

ADDITIONAL NOTES ON THE GENUS CORNUTIA. II

Harold N. Moldenke

CORNUTIA Plum.

Additional & emended bibliography: Westm. in L., Orat. Tellur. Habit. Incr. 59. 1744; A. L. Juss., Gen. Pl., ed. 1, 107--108 (1789) and ed. 2, 120--121. 1791; Guill., Enum. Pl. Déc. Voy. Iles Société 210. 1837; Benth., Bot. Voy. Sulphur 154. 1846; Bocq., Adansonia 2: 88, 111, 113, 114, 118, 119, 121, 123, 125, 126, 131, 133, 137--139, & 147 (1862) and 3: 178, 180, 181, 184, & 233--234, pl. 12. 1863; Bocq., Rev. Verbenac. 88, 111, 113, 114, 118, 119, 121, 123, 125, 126, 131, 133, 137--139, 147, 178, 180, 181, 184, & 233--234, pl. 12. 1863; Turcz., Bull. Soc. Imp. Nat. Mosc. 36 (2): 220 & 222--223. 1863; Griseb., Cat. Pl. Cub. 216. 1866; A. Stewart, Proc. Calif. Acad. Sci., ser. 4, 1: 395. 1912; Loes., Verh. Bot. Ver. Brand. 53: 81 [Abhandl. 246]. 1912; P. C. Standl., Contrib. U. S. Nat. Herb. 23: 1235, 1251, & 1252. 1924; K. V. O. Dahlgren, Svensk. Bot. Tidsk. 32: 231. 1938; A. W. Hill, Ind. Kew. Suppl. 9: 5. 1938; Robledo, Lecc. Bot. 2: 499. 1940; C. L. Lundell, Contrib. Univ. Mich. Herb. 8: 61 & 90. 1942; Moldenke, Phytologia 5: 95 (1954), 5: 153, 297, & 317 (1955), and 5: 393 & 409. 1956; Angely, Cat. Estat. Gen. Bot. Fan. 17: 3. 1956; Angely, Fl. Paran. 7: 4. 1957; Moldenke, Phytologia 5: 476, 478, & 509 (1957), 6: 98 (1957), 6: 199, 232, & 242 (1958), and 6: 509. 1959; Anon., Kew Bull. Gen. Index 1929-1956, 84. 1959; Angely, Liv. Gen. Bot. Bras. 35 & 42. 1960; Runner, Rep. G. W. Groff Coll. 362. 1961; Moldenke, Phytologia 7: 376--399. 1961; Moldenke, Biol. Abstr. 36: 3141. 1961; Soukup, Biota 4: 180. 1962; Angely, Fl. Bacia Paran. 22: 39. 1962; Menninger, Flow. Trees World 283, 313, 316, & 326, pl. 414. 1962; Shelford, Ecol. N. Am. 442 & 559. 1963; Hocking, Excerpt. Bot. A6: 533. 1963; Langman, Select. Guide Lit. Flow. Pl. Mex. 515, 516, & 1010. 1964; Soukup, Biota 5: 123 & 130. 1964; Neal, In Gard. Hawaii, ed. 2, 721. 1965; Moldenke, Phytologia 12: 6 (1965) and 13: 324 & 334. 1966; Anon., Gen. Costa Ric. Phan. 10. 1966; Fournier, Imp. Tree Fam. Costa Ric. 13. 1966.

Westmann (1744) places this genus in his group "Plantae bacca-tae". Dahlgren (1938) places it in the Labiatae. The generic names Midi Herm., Sambucus Burm., and Cornutioides L., listed by Angely (1956) as synonyms of Cornutia, actually belong in the synonymy of Premna. Soukup (1964) records the vernacular names "toe" and "ulape" from Peru -- the former being applied also to Datura.

