MATERIALS TOWARD A MONOGRAPH OF THE GENUS VERBENA. VI

Harold N. Moldenke

Two additional abbreviations employed herein for the names of herbaria whose material has been examined in the preparation of this work are: Hi = University of North Carolina, Chapel Hill, North Carolina, and Pm = Pharma Herbarium, CIBA, Basle, Switzerland.

VERBENA L., Mat. Med. 6 (1749), Sp. Pl., ed. 1, 1: 18. 1753; Gen. Pl., ed. 5, 12. 1754.

Additional & emended literature: Brunfels, Herb. Viv. Icon. 1: 119--120. 1532; Dorsten, Botanicon 292--294. 1540; Fuchs, Hist. Plant. Basil. 592. 1543; Ruel, Ped. Dioscorid. Anazarb., ed. 1, 317 (1549) and ed. 2, 519--521. 1551; Gesner, Collect. Stirp. 113. 1553; Matth., Comment. 466--467. 1554; Cord., Op. Posth. 66. 1561; Matth., Disc. Ped. Dioscor. Anazarb. 1106--1108. 1568; L'Obel, Plant. Obs. 231. 1576; Caesalp., De Plantis 450 & 451. 1583; Bejthe, Stirp. Nomencl. [14]. 1583; Gerarde, Herbal 580--582. 1597; L'Ecluse, Rar. Plant. Hist. 4: xlv--xlvi. 1601; Matth., Opera Omnia Comment. 741--742. 1624; J. Bauh., Hist. Plant. Univ. 3: 443--445. 1650; Imperato, Hist. Nat. 673--674. 1672; Matth., Apolog. 174 & 214. 1674; P. Herm., Hort. Acad. Lugd.-Bat. Cat. 619 & 699. 1687; Breyn, Prodr. Fasc. Rar. Pl., ed. 1, 2: 100. 1689; J. Bauh., Hist. Pl. Eur. 2: 494. 1689; Rivinus, Introd. Gen. Remherb. [24], Icon. [56] & [57]. 1690; P. Herm., Fl. Lugd.-Bat. 54--55. 1690; Pluk., Phytogr. 3: pl. 232, fig. 4, & 321, fig. 1. 1692; Petiver, Mus. Petiv. 60. 1695; P. Herm., Parad. Batav., ed. 1, 242, pl. 242. 1698; Tourn., Hist. Pl. Paris 309--310. 1698; Ray, Hist. Plant. 3: Suppl. 285--288 & App. 249. 1704; Boerh., Ind. Plant. Hort. Acad. Lugd., ed. 1, 75. 1710; Munting, Phytograph. Cur. 784. 1711; Boerh., Ind. Alt. Plant. Hort. Acad. Lugd., ed. 2, 1: 186--187 (1720) and ed. 3, 1: 186--187. 1727; Zannichell, Istor. Piante Venez. 273, pl. 269. 1735; L., Hort. Cliff. 10--11. 1737; Breyn, Prodr. Fasc. Rar. Pl., ed. 2, 2: 100. 1739; J. F. Gronov., Fl. Virg., ed. 1, 1: 7--8. 1739; A. van Royen, Fl. Leyd. Prod. 326--327 & 530. 1740; A. von Haller, Enum. Meth. Stirp. Helvet. 1: 551, 624, 634, 660, 661, 709, & 794. 1742; L., Fl. Suec., ed. 1, 9. 1745; Micheli, Cat. Plant. Hort. Caes. Florent. 98. 1748; L., Mat. Med. 6, 208, & 218. 1749; Dalib., Fl. Paris. 9. 1749; Sauvages, Meth. Fol. Pl. Fl. Monspel. 145, 248, 279, & 342. 1751; E. Blackwell, Cur. Herbal 1: pl. 41. 1751; L., Sp. Pl., ed. 1, 1: 18--21 & 342 (1753) and 2: 601, 630, & 660. 1753; L., Fl. Svec., ed. 2, 10. 1755; Kniphof, Bot. Orig. Herb. Viv. pl. [284]. 1757; Dodart, Mem. Serv. Hist. Pl., ed. 3, 627, pl. 35. 1758; J. F. Gronov., Fl. Virg., ed. 2, 4, 92, & 146. 1762; A. von Haller, Hist. Stirp. Indig. Helvet. 1: [96]--97 and 3: 183 & 202. 1768; Rosenstein, Kinder Krankh. 79. 1768; J. A. Murr. in L., Syst. Veg., ed. 13, 61--62. 1774; Haartm. in L.,

Amoen. Acad. 3: 35 & 43, pl. 2. 1775; Sabbat in Martelli, Hort. Roman. 3: 10--11, pl. 54--56. 1775; Pollich, Hist. Plant. Palat. 1: 22. 1776; O. F. Müll., Icon. Plant. Fl. Dan. 4: 5, pl. 628. 1777; Thunb., Fl. Jap. 22. 1784; Pulteney, Hist. & Biogr. Sketches Prog. Bot. England 1: 5--7. 1790; Lour., Fl. Cochinch., ed. 1, 1: 26--27 & 721 (1790) and ed. 2, 1: 33 & 881. 1793; Desf., Fl. Atlant. 1: 15--17. 1800; Lam. & DC., Fl. Franç. 3: 502--503. 1805; Poir. in Lam., Encycl. Méth. Bot. 8: 544--550 & 843--844. 1808; Picot de Lapeyr., Hist. Abrég. Pl. Pyrén. 12--13 & 652. 1813; Reichenb., Consp. Reg. Veg. 117 & 292. 1828; Bartl., Ord. Pl. 178. 1830; Reichenb., Fl. Germ. Exc. 334. 1830; Kunth, Handb. 391. 1831; Lindl., Einl. Syst. Bot. 355. 1833; H. E. Richter, Cod. Bot. Linn. 34--36. 1835; Mackay, Fl. Hibern. 208--209. 1836; W. D. J. Koch, Synops. Deutsch. & Schw. Fl., ed. 1, 578 & 844. 1837; W. D. J. Koch, Synops. Deutsch. & Schw. Fl. Ind. Gen. Spec. 99. 1838; Spenn. in Nees von Esenbeck, Gen. Plant. Germ. fasc. 21: 20 (420). 1839; E. Mey., Preuss. Pflanzengatt. 113. 1839; G. L. Petermann, Cod. Bot. Linn. Ind. Alph. 196. 1840; F. Krauss, Flora 28: 68. 1845; W. D. J. Koch, Synops. Deutsch. & Schw. Fl., ed. 2, 681 & 1206. 1846; A. Rich., Tent. Fl. Abyss. 2: 165--166. 1851; Zetterstedt, Pl. Vasc. Pyren. 220. 1857; Hofmeister, Jahrb. Wiss. Bot. 1: 140. 1858; Tornabene, Atti Accad. Gioen. Scien. Nat. Catania, ser. 2, 16: 125. 1860; Reichenb. f., Neuholl. Pfl. Am. Dietr. 9. 1866; Ascherson in Schweinf., Beitr. Fl. Aethiop. 1: 120. 1867; F. Muell., Fragm. 6: 153. 1868; Benth. & Muell., Fl. Austr. 5: 35--36. 1870; F. Muell., Fragm. 9: 5. 1875; Loret & Barrandon, Fl. Montpel. 532. 1876; C. Berg, Enum. Pl. Europ. 17 & 24. 1877; F. Muell., First Census 102. 1882; Franchet, Sert. Somal. 50. 1882; J. Sm., Dict. Pop. Names Pl. 428. 1882; H. Friend, Fls. & Flow. Lore 171, 313, 315, 529, 532--534, 545, 547, 548, 591, 607, 609, 610, & 615. 1883; F. M. Bailey, Syn. Queensl. Fl. 376. 1883; F. M. Bailey, Proc. Roy. Soc. Queensl. 1: 70. 1884; Tristram, Surv. West. Palest., ed. 1, 378. 1884; F. Muell., Key Victor. Pl. 2: 43 (1885) and 1: 397. 1887--1889; Tristram, Surv. West. Palest., ed. 2, 378. 1888; Stewart & Corry, Fl. North-east Ireland 285--286. 1888; F. Muell., Sec. Census 171. 1889; R. Tate, Handb. Fl. Extratr. South Austr. 155 & 254. 1890; H. C. Hart, Some Acct. Fauna Fl. Sinai 104. 1891; Engl., Über Hochgebirgsfl. Trop. Afr. 355--356. 1892; G. Watt, Dict. Econom. Prod. Ind. 6 (4): 229. 1893; Fiori & Paoletti, Icon. Flor. Ital. 380, fig. 3218. 1895; F. M. Bailey, Cat. Pl. Queensl. 35. 1890; Moore, Handb. Fl. N. S. Wales 356. 1893; Sieb. & Voss in Vilm., Blumeng., ed. 3, 1: 825. 1895; Mak., Bot. Mag. Tokyo 9: [321]. 1895; Gürke in Engl., Pfl. Ost-Afr. C: 337. 1895; Kuntze, Rev. Gen. Pl. 3 (2): 254--258. 1898; J. L. Stewart, Punjab Pl. 166. 1899; "V. N.", Rev. Hort. Belg. 26: 76--77, fig. 15. 1900; F. M. Bailey, Queensl. Fl. 4: 1173. 1901; H. H. W. Pearson in Thiselt.-Dyer, Fl. Cap. 5: 207--210. 1901; J. K. Small, Fl. Southeast. U. S., ed. 1, 1009--1011 & 1337. 1903; Maiden, Proc. Linn. Soc. N. S. Wales [Fl. Norf. Isl.] 29: 712. 1904; Burbidge, Book Scented Gard. 74 & 95. 1905; F. M. Bailey,

Weeds & Poison. Pl. Queensl. 139, 141, & 143, fig. 243. 1906; Cheeseman, Man. N. Zeal. Fl. 1083. 1906; P. C. Standl., Contrib. U. S. Nat. Herb. 13: 161, 164, 171, & 211. 1910; C. M. Skinner, Myths & Legends 262. 1911; Nakai, Fl. Korea 2: 134. 1911; Felt, Journ. N. Y. Entomol. Soc. 20: 150--151. 1912; Matsum., Ind. 2 (2): 534. 1912; Britton & Br., Illustr. Fl., ed. 2, 3: 94--97, 599, 618, & 635, fig. 3552--3559. 1913; F. M. Bailey, Compreh. Cat. 382. 1913; Lévl., Cat. Pl. Yun-Nan 278. 1917; Basu, Ind. Medic. Pl. 3: 3, pl. 732. 1918; Holste, Zeitschr. Exper. Patholog. 19: 483. 1918; Quart. Journ. Geol. Soc. Lond. 76 (2): 157. 1920; Fitch & Sm., Ill. Brit. Fl., ed. 5, fig. 822. 1924; Hegi, Illustr. Fl. Mittel-Eur. 5 (3): 2238--2243, pl. 222 & 346, fig. 5, 3174, & 3175. 1927; Domin, Biblioth. Bot. 89 (VI): 1106. 1928; Seckt, Rev. Univ. Nac. Cordoba 17: 87--90, pl. 18, fig. 486. 1930; Marzell in Fedde, Repert. Beih. 61: 176. 1930; Eig in Fedde, Repert. Beih. 63: 172. 1931; Soest, Invl. Rivier. Fl. Gelderland 3 & 6. 1931; Grieve, Modern Herb. 830. 1931; Eig, Zohary, & Feinbrunn, Pl. Palest. 305--306. 1931; Crevost & Pételot, Bull. Econom. Indo-Chine 37: 1287. 1934; Dop in Lecomte, Fl. Gén. Indochine 4: 773 & 777--778, fig. 83, 4--7. 1935; Bourdier, Arch. Pharm. 273: 357. 1935; Reichert, Arch. Pharm. 273: 357. 1935; Buchli, Beitr. Geobot. Landes. Schweiz 19: 63. 1936; W. Young, Trans. & Proc. Bot. Soc. Edinb. 32: 114. 1936; Bedevian, Illustr. Polyglott. Dict. Pl. Names 609--610. 1936; Cheymol, Verbenaloside. 1937; Gonçalves da Cunha & Gonçalves Sobrinho, Revist. Fac. Ciencias 3: 5, 10, & 43. 1938; F. C. Hoehne, Plant. Subst. Veg. Tox. Med. 249--250. 1939; Kuwajima, Tohoku Journ. Exp. Med. 36: 28--43. 1939; Fern., Rhodora 42: 478. 1940; Oppenheimer & Evenari, Bull. Soc. Bot. Genèv., ser. 2, 31: [Fl. Cisiord.] 90 & 363. 1940; Robledo, Lecc. Bot. 2: 497. 1940; N. R. Hanson, Texas Wild Flow. Legends, ed. 2, 113. 1940; Gonçalves da Cunha & Gonçalves Sobrinho, Bol. Soc. Brot., ser. 2, 14: 11. 1940; Biswas, Ind. Forest Rec. Bot., new ser., 3: 42. 1941; Hutchinson & Bruce in Gillet, Kew Bull. 1941: 177. 1941; H. N. Webster, Herbs 27, 31, 32, & 64. 1942; Breitwieser, Pharmakogn. Untersuch. Verbenac. 1942; Rosengurtt, Estud. Prad. Nat. Urug. 3: [Fl. Palleros] 234--237. 1943; Yuncker, Bishop Mus. Bull. 178: 101. 1943; R. S. Woods, Naturalists' Lex. 271. 1944; Rozeira, Fl. Prov. Tras. & Alto Douro 164. 1944; Schnack & Covas, Darwiniana 6: 469--476, fig. 1--3. 1944; Roig, Plant. Med. Cuba 670--671 & 811. 1945; Schnack & Gonzalez, Revist. Argent. Agron. 12: 285--290. 1945; Rosengurtt, Estud. Prad. Nat. Urug. 5: [Fl. J. Jackson] 394--395, fig. 36. 1946; Schnack & Covas, Haumania 1: 5, [8], & 10, fig. 2 h & i. 1947; R. R. Tatnall, Fl. Del. 217--218. 1947; Kasapligil, Kuzey Anadol. Botanik Gezileri 74, 122, & 155. 1947; P'ei, Bot. Bull. Acad. Sin. 1: 2--3. 1947; Cabrera, Anal. Acad. Nac. Cienc. Nat. Buenos Aires 12: 22. 1947; Hager in Reichert, Trat. Farm. Práct. 5: 1214. 1948; Hausman, Begin. Guide Wild Fls. 26 & 375. 1948; Blossom, N. Y. Herald Trib., sect. 5, p. 14, July 25. 1948; Cabrera & Fabris, Publ. Tecn. 5 (2): [Pl. Acuat. Prov. Buenos Aires] 13. 1948; Cabrera, Lilloa 20: 175 & 337, cuadro I, III, IV, VII, VIII, XI, & XVII. 1949; La Estrella, p. 7, Jan. 22.

1951; Connor & Adams, Poison. Pl. N. Zeal. 106 & 135. 1951; Ahles, Bull. Torrey Bot. Club 78: 269. 1951; Howell, Wasmann Journ. Biol. 10: 377. 1952; R. Mohr, Deutsch. Med. Wochenschr. 79: 1513. 1954; Cohn, Vis, & Karrer, Helv. Chim. Act. 37: 790. 1954; Univ. Hull List of Seeds 7. 1955; Kasapligil, Pl. Jordan 102. 1956; Hara, Journ. Fac. Sci. Univ. Tokyo, ser. 3, 6: 366. 1956; Braun-Blanquet & Bolós, Anal. Estac. Exper. Aula Dei 5: 41, 62, 68, 109, 139, 202, pl. 8 & 25. 1957; Univ. Hull List of Seeds 7. 1958; Reitz, Sellowia 11: 45, 57, 79, & 134. 1959; Winde & Hänsel, Arch. Pharm. 293: 556--567. 1960; H. V. Sm., Mich. Wildfls. 313--315, 317, & 465, pl. 154 & 155. 1961; Ricardi, Gayana 3: 13. 1961; Moldenke, Phytologia 8: 108--152, fig. 1 & 2 (1961) and 8: 175--216 & 230--272, fig. 3 & 4. 1962; A. Putz, N. Y. Herald Trib., sect. 4, p. 18, Feb. 4. 1962; Moldenke, Résumé Suppl. 3: 1--19, 25--27, 29, & 32--42. 1962; Vaughan, Gard. Illustr. 86: 61 & 71. 1962.

Several of the bibliographic references given above occur in more or less erroneous form in literature; e.g., Gerarde, Herbal 580--582 (1597) is sometimes cited as page "781"; L'Ecluse, Rar. Plant. Hist. 4: xlv--xlvi (1601) is sometimes cited "Clus...xiv"; J. Bauh., Hist. Plant. Univ. 3: 443--445 (1650) is sometimes cited as "1651"; J. F. Gronov., Fl. Virg., ed. 1, 1: 7--8 (1739) is sometimes cited as "Clayt., Fl. Virg. 8. 1743"; A. van Royen, Fl. Leyd. Prod. 326--327 & 530 (1740) is sometimes cited as "Royen, Leyd. 161"; L., Mat. Med. 6, 208, & 218 (1749) is sometimes cited as page "38"; L., Sp. Pl. ed. 1, 1: 18--21 & 342 and 2: 601, 630, & 660 (1753) is sometimes cited as "878 & 879"; Kniphof, Bot. Orig. Herb. Viv. pl. [284] (1757) is sometimes cited as "cent. 12, no. 99"; J. A. Murr. in L., Syst. Veg., ed. 13, 61--62 (1774) is sometimes cited as page "66"; Lour., Fl. Cochinch., ed. 1, 26--27 & 721 (1790) is sometimes cited as page "33", which is the page in edition 2; Burbidge, Book Scented Gard. 74 & 95 (1905) is sometimes cited with the letters "n. e"; while the Treub, Ann. Jard. Bot. Buitenz. 3: 77--87 (1883) sometimes included in the bibliography of this genus contains no reference whatever to it.

Additions and emendations to the List of Excluded Species:

Verbena americ. frutesc. etc. Breyn. = Stachytarpheta mutabilis (Jacq.) Vahl

Verbena americana frutescens etc. Breyn. = Stachytarpheta mutabilis (Jacq.) Vahl

Verbena americana frutescens, teucrii foliis & facie, floribus caeruleo-purpurascentibus amplissimis Breyn. = Stachytarpheta mutabilis (Jacq.) Vahl

Verbena americana frutescens, teucrii foliis, floribus coeruleo-purpurascentibus amplissimis Breyn. = Stachytarpheta mutabilis (Jacq.) Vahl

Verbena americana latifolia etc. Magn. = Stachytarpheta mutabilis (Jacq.) Vahl

Verbena americana latifolia, spica simplici longissima nigro-purpurea Magn. = Stachytarpheta mutabilis (Jacq.) Vahl

Verbena americana media annua ocimi folio lanuginoso, flore

purpureo amplo Breyn. = Bouchea prismatica (L.) Kuntze

Verbena americana media annua, ocimifolio lanuginoso, flore purpureo amplo Breyn. = Bouchea prismatica (L.) Kuntze

Verbena americana veronicae foliis, flore coccineo spicata Breyn. = Stachytarpheta mutabilis (Jacq.) Vahl

Verbena americana, veronicae foliis, flore coccineo spicata breynii Comm. = Stachytarpheta mutabilis (Jacq.) Vahl

Verbena botryoides major canadensis Munt. = Laportea canadensis (L.) Gaud., Urticaceae

Verbena bryoides maj. canad. Munt. = Laportea canadensis (L.) Gaud., Urticaceae

Verbena capensis folio capillacea Ray = Hebenstretia erinoides L. f., Selaginaceae

Verbena caudata americana flore pallidè coeruleo Munt. = Stachytarpheta jamaicensis (L.) Vahl

Verbena caule repente, foliis oblongis superne crenatis, pedunculis solitariis Gronov. = Phyla nodiflora (L.) Greene

Verbena caule repente, foliis oblongis superne crenatis, pedunculis solitariis capitatis Gronov. = Phyla nodiflora (L.) Greene

Verbena curassavica scutellariae foliis, flore purpurascente Herm. = Bouchea prismatica (L.) Kuntze

Verbena diandra L. = Stachytarpheta jamaicensis (L.) Vahl

Verbena diandra, spicis laxis, calycib. alternis prismaticis truncatis aristatis, fol. ovatis obtusis L. = Bouchea prismatica (L.) Kuntze

Verbena diandra, spicis laxis, calycib. fructus reflexis rotundato-didymis hispidis L. = Priva mexicana (L.) Pers.

Verbena diandra, spicis longis., calycib. aristatis, fol. ovatis, argute serratis L. = Ghinia curassavica (L.) Millsp.

Verbena diandra, spicis longiss. carnosis nudis, fol. lanceolato-ovat., oblique dentatis, caule laevi L. = Stachytarpheta indica (L.) Vahl

Verbena diandra, spicis longiss., foliosis L. = Stachytarpheta orubica (L.) Vahl

Verbena diandra, spicis ovat., fol. lanceolat. serrato-plicatis, caule fruticoso Royen = Phyla stoechadifolia (L.) Small

Verbena dispermos americana lignescens veronicae foliis Moris. = Bouchea prismatica var. longirostra Grenz.

Verbena femina Brunf. = Erysimum officinale L., Brassicaceae

Verbena fol. ovat. acuminatis, spica foliolosa L. = Stachytarpheta orubica (L.) Vahl

Verbena fol. subrot. serrato etc. Sloane = Stachytarpheta jamaicensis (L.) Vahl

Verbena foliis lanceolatis plicatis, spicis ovatis, caule fruti-

coso Royen = Phyla stoechadifolia (L.) Small
Verbena foliis lanceolatis, spica carnosa nuda Royen = Stachytarpheta jamaicensis (L.) Vahl
Verbena foliis obtuse ovalibus, spica carnosa nuda L. = Stachytarpheta jamaicensis (L.) Vahl
Verbena foliis ovatis acuminatis, spica foliolosa L. = Stachytarpheta orubica (L.) Vahl
Verbena folio subrotundo serrato, flore caeruleo Sloane = Stachytarpheta jamaicensis (L.) Vahl
Verbena folio subrotundo serrato flore coeruleo Sloane = Stachytarpheta jamaicensis (L.) Vahl
Verbena fruticosa Millsp. = Phyla nodiflora var. reptans (H.B.K.) Moldenke & P. strigulosa (Mart. & Gal.) Moldenke
Verbena indica Bont. = Stachytarpheta jamaicensis (L.) Vahl
Verbena indica lanuginosa Bod. = Manulea rubra L. f., Scrophulariaceae
Verbena mariana, rosae chin. fol. etc. Petiv. = Phryma leptostachya L., Phrymaceae
Verbena mexican. L. = Priva mexicana (L.) Pers.
Verbena mexicana, trachelii fol. etc. Dill. = Priva mexicana (L.) Pers.
Verbena mexicana, trachelii fol., fructu aparines Dill. = Priva mexicana (L.) Pers.
Verbena minima, chamaedr. fol. Sloane = Bouchea prismatica (L.) Kuntze
Verbena minima, chamaedros fol. Sloane = Bouchea prismatica (L.) Kuntze
Verbena minima chamaedryos folio Sloane = Bouchea prismatica (L.) Kuntze
Verbena; nodiflora C. Bauh. = Phyla nodiflora (L.) Greene
Verbena nodiflora capite oblongo, seu V. nodiflora imperati Barrel. = Phyla nodiflora (L.) Greene
Verbena nodiflora curassavica, foliis menthae Herm. = Ghinia curassavica (L.) Millsp.
Verbena nodiflora, foliis minoribus viridibus Moris. = Phyla nodiflora (L.) Greene
Verbena, nodiflora, foliis minoribus, viridibus Moris. = Phyla nodiflora (L.) Greene
Verbena nodiflora incana curassavica latifolia Herm. = Phyla nodiflora (L.) Greene
Verbena nodiflora incana, curassavica latifolia Herm. = Phyla nodiflora (L.) Greene
Verbena orubica, teucrii fol. etc. Pluk. = Stachytarpheta mutabilis (Jacq.) Vahl
Verbena orubica, teucrii fol., primulae veris fl., siliq. et

seminib. longissimis Pluk. = Stachytarpheta mutabilis (Jacq.) Vahl

Verbena orubica, teucrii folio, primulae veris flore, siliquis & seminibus longissimis Pluk. = Stachytarpheta mutabilis (Jacq.) Vahl

Verbena racemo simpliciss. etc. Gronov. = Phryma leptostachya L., Phrymaceae

Verbena racemos simplicissimo, floribus sessilibus, calycibus fructus reflexis, racemoque appressis Gronov. = Phryma leptostachya L., Phrymaceae

Verbena recta & mas Gesn. = Erysimum officinale L., Brassicaceae

Verbena repens nodifl. Burm. = Phyla nodiflora (L.) Greene

Verbena repens nodiflora Park. = Phyla nodiflora (L.) Greene

Verbena rubra Rumph. = Aerva sanguinolenta (L.) Blume, Amaranthaceae

Verbena scutellariae foliis dispermos americana Pluk. = Bouchea prismatica (L.) Kuntze

Verbena scutellariae s. cassid. fol. etc. Pluk. = Bouchea prismatica (L.) Kuntze

Verbena, scutellariae, s. cassidae fol., dispermos americ. Pluk. = Bouchea prismatica (L.) Kuntze

Verbena scutellariae sive cassidae folio dispermos Pluk. = Bouchea prismatica (L.) Kuntze

Verbena spicata jamaicana etc. Pluk. = Stachytarpheta jamaicensis (L.) Vahl

Verbena spicata jamaicana teucrii pratensis folio, dispermos Pluk. = Stachytarpheta jamaicensis (L.) Vahl

Verbena spicata jamaicana, teucrii pratensis folio, dispermos Pluk. = Stachytarpheta jamaicensis (L.) Vahl

Verbena tetrandra, calyc. subrotundis erectiusc., sem. echinatis L. = Priva lappulacea (L.) Pers.

Verbena tetrandra, spicis capitato-conicis, foliis serratis, caule repente L. = Phyla nodiflora (L.) Greene

Verbena tetrandra; spicis capitato-conicis; foliis serratis; caule repente L. = Phyla nodiflora (L.) Greene

The following thirteen pre-linnean names have not as yet been satisfactorily identified by me. If any of the readers of this paper, specialists in the regions involved, know to what plants these names actually apply, it would be most deeply appreciated if this information were communicated to me:

Verbena americana radice grumosa Munting apud Ray, Hist. Plant. 3: Suppl. 285. 1704.

Verbena foliis planta aethiopica quadricapsularis, flore parvo calathoide coeruleo Pluk. apud Ray, Hist. Plant. 3: Suppl. 286. 1704.

Verbena fructu in singulis capitulis echinatis, unico flore albo

Sabbat in Martelli, Hort. Roman. 3: 11. 1775.

Verbena guineensis folio integro serrato glabro Ray, Hist. Plant. 3: Suppl. App. 249. 1704.

Verbena hyssopi foliis parvis è Cap. Boe. Spei Petiv. apud Ray, Hist. Plant. 3: Suppl. 286. 1704.

Verbena indica, rotundifolia, spicis comosis Mus. Zeyl. pag. 58 an Bliti superius descripti species? an vero Verbena nodiflora, major, indica, flore niveo hermanni apud Moris. tom. 3, pag. 419? Herm., Thes. Zeyl. 228. 1737.

Verbena nodiflora incana minor Indiae Orientalis, Poordela Malabarorum Pluk. apud Ray, Hist. Plant. 3: Suppl. 286. 1704.

Verbena nodiflora major indica flore niveo, hermanni Morison, Pl. Hist. Univ. Oxon. 3: 419. 1699.

Verbena nodiflora major indica, flore niveo hermanni Moris. apud Ray, Hist. Plant. 3: Suppl. 287. 1704.

Verbena pervana perpetvo virens J. Bauh., Hist. Plant. Univ. 3: 444--445. 1650.

Verbena scorodoniae folio spicata marilandica D. Sherard apud Ray, Hist. Plant. 3: Suppl. 287. 1704.

Verbena taxi foliis, marginibus lanuginosis Petiv. apud Ray, Hist. Plant. 3: Suppl. 286. 1704.

Verbena trachely, ruvidis foliis, fructu aparines H. Eyst. apud Sabbat in Martelli, Hort. Roman. 3: 11. 1775.

Additions to the list of known hybrids:

xVerbena gonzalezi Moldenke = Verbena santiaguensis (Covas & Schnack) Moldenke x V. perakii (Covas & Schnack) Moldenke

xVerbena perplexa Moldenke = V. gooddingii Briq. x V. bipinnatifida Nutt.

xVerbena tentamenta Moldenke = V. perakii (Covas & Schnack) Moldenke x V. peruviana (L.) Britton

It is worthy of note that Lamarck & DeCandolle, Fl. Franç. 3: 502--503 (1805) say of Verbena: "Ce genre, placé par Lamarck dans les Labiées, et par Jussieu dans les Pyrénacées, établit la liaison naturelle de ces deus familles."

VERBENA ABRAMSI Moldenke

Additional literature: Moldenke, Phytologia 8: 142--145 (1961) and 8: 177. 1962; Moldenke, Résumé Suppl. 3: 8. 1962.

Brock found this species growing in very heavy damp soil by old well-pipes, along with Hypericum anagalloides C. & S., H. formosum H.B.K., and Gnaphalium chilense Spreng.

Additional citations: CALIFORNIA: Madera Co.: Brock 297 (Hi--204019).

xVERBENA ADULTERINA Hausskn.

In my Alph. List Invalid Names Suppl. 1: 22 (1947) I reduced this binomial to synonymy under V. officinalis L. and followed this disposition of it as late as my Résumé in 1959. It is only

since the latter date that I have decided to keep it apart.

VERBENA ALATA Sweet

Additional & emended literature: Briq. in Engl. & Prantl, Nat. Pflanzenfam. 4 (3a): 147. 1894; Reitz, Sellowia 13 (13): 110. 1961.

VERBENA AMBROSIFOLIA Rydb.

Additional literature: Moldenke, Phytologia 2: 126 (1945), 8: 149--152 (1961), and 8: 177--181, fig. 2. 1962; Moldenke, Résumé Suppl. 3: 7. 1962.

VERBENA AMBROSIFOLIA f. EGLANDULOSA Perry

Additional literature: Moldenke, Phytologia 8: 181--183. 1962; Moldenke, Résumé Suppl. 3: 37. 1962.

VERBENA ARAUCANA R. A. Phil.

Additional literature: Acevedo de Vargas, Bol. Mus. Nac. Hist. Nat. Chile 25: 50. 1951; Moldenke, Phytologia 8: 187--188. 1962.

Acevedo de Vargas states that "El tipo de esta especie, conservado en nuestro herbario museal, ha sido confundido con una planta del herbario del Museo de Berlin, cuya foto ha sido distribuída por Field Mus. Nat. Hist. 17401" (Sg--66908).

VERBENA ARENARIA Moldenke

Literature: Moldenke, Phytologia 8: 59--60 (1961) and 8: 188--189. 1962; Moldenke, Résumé Suppl. 3: 14. 1962.

xVERBENA ARGENTINA Moldenke

Literature: Moldenke, Phytologia 8: 60 (1961) and 8: 189. 1962; Moldenke, Résumé Suppl. 3: 14. 1962.

VERBENA ATACAMENSIS Reiche

Additional literature: Acevedo de Vargas, Bol. Mus. Nac. Hist. Nat. Chile 25: 51. 1951; Moldenke, Phytologia 8: 191--192. 1962.

The type of this species was collected in September, 1900, and is No. 54771 in the herbarium of the Museo Nacional de Historia Natural in Santiago, Chile. Acevedo de Vargas cites, in addition, R. A. Philippi s.n. [Paposo, XII.1853] (Sg--42477, Sg--54753) and Reiche s.n. [Taltal-Paposo, IX.1909] (Sg--61450) from Antofagasta. She notes that the species has been confused in her herbarium with V. laciniata (L.) Briq.

VERBENA AURANTIACA Speg.

Additional descriptive data: Branches 16--40 cm. long, 1--2 mm. thick, somewhat twiggy, leafless below, prostrate-diffuse, arcuate-ascending above, with only a few leaves; principal internodes 2--7 cm. long, smooth or slightly 2-striate at the branchings; leaves shorter than the internodes, often bearing 2--4 slightly smaller leaves in their axils, rather thick-membranous in drying, often subglaucescent, 1-nerved, sometime spatulate or obovate,

often obtusely rounded at the apex, 1--2.5 cm. long, 2--14 mm. wide, the lower ones larger and broader, the upper ones shorter and narrower (often linear or linear-lanceolate), the lobes obtuse; inflorescence often borne on peduncle-like elongate branches 3--8 cm. long, leafless or with 2 linear leaflets 5--15 mm. below the flowers, rarely with 1 or 2 aborted flower-heads, the spikes 8--16-flowered, at first rather compact-capitate, 15 mm. long and wide, but after anthesis elongating to 30 mm. long and only 5 mm. wide; bractlets often linear or lanceolate, rather acute at the apex, often hirsutulous-pubescent with appressed hairs; calyx cylindric or tubular, subterete, 8--10 mm. long, 2 mm. wide, plainly or obscurely 5-ribbed, canescent-pubescent with appressed hairs on the outside, glabrous within, the rim very shortly 5-dentate, the teeth triangular, subacute, irregular or subequal; corolla-tube 12--16 mm. long, 1--1.5 mm. wide, subterete, scarcely inflated and very slightly incurved at the apex, retrorse-hispidulous on the inner surface, the limb spreading, the lobes obovate-truncate, slightly emarginate at the apex; stamens 4, tetradynamous; anthers often included, yellow, not appendaged; fruit not known.

The species was based by Spegazzini on two collections described by him as follows: "In pratis siccis sabulosis prope Lago Argentino, anno 1884 (T. F.) et in Golfo de Se San Jorge, Febr. 1896 (C. A)."

VERBENA AUSTRALIS Moldenke

Additional literature: Moldenke, Phytologia 8: 193--194. 1962.

Additional citations: BRAZIL: Paraná: Braga & Lange 328 (W--2369350).

xVERBENA BAILEYANA Moldenke

Additional synonymy: Verbena tetrandra L. apud Peterm., Cod. Bot. Linn. Ind. Alph. 196. 1840.

Additional literature: Lam., Tabl. Encycl. Méth. Bot. 1: 57. 1791; H. E. Richter, Cod. Bot. Linn. 35. 1835; Peterm., Cod. Bot. Linn. Ind. Alph. 196. 1840; Briq. in Engl. & Prantl, Nat. Pflanzenfam. 4 (3a): 148. 1894; Moldenke, Phytologia 8: 194--196.1962.

Petermann (1840) cites the synonym given above as "V. tetrandra Diss. de Pl. Hybr. 161. obs.", implying Linnean authorship.

Briquet (1894) was of the opinion that V. pinnatifida Lam. represents this hybrid, too. This may be true, but until Lamarck's type specimen can be examined, I am not ready to say so. His original description is "Verbena pinnatifida. V. spicis filiformibus, foliis inciso-pinnatifidis grosse serratis. Ex America septentrionali ♄."

VERBENA BALANSAE Briq.

Additional literature: Reitz, Sellowia 13 (13): 110. 1961; Moldenke, Phytologia 8: 197--199. 1962.

VERBENA BERTERII (Meisn.) Schau.

Additional literature: Acevedo de Vargas, Bol. Mus. Nac. Hist. Nat. Chile 25: 51--52. 1951; Moldenke, Phytologia 8: 202--205. 1962; Moldenke, Résumé Suppl. 3: 36. 1962.

Acevedo de Vargas, in the reference cited above, cites the following specimens not as yet seen by me: Aconcagua: Landbeck s.n. [XI.1862] (Sg--54737). Curicó: Landbeck s.n. [XI.1861] (Sg--42468, Sg--54758, Sg--68400). Maule: Reiche s.n. [XI."1990"] (Sg--68401), s.n. [X.1907] (Sg--60915). Ñuble: Collector undesignated s.n. (Sg--42466, Sg--68403); Puga s.n. [X.1878] (Sg--68402). O'Higgins: Bertero s.n. [X-XI.1828] (Sg--54755). Santiago: C. Gay 1084 (Sg--54734). Valparaíso: Quilpué s.n. [X.1891] (Sg--68399). Province undetermined: Volckmann s.n. [San Rafael, 1862--3] (Sg--54735).

VERBENA BERTERII f. ALBIFLORA Moldenke

Additional literature: Moldenke, Phytologia 8: 205. 1962; Moldenke, Résumé Suppl. 3: 13 & 14. 1962.

VERBENA BIPINNATIFIDA Nutt.

Additional literature: Ranson, Texas Wild Fl. Legends, ed. 2, 113. 1940; Moldenke, Phytologia 8: 207--216, fig. 3. 1962; Moldenke, Résumé Suppl. 3: 4, 6, 7, 29, & 36. 1962; Vaughan, Gard. Illustr. 86: 71. 1962; Park's Flower Book 1962: 36. 1962; A. Putz, N. Y. Herald Trib., sec. 4, p. 18, Feb. 4. 1962.

Park (1962) describes this species as "a showy 15-inch everblooming perennial in lavender-blue with lovely fern-like foliage", calls it the "fern verbena", and offers 100 seeds for 25 cents (his no. 2055).

The Britt 2281 distributed as this species is actually V. temuisecta Briq., Darrow s.n. [March 20, 1938] is the type collection of xV. perplexa Moldenke, and Lawrence & Surber s.n. [3-27-60] is V. gooddingii Briq.

A natural hybrid with V. gooddingii has been found in several places where the ranges of the two species overlap and is discussed herein under xV. perplexa.

Additional citations: MISSISSIPPI: Lee Co.: J. D. Ray 5858 (Hi--199596). Sharkey Co.: J. D. Ray 4923 (Hi--199709). ARKANSAS: Clark Co.: Demaree 44954a (Ca). Hempstead Co.: Demaree 44912 (Ca), 44963 (Ca). KANSAS: Ellis Co.: C. S. Sheldon 323 (Hi--59443). TEXAS: Bell Co.: LeClair s.n. [Aug. 6, 1937] (Hi--9120). Dallas Co.: C. L. Lundell 1275 (Hi--54131); Lundell & Lundell 11315 (Hi--59615).

VERBENA BIPINNATIFIDA var. LATILOBATA Perry

Additional & emended literature: Moldenke, Phytologia 2: 127 (1945) and 8: 242--244. 1962.

xVERBENA BLANCHARDI Moldenke

Additional literature: Moldenke, Résumé Suppl. 3: 4, 6, 36, &

38. 1962; Moldenke, Phytologia 8: 244--246. 1962.

VERBENA BONARIENSIS L.

Additional synonymy: Verbena foliis lanceolatis, spicis congestis fastigiatis L. apud A. van Royen, Fl. Leyd. Prod. 326. 1740. Verbena tetrandra, spicis fasciculat., fol. lanceolatis amplexicaulib. L. apud H. E. Richter, Cod. Bot. Linn. 35. 1835. Verbena fol. lanc., fl. congestis fastigiatis L. apud H. E. Richter, Cod. Bot. Linn. 35. 1835. Verbena bonariensis altiss., laveendulae canariensis fol., spica lavendulae Dill. apud H. E. Richter, Cod. Bot. Linn. 35, in syn. 1835. Verbena bonariensis altiss. etc. Dill. apud Peterm., Cod. Bot. Linn. Ind. Alph. 196, in syn. 1840.

Additional & emended literature: Sabbat in Martelli, Hort. Roman. 3: 10--11, pl. 54. 1775; H. E. Richter, Cod. Bot. Linn. 35. 1835; Peterm., Cod. Bot. Linn. Ind. Alph. 196. 1840; Briq. in Engl. & Prantl, Nat. Pflanzenfam. 4 (3a): 147. 1894; Baker & Stapf in Thiselt.-Dyer, Fl. Trop. Afr. 5: 286. 1900; Acevedo de Vargas, Bol. Mus. Nac. Hist. Nat. Chile 25: 52. 1951; A. Putz, N. Y. Herald Trib., sect. 4, p. 18, Feb. 4. 1962; Moldenke, Phytologia 8: 246--265, fig. 4. 1962.

Sabbat (1775) includes the names "Verbena americana, spica multiplici, foliis urticae angustissimis, floribus caeruleis [spelled thus on p. 11; spelled "coeruleis" on pl. 54]" and "Verbena altissima, americana" in the synonymy of this species, but these names more properly belong to what is now known as V. hastata L. Sabbat's color plate is very definitely V. bonariensis. Apparently this is a case of misidentification on his part.

The Kniphof reference given in the synonymy of V. bonariensis is sometimes cited as "Cent. 12, no. 99". He himself cites a "Dudw. D. G. P. 222", which has not as yet been located by me.

The A. E. Radford 22769 distributed as V. bonariensis is actually var. conglomerata, while Montes 9553 and Osorio 662 are V. montevidensis Spreng.

Recent collectors have found the species in fields, weedy areas along railroads, river bottoms, wastelands, the edge of woods, in low fallow fields and low woods, and among granite boulders.

Acevedo de Vargas (1951) cites the following specimens not as yet seen by me: CHILE: Colchagua: Bertero s.n. [Rancagua, II. 1828] (Sg--54690). Coquimbo: Landbeck s.n. [XII.1862] (Sg--54702). Curicó: Collector undesignated s.n. [Teno inferior, II.1896] (Sg-68326). Llanquihue: Collector undesignated s.n. [Osorno] (Sg--65717); R. A. Philippi s.n. [Osorno, II.1852] (Sg--54687). Maule: Reiche s.n. [X.1890] (Sg--68328). Ñuble: M. A. Solis s.n. [III. 1864] (Sg--54688). Santiago: Guzmán s.n. [XI.1943] (Sg--59935). Valdivia: Collector undesignated s.n. [San Juan, III.1862] (Sg--

42452); C. Gay 1113 (Sg—54689).

Additional citations: NORTH CAROLINA: Carteret Co.: P. J. Crutchfield 556 (Hi—104739). Gates Co.: Ahles & Duke 44608 (Hi—110661). Hertford Co.: Ahles & Duke 45941 (Hi—121528). Robeson Co.: Ahles & Haesloop 28827 (Hi—104735); Britt 2476 (Hi—180052). Washington Co.: A. E. Radford 35209 (Hi—104734); Wood & Clement 6950 (Hi—51275). SOUTH CAROLINA: Aiken Co.: A. E. Radford 514 (Hi—14535). Allendale Co.: Ahles & Bell 15880 (Hi—92930). Bamberg Co.: Ahles & Haesloop 30616 (Hi—104743). Berkeley Co.: Ahles & Haesloop 26487 (Hi—104741, Hi—104742). Calhoun Co.: Ahles & Haesloop 25657 (Hi—104740). Charleston Co.: Ahles & Haesloop 25706 (Hi—104738). Chester Co.: C. R. Bell 9615 (Hi—93399). Dillon Co.: Ahles & Haesloop 27786 (Hi—104737); Ahles & Leisner 32180 (Hi—104736). Edgefield Co.: A. E. Radford 22525 (Hi—93397). Fairfield Co.: C. R. Bell 9451 (Hi—92906). Florence Co.: C. R. Bell 7623 (Hi—92902). Georgetown Co.: A. E. Radford 24991 (Hi—92903). Lee Co.: A. E. Radford 27248 (Hi—92904). Marion Co.: C. R. Bell 7879 (Hi—92907). Marlboro Co.: A. E. Radford 12473 (Hi—92931). McCormick Co.: A. E. Radford 22293 (Hi—92908). Newberry Co.: C. R. Bell 9078 (Hi—92909); O. M. Freeman 56492 (Hi—92932). Williamsburg Co.: A. E. Radford 24714 (Hi—92910). LOUISIANA: Bossier Par.: Moore & Moore 6157 (Hi—131972). BRAZIL: Rio Grande do Sul: Sehnem 5598 (B). BOLIVIA: Cochabamba: A. Jimenez 83 (W—2369922). URUGUAY: H. H. Bartlett 20710 (W—2320144).

VERBENA BONARIENSIS f. ALBIFLORA Moldenke

Additional literature: Moldenke, Phytologia 8: 265. 1962.

Additional citations: BRAZIL: Paraná: Hatschbach 7371 (Z).

VERBENA BONARIENSIS var. CONGLOMERATA Briq.

Additional literature: Moldenke, Phytologia 8: 265—267. 1962.

Radford found this plant in waste places, flowering in May.

Additional citations: SOUTH CAROLINA: Abbeville Co.: A. E. Radford 22769 (Hi—92901).

VERBENA BRACTEATA Lag. & Rodr.

Additional synonymy: Verbena bractiosa Michx., in herb.

Additional & emended literature: Briq. in Engl. & Prantl, Nat. Pflanzenfam. 4 (3a): 148. 1894; P. C. Standl., Contrib. U. S. Nat. Herb. 13: 164 & 211. 1910; Perry, Rhodora 38: 271. 1936; Hill & Salisb., Ind. Kew. Suppl. 10: 242. 1947; H. V. Sm., Mich. Wildfls. 315, 317, & 465, pl. 155. 1961; Moldenke, Résumé Suppl. 3: 1, 2, 4—8, 36, & 41. 1962; Moldenke, Phytologia 8: 267—272. 1962.

Additional illustrations: H. V. Sm., Mich. Wildfls. pl. 155. 1961.

The type of V. confinis Greene was collected at an altitude of 2695 meters.

Moldenke, Harold N. 1962. "Materials toward a monograph of the genus Verbena. VI." *Phytologia* 8, 371–384. https://doi.org/10.5962/bhl.part.27503.

View This Item Online: https://www.biodiversitylibrary.org/item/50818
DOI: https://doi.org/10.5962/bhl.part.27503
Permalink: https://www.biodiversitylibrary.org/partpdf/27503

Holding Institution
Missouri Botanical Garden, Peter H. Raven Library

Sponsored by
Missouri Botanical Garden

Copyright & Reuse
Copyright Status: In copyright. Digitized with the permission of the rights holder.
Rights Holder: Phytologia
License: http://creativecommons.org/licenses/by-nc-sa/3.0/
Rights: https://biodiversitylibrary.org/permissions

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.

This file was generated 21 April 2024 at 06:17 UTC