnostachyum subcordatum* Elmer, LPB 5 (1913)
1703; --Merr., EPFP 3 (1923) 481.

PALAWAN. Lowland forests along streams.

Bremekamp's combination is antedated by *S. subcordata* Benoist, Bull. Mus. Nat. Hist.
Paris, ser. 2, 5 (1933) 173.

Strobilanthes Blume

Strobilanthes apoensis (Elmer) Merr., EPFP 3 (1923) 475; --*Hypoestes apoensis* Elmer, LPB 7
(1915) 2544. --Type: Elmer 10722 (US*, iso). Mindanao: Davao, Mt Apo, Todaya, May 1909.
MINDANAO: Davao (Mt Apo). Primary forests, altitude c. 1100m.

Strobilanthes boholensis Merr., PJS 29 (1926) 487. --Type: BS 43256 Ramos (US*, iso). Bohol: Bilar, in damp forest, altitude c. 600m, Oct 1923.
BOHOL (Bilar).

Strobilanthes bulusanensis Elmer, LPB 10 (1939) 3678, invalid name, no Latin description. --Type: Elmer 16884 (N)
LUZON: Sorsogon (Mt Bulusan).

Strobilanthes cincinnalis CB Clarke, PJS 1 (1906) Suppl. 249; --Merr., EPFP 3 (1923) 475.
--Type: BS 4574 Merrill (US*, iso; NY*, type). Luzon: Mountain Province, Mt. Data, altitude 2250m, Nov 1905.
LUZON: Mountain Province, Benguet. Mossy forests, altitude 2000-2400m.

Strobilanthes fusca JRI Wood, Kew Bull. 64(1) (2009) 11-13, Fig. 5. --Type: PPI 4164 Reynoso, Alvarez & Fernando (K, holo). Luzon: Zambales prov., Masinloc, Coto, 2 Feb 1992.
LUZON: Zambales

Strobilanthes mearnsii Merr., PJS 4 c (1909) Bot. 322; --Merr., EPFP 3 (1923) 475.
LUZON: Mountain Province, Benguet. Wet thickets and forests, altitude 1400-2000m.

Strobilanthes pluriformis CB Clarke, Govt. Lab. Publ. (Philip.) 35 (1906) 93; --Merr., EPFP 3 (1923) 475. --Type:
LUZON: Mountain Province, Ifugao, Benguet, Pampanga, Bataan, Rizal, Laguna, Quezon, Batangas, MINDORO. Mossy forests, altitude 1000-2000m.

Thunbergia Retzius

Revision:

Bremekamp, CEB. 1955. The Thunbergia species of the Malesian area [Acanthaceae].
Verhandelingen der Koninklijke Nederlandse Akademie van Wetenschappen,
Amsterdam, section ii, 50 no. 4: 1-90.

Thunbergia alata Boj. ex Sims., Bot. Mag. t. 2591; --Merr., Fl. Manila (1912) 440; EPFP 3 (1923) 468.

Native of tropical Africa, now pantropic. LUZON: Bataan, Rizal. Thoroughly naturalized in waste places and thickets in the lowlands. Also cultivated.

Thunbergia benguettensis Bremek., Verh. Nederl. Akad. Wetensch. Amst., sect. 2, 50 No. 4- (Thunbergia Sp. Males.) (1955) 76. --Type: RS Williams 935 (NY, type). Luzon: Benguet prov.,

Kias
(present-day Baguio), Sept 1904.

LUZON

Thunbergia brachypoda Bremek., Verh. Nederl. Akad. Wetensch. Amst., sect. 2, 50 No. 4- (Thunbergia Sp. Males.) (1955) 59. --Type: Elmer 13076 (L*, holo; iso in NY*)

PALAWAN

Thunbergia brachytylla Bremek., Verh. Nederl. Akad. Wetensch. Amst., sect. 2, 50 No. 4- (Thunbergia Sp. Males.) (1955) 72. --Type: BS 98 Piper (L, type). Mindanao: Zamboanga del Norte prov., (indicated as Province of Misamis in label), Dapitan, Apr 1911.

MINDANAO

Thunbergia erecta (Benth.) T Anders., J. Linn. Soc. Bot. 7 (1864) 18; --Merr., Fl. Manila (1912) 440; EPFP 3 (1923) 468.

Native of tropical Africa, introduced in the Philippines around 1900, cultivated as an ornamental but nowhere spontaneous.

Thunbergia fragrans Roxb., Fl. Coromandel. 1 (1795) 47, t. 67; --Merr., Fl. Manila (1912) 440; EPFP 3 (1923) 468.

Thunbergia subsagittata Blanco, Fl. Filip. (1837) 518. --Type: Merrill Species Blancoanae 963 (US*, illustrative specimen). Luzon: Bataan prov., Lamao, Dec 1915.

Thunbergia subdigitata var. *hirsutifolia* Bremek., xxx; --Type: Warburg 11726 (NY, type). Luzon: Cagayan prov.

India to Australia. Throughout the Philippines in most islands and provinces. Low and medium altitude thickets. Variable in vegetative characters.

Thunbergia grandiflora Roxb., Hort. Beng. (1814) 45, *nomen nud.*, Fl. Ind. 3 (1832) 34; --Merr., Fl. Manila (1912) 439; EPFP 3 (1923) 469

Native of India. Commonly planted in the Philippines for ornamental purposes. Not known to fruit here.

Thunbergia ilocana Bremek., Verh. Nederl. Akad. Wetensch. Amst., sect. 2, 50 No. 4- (*Thunbergia* Sp. Males.) (1955) 77. --Type: BS 32756 Ramos (L, iso). Luzon: Ilocos Norte prov., Burgos, July 1918.

Xxxxx

Thunbergia laurifolia Lindl., Gard. Chron. (1856) 260; --Merr., EPFP 3 (1923) 469.

Peninsular Malaysia. Occasionally planted in the Philippines for ornamental purposes.

Cultivated:

Beloperone Nees = *Justicia*

Crossandra Salisb. -C

Fittonia Coemans*

Odontonema Nees - W

Sanchezia Ruiz & Pavon -C

Doubtful taxa:

Adhatoda aspera Nees in DC, Prodr. 11 (1847) 397; --Merr., EPFP 3 (1923) 490.

According to Merrill this was based on Cuming 1403, which in most herbaria is a *Jasminum*.