Some notes by Turczaninow (1863) are of interest: "Cornutia e prov. Carabobo Venezuelae, Linden No. 1457, eadem videtur cum specimine ejusdem collectionis sub No 1398 et cum mexicana Galeotti No 757. Omnes ad C. grandifoliam Schauer pertinent. Variat

haec planta panicula descriptione lineari-lanceolata et late ovata pyramidata. Habitu proxima sed staminibus omnibus fertilibus servatur in collectione mexicana Jurgensenii sub No 533. Generis propinqui sed verosimiliter distincti sunt specimina collectionis Sellowianae, No 510, filamentis duobus anantheris, foliis glabris, inflorescentia racemosa pauciflora, floribus multo majoribus coriaceis et praesertim calycis lobo inferiore cucullato-gibboso divergentia. Ovarium in paucis floribus, partim corruptis, videtur quadrilobus fere Acerae. An hujus generis species brasiliensis?" The Linden 1398 to which he refers is C. odorata var. colombiana Moldenke and 1457 is C. microcalycina Pavon & Moldenke, while Galeotti 757 is C. grandifolia var. purpusi Moldenke. Jurgensen 533 and Sellow 510 have not as yet been seen by me.

CORNUTIA COERULEA (Jacq.) Moldenke

Additional bibliography: Moldenke, Phytologia 7: 381--382. 1961.

One of the original cotypes of this species from the Jacquin herbarium, preserved in the Vienna herbarium, was photographed there by Macbride as his type photograph number 34306.

Additional & emended citations: CULTIVATED: Austria: Herb. Jacquin f. s.n. [Macbride photos 34306] (W--photo of cotype). Germany: Herb. Bernhardi s.n. (E--118976).

CORNUTIA GRANDIFOLIA (Schlecht. & Cham.) Schau.

Additional synonymy: Cornutia grandifolia Schau. ex Turcz., Bull. Soc. Imp. Nat. Mosc. 36 (2): 222, in nota. 1863. Cornutia grandifolia (Cham. & Schlecht.) Schau. apud A. Stewart, Proc. Calif. Acad. Sci., ser. 4, 1: 395. 1912.

Additional bibliography: Benth., Bot. Voy. Sulphur 154. 1846; Loes., Verh. Bot. Ver. Brand. 53: 81 [Abhandl. 246]. 1912; A. Stewart, Proc. Calif. Acad. Sci., ser. 4, 1: 395. 1912; P. C. Standl., Contrib. U. S. Nat. Herb. 23: 1251. 1924; E. J. Salisb., Ind. Kew. Suppl. 10: 61. 1947; Moldenke, Phytologia 7: 382--387. 1961; Menninger, Flow. Trees World 283, pl. 414. 1962; Shelford, Ecol. N. Am. 442 & 559. 1963; Neal, In Gard. Hawaii, ed. 2, 721. 1965.

Additional illustrations: Menninger, Flow. Trees World pl. 414 [in color]. 1962.

Recent collectors describe this plant as a shrub, 15--20 feet tall, or a tree, 18--25 feet tall, the foliage and flowers fragrant, and the leaves with a brownish aspect, growing along trails, on hillsides and steep wooded slopes or slopes with Pinus and Liquidambar, at altitudes of 60 to 5500 feet, flowering also in March and September. A wood sample accompanies Stork 4526. The flowers are described as "blue" on Breedlove 10094 & 10366 and on Gilly & Hernandez Xolocotzi 172, "purple" on Stork 4526, "dark-purple" on Stork 3009, and "bright reddish-violet" on Rodríguez C.427

Stewart (1912) describes the plant as "bushes about 8 feet tall on the sides of cliffs and on the banks of streams near Wafer Bay (No. 318). Further distrib. S. Mex.", but his specimen is the type collection of C. microcalycina var. anomala Moldenke. Menninger (1962) affirms that C. grandifolia can withstand temperatures as low as 25°F. — "although rather tender and sometimes killed to the ground by frost, Cornutia recovers quickly and comes back from the roots." Shelford (1963) records the vernacular name "cuatro caras".

Turczaninow (1863) cites Linden 1398 & 1457 from Venezuela and Galeotti 757 and Jurgensen 533 from Mexico. The first of these, however, is C. odorata var. colombiana Moldenke, the second is C. microcalycina Pavon & Moldenke, the third is C. grandifolia var. purpusi Moldenke, and the fourth has not as yet been seen by me. The Liebmann 11306, Lévy 1177, C. Hoffmann 117 & 517, H. Pittier 237 bis, Stork 508, and Tonduz s.n. [Tucurrique, Las Vueltas], all cited by me in my 1936 work as from "Province undetermined", have now been localized and are re-cited below.

Material of this taxon has been misidentified and distributed in herbaria as C. grandifolia var. quadrangularis Ørst. & Moldenke. On the other hand, the Paray 560, distributed as C. grandifolia, is actually C. lilacina var. velutina Moldenke.

Additional & emended citations: MEXICO: Chiapas: Breedlove 6469 (Z), 10094 (Rf), 10366 (Ac); Gilly & Hernandez Xolocotzi 172 (Mi); Paray 561 (Ip). Oaxaca: Liebmann 11306 (W-1315087); Martínez & Calderón 15 (Ca-938170). Vera Cruz: Plunkett 131 (F-671130); Schiede 81 (E-118978--cotype). GUATEMALA: Alta Verapaz: H. V. Johnson 895 (W-1084015); Türckheim 248 (W-1323340), 7935 (W-398410, W-1323335), II.400 (W-860706). El Petén: Contreras 2437 (Ld, S); C. L. Lundell 16450 (Ld). Izabal: P. C. Standley 24863 (W-1150474). BRITISH HONDURAS: C. S. Brown 13 (F-585394, Y-13032); Gentle 7968 (Ld, S), 9150 (Ld); Schipp 265 (Ca-396492, E-988623, F-713239, W-1494694). HONDURAS: Atlántida: A. M. Chickering 23 (F-689825); E. R. Mitchell 117 (F-580545, W-1430244); Salvoza 809 (F-710562); P. C. Standley 53342 (F-582699, W-1407667). Colon: Johansen 2 (F-572610). Cortés: Record & Kuylen H.6 (W-1315362, Y-9952). Province undetermined: Carleton 489 [Comagalpa] (E-921010, W-1208472). EL SALVADOR: San Salvador: Calderón 474 (W-1151455); P. C. Standley 22990 (W-1138699). NICARAGUA: Managua: Maxon, Harvey, & Valentine 7404 (W-1181115). Rivas: Lévy 1177 (Cb). Zelaya: Englesing 293 (F-585038, Y-13275). COSTA RICA: Cartago: R. L. Rodríguez C. 427 (Ca-95600, Mi); Stork 508 (W-1167057), 4526 (Mi); Tonduz s.n. [Tucurrique, Las Vueltas] (W-1323330). Puntarenas: Pittier & Tonduz 9714 (W-1323327); Tonduz s.n. [Herb. Inst. Physico-geogr.

Nat. Costaric. 9714] (W-1323326). San José: J. A. Echeverria 364 (Ca-776219); C. Hoffmann 117 (Cp), 517 (B, B, B, B); H. Pittier 237 bis (W-1323329); Stork 3009 (Mi). Province undetermined: Kuntze 2201 (F-297678, F-297691). PANAMA: Panamá: P. C. Standley 26662 (W-1217135).

CORNUTIA GRANDIFOLIA var. INTERMEDIA Moldenke

Additional bibliography: Moldenke, Phytologia 7: 384-385. 1961.

The flowers are described as "blue" on Breedlove 11399. This collector found the plant growing on wooded slopes, flowering in August. Smith describes the buds as dark-violet in color.

Additional & emended citations: GUATEMALA: Alta Verapaz: Türckheim 935 (W-1323338). Escuintla: Seler & Seler 2560 (W-1205547). Guatemala: Garcia S. 1472 (F-663850). Izabal: H. Pittier 8538 (W-1013483); P. C. Standley 24398 (W-1150040). Quezaltenango: Holway 822 (W-863011, W-863012). Sacatepéquez: Breedlove 11399 (Z); Tejada 243 (W-862378). Santa Rosa: Heyde & Lux 2957 (E-118977, W-57683, W-480107, W-1323333); Lehmann 1638 (W-1323331). Sololá: Shannon 135 (W-57684, W-1323332). Department undetermined: Heyde 79 [337] (W-248336). HONDURAS: Santa Bárbara: Thieme 5411 (F-574645--isotype, W-246644--isotype, W-1323339--type). NICARAGUA: Managua: Maxon, Harvey, & Valentine 7531 (W-1181246). COSTA RICA: Alajuela: A. F. Smith 13 [Stork 4113] (Ld), 14 [Stork 4113] (Mi). Guanacaste: A. R. Moldenke 1323 (Rf). PANAMA: Bocas del Toro: G. P. Cooper 529 (F-579205, Y-12149). Coclé: R. S. Williams 963 (W-678336). Panamá: P. C. Standley 25853 (W-1216677).

CORNUTIA GRANDIFOLIA var. NORMALIS (Kuntze) Moldenke

Additional bibliography: Moldenke, Phytologia 7: 385-386. 1961.

The flowers are described as "bluish-violet" on C. O. Erlanson 311 and "blue-purple" on Bartlett & Lasser 16528.

Additional & emended citations: COSTA RICA: Cartago: Tonduz s. n. [Herb. Inst. Physico-geogr. Nat. Costaric. 11507] (W-333918, W-365936, W-577453, W-1323336, W-1323337). Puntarenas: Maxon 584 (W-1323334); A. R. Moldenke 1322 (Rf); H. Pittier s. n. [Herb. Inst. Physico-geogr. Nat. Costaric. 11979] (W-1323325); Tonduz 4512 (W-1323328). PANAMA: Bocas del Toro: Dunlap 575 (F-689803, W-1405497). Canal Zone: Bailey & Bailey 551 (F-703162); Bartlett & Lasser 16528 (Mi); Gervais 122 (W-716503); Kuntze 1932 (E-118973--isotype); Maxon & Harvey 6610 (W-1180353); H. Pittier 3702 (W-678770), 6711 (W-716765); P. C. Standley 25471 (W-1216484). Chiriquí: Cooper & Slater 225 (F-573158, W-1318433, Y-10578). Panamá: Bartlett & Lasser 16329 (Mi); Maxon & Harvey 6661 (W-

1180402); H. Pittier 4617 (W--679772); Riley 120 (W--1319063).  
PEARL ISLANDS: San José: C. O. Erlanson 311 (Mi). CULTIVATED:  
Hawaiian Islands: Hutchison 2744 [Wahiawa Bot. Gard. 5662] (Ac,  
W--2470767).

CORNUTIA GRANDIFOLIA var. PURPUSI Moldenke

Additional synonymy: Hosta longifolia Humb. & Kunth ex Benth.,  
Bot. Voy. Sulphur 154. 1846.

Additional bibliography: Benth., Bot. Voy. Sulphur 154. 1846;  
P. C. Standl., Contrib. U. S. Nat. Herb. 23: 1252. 1924; Moldenke,  
Phytologia 7: 386--387. 1961.

The flowers are described as "purple" on Breedlove 6287 and as  
"blue" on J. V. Santos 3054. Recent collectors refer to the plant  
as a shrub, 4 m. tall, growing at altitudes of 2200--3600 meters,  
flowering in June and July. The Tessmann 4046, distributed as  
this variety, is actually Sanango durum Bunting & Duke, in the  
Loganiaceae.

Additional & emended citations: MEXICO: Chiapas: Breedlove  
6287 (Z); E. W. Nelson 3011 (W--233319, W--233320). Vera Cruz:  
Botteri 864 (W--57685), 1091 (E--118988, F--689828, W--57686, W--  
242022, W--242023); Mohr 323 (W--771906); E. W. Nelson 481 (W--  
569125); Purpus 2647 (Ca--101607--type, E--118975--isotype, F--  
343993--isotype, W--841773--isotype), 4445 (Ca--143290), s.n.  
[Veracruz, 1922] (Ca--402975); J. V. Santos 3054 (Mi).

CORNUTIA GRANDIFOLIA var. QUADRANGULARIS Ørst. & Moldenke

Additional bibliography: Moldenke, Phytologia 7: 387. 1961.

The Rodríguez C. 427, distributed as this variety, is actually  
typical C. grandifolia (Schlecht. & Cham.) Schau.

Emended citations: COSTA RICA: Cartago: Ørsted 11200 (W--  
1315040--type).

CORNUTIA GRANDIFOLIA var. STORKII Moldenke

Additional bibliography: Moldenke, Phytologia 7: 387--388.  
1961.

Emended citations: COSTA RICA: San José: P. C. Standley 34134  
(W--1226560); Stork 1743 (F--598926--type), 3009 (F--598926).

CORNUTIA JAMAICENSIS Moldenke

Additional bibliography: Moldenke, Phytologia 7: 388. 1961.

The Proctor 19689, distributed as this species and so cited by  
me in 1961, proves to represent C. thyrsoides Banks & Moldenke  
instead. Dr. Stearn agrees with this re-identification.

Emended citations: JAMAICA: W. Harris 9252 (F--212271--isotype,  
W--524685--isotype).

CORNUTIA LATIFOLIA (H.B.K.) Moldenke

Additional & emended bibliography: C. L. Lundell, Contrib.

Univ. Mich. Herb. 8: 61. 1942; Moldenke, Phytologia 7: 388--389. 1961.

Recent collectors describe this plant as a shrub or small tree, to 6 m. tall, the stem 12 cm. in diameter, the flowers with a fetid odor, fruiting in September, found in secondary growth, in arid scrub forests, and along roadsides in limestone hills. The flowers are described as "lavender-blue" on Gilly & Hernandez Xolocotzi 109, "grayish-blue" on Gilly & Hernandez Xolocotzi 263, "purplish" on Matuda 3398, and "pale purple-blue" on R. M. King 992. The last-mentioned collector notes that it is a "common tree growing in sandy loam in open sun" in Vera Cruz. A vernacular name reported for it is "expangege".

Additional & emended citations: MEXICO: Campeche: Sauer & Gade 3184 (Ws); Steere 1741 (F--668594). Chiapas: Matuda 3807 (Mi). Tabasco: Gilly & Hernandez Xolocotzi 109 (Mi), 263 (Mi); Matuda 3398 (Mi, Rf). Vera Cruz: R. M. King 992 (Mi); Orcutt 6330 (W--1266592). Yucatán: Degener & Degener 26794 (N, W, Z); G. F. Gaudmer 822 (E--118983, F--36625, W--268379); Lundell & Lundell 7888 (Rf); Steere 1458 (E--1087185). GUATEMALA: El Petén: Aguilar Hidalgo 54 (E--1067851, F--713088). BRITISH HONDURAS: Gentle 16 (F--696392), 186 (F--662519, W--1585899), s.n. [Lundell 4746] (F--683520); W. C. Meyer 38 (F--713307); Winzerling III.2 (W--1266652).

#### CORNUTIA LATIFOLIA f. ALBA Moldenke

Additional bibliography: Moldenke, Phytologia 7: 389. 1961; Langman, Select. Guide Lit. Flow. Pl. Mex. 516. 1964.

#### CORNUTIA LILACINA Moldenke

Additional synonymy: Cornutia liliacea Moldenke, Résumé Suppl. 6: 9, in syn. 1963.

Additional bibliography: Moldenke, Phytologia 5: 95 (1954) and 7: 389--390. 1961; Moldenke, Résumé Suppl. 6: 9. 1963.

Recent collectors describe this plant as a shrub, 4 m. tall, or a liana to 10 m. long, growing in forests and on creek banks, blooming also in July. The flowers are described as "purple" on Williams & Molina R. 10100, "blue" on Williams & Molina R. 10274, and "violet" on Molina R. 83.

The Molina R. 12981, distributed as C. lilacina, is actually var. velutina Moldenke.

Additional & emended citations: GUATEMALA: Zacapa: C. C. Deam 6383 (E--118974--type, W--579655--isotype). HONDURAS: El Paraíso: Williams & Molina R. 10274 (Ca--729307, Mi, Rf). Morazán: Molina R. 83 (Ca--792704, Rf); Williams & Molina R. 10100, in part (Ca--729291, Mi). Yoro: J. B. Edwards P.648 (Ca--522683, F--688146, W--1588609). EL SALVADOR: La Libertad: Calderón 823 (W--1151780).

#### CORNUTIA LILACINA var. VELUTINA Moldenke

Additional bibliography: Moldenke, Phytologia 5: 95 (1954), 7:

390 (1961), and 14: 422. 1967.

Recent collectors describe this plant as a shrub, 2 m. tall, fruiting in September. Molina R. reports it "frequent in wet matorrales", while P. H. Allen calls it "infrequent" and Allen & Severen refer to it as "occasional" in the badlands of El Salvador. The flowers are described as "blue" on Allen & Severen 6923 and as "deep-violet" on P. H. Allen 7073.

Through a typographic error, the type collection of this variety is cited in *Phytologia* 7: 390 (1961) as "0.385". Material has been misidentified and distributed in herbaria as C. grandifolia (Schlecht. & Cham.) Schau. and as typical C. lilacina Moldenke.

Additional & emended citations: HONDURAS: Comayagua: J. B. Edwards P.385 (Ca--522721--isotype, F--713810--isotype, W--1588747--isotype). Lempira: Molina R. 12981 (W--2445627). Morazán: Williams & Molina R. 10100, in part (Rf). Santa Rosa: Paray 560 (Ip). EL SALVADOR: Sonsonate: P. H. Allen 7073 (Rf); Allen & Severen 6923 (Rf).

#### CORNUTIA MICROCALYCINA Pavon & Moldenke

Additional & emended bibliography: E. J. Salisb., Ind. Kew. Suppl. 10: 61 & 114. 1947; Moldenke, Mem. N. Y. Bot. Gard. 9: 176. 1955; Moldenke, *Phytologia* 7: 390--391 (1961) and 14: 421 & 422. 1967.

The flowers on I. L. Wiggins 10924 are described as "purple", and the plant is said to grow "over 6 m. tall", fruiting in October. The Gilmartin 597, distributed under this name, is actually var. pulverulenta Moldenke.

Additional & emended citations: COLOMBIA: Cauca: B. T. Lehmann 5094 (F--578229). ECUADOR: Chimborazo: Rimbach 100 (F--666797, Y--22810). El Oro: I. L. Wiggins 10924 (Du--312192). Guayas: Gilmartin 711 (W--2428446). PERU: Junín: Killip & Smith 26133 (W--1460129).

#### CORNUTIA MICROCALYCINA var. ANOMALA Moldenke

Additional bibliography: A. Stewart, Proc. Calif. Acad. Sci., ser. 4, 1: 395. 1912; Moldenke, *Phytologia* 7: 391 (1961) and 14: 422. 1967.

Stewart (1912) cites this taxon as "C. grandifolia (Cham. & Schlecht.) Schau."

Emended citations: PANAMA: Panamá: Goldman 1896 (W--716154).

#### CORNUTIA MICROCALYCINA var. PULVERULENTA Moldenke

Additional bibliography: Moldenke, *Phytologia* 7: 391--392. 1961.

Recent collectors describe this plant as an aromatic bush, half-shrub, or shrub, 2--5 m. tall, growing in virgin forests and seasonal rainforests, flowering in March, July, and August, and fruiting in August. The corolla is described as "violet-blue" on

Harling 4566, "violet" on Jativa & Epling 470, and "royal blue with white hairs" on Cazalet & Pennington 5259. Material has been misidentified and distributed in herbaria as C. microcalycina Pavon & Moldenke and as a member of the Labiatae.

Additional & emended citations: PANAMA: Canal Zone: Johansen 41 (W--1167493); H. Pittier 5690 (W--715977). COLOMBIA: Antioquia: Metcalf & Cuatrecasas 30194 (W--1833442). Boyacá: Lawrance 764 (E--1068398, F--681054, W--2324130). Cauca: F. C. Lehmann 9018 (F--559916--isotype). ECUADOR: Esmeraldas: Gilmartin 597 (W--2428431); Harling 4566 (S), 4677 (S); Jativa & Epling 442 (La), 470 (La--53177), 749 (La--53580). Guayas: A. S. Hitchcock 20492 (W--1195416). Los Ríos: Asplund 5504 (Gg--354514, W--1930541). Pichincha: Cazalet & Pennington 5259 (N, W--2405728).

CORNUTIA OBOVATA Urb.

Additional bibliography: Moldenke, Phytologia 5: 317 (1955) and 7: 392--393. 1961.

Emended citations: PUERTO RICO: Sintenis 2022 (E--118982--isotype, F--79572--isotype, W--403508--isotype).

CORNUTIA ODORATA (Poepp. & Endl.) Poepp.

Additional bibliography: Moldenke, Phytologia 5: 152 (1955) and 7: 393. 1961; Soukup, Biota 4: 180. 1962; Moldenke, Phytologia 13: 324 (1966) and 14: 421 & 422. 1967.

Soukup (1962) reports the additional vernacular names "huitoto", "toe", and "ulpe" for this species.

The type specimen, Poeppig 2448, in the Delessert Herbarium at the Conservatoire et Jardin Botaniques in Geneva, was photographed there by Macbride as his type photograph number 7885. The Asplund 5504 and Cazalet & Pennington 5259, distributed as this species, are actually C. microcalycina var. pulverulenta Moldenke. The United States National Herbarium sheet of Asplund 8935 is actually Aegiphila elegans Moldenke.

Additional & emended citations: PERU: Loreto: Klug 394 (W--1455396), 662 (F--630012, W--1455661), 2159 (E--1040446, F--668862, W--1456802); Poeppig 2448 [Macbride photos 7885] (F--645726--photo of type, W--photo of type); Ll. Williams 8223 (F--623347). San Martín: Klug 4004 (W--1458427).

CORNUTIA ODORATA var. CALVESCENS Moldenke

Additional bibliography: Moldenke, Phytologia 7: 394. 1961.

Steyermark describes this plant as a tree, 3 m. tall, the leaf-blades firmly membranous, dull-green above, pale-green beneath with raised venation, the fruiting-rachis tetragonal, and the fruit dull blue-lavender.

Additional citations: COLOMBIA: Caldas: Sneidern 5232 (M1), 5432 (W--2056616). VENEZUELA: Miranda: J. A. Steyermark 90054 (Z).



## CORNUTIA ODORATA var. COLOMBIANA Moldenke

Additional bibliography: Moldenke, *Phytologia* 7: 394—395 (1961) and 14: 421 & 422. 1967.

The type specimen of this taxon, Triana 2068, in the herbarium of the Naturhistorisches Museum in Vienna, was photographed there by Macbride as his type photograph number 34305. The plant has been collected in anthesis also in December.

Additional & emended citations: COLOMBIA: Bolívar: Curran 160 (W—537311). Cundinamarca: Mutis 873 (F—712616, W—1562702); Triana 2068 [Macbride photos 34305] (W—photo of type). Tolima: Juzepczuk 6867 (W—1144496); F. C. Lehmann B.T.1108 (F—559867); F. W. Pennell 3371 (W—1042802).

## CORNUTIA PUBESCENS Gaertn. f.

Additional & emended bibliography: Bocq., *Adansonia* 2: 126 (1862) and 3: 137 & 234, pl. 12. 1863; Bocq., *Rev. Verbenac.* 126, 137, & 234, pl. 12. 1863; Moldenke, *Phytologia* 7: 395. 1961.

## CORNUTIA PYRAMIDATA L.

Additional bibliography: Bocq., *Adansonia* 3: [Rev. Verbenac.] 234. 1863; Griseb., *Cat. Pl. Cub.* 216. 1866; P. C. Standl., *Contrib. U. S. Nat. Herb.* 23: 1251. 1924; A. W. Hill, *Ind. Kew. Suppl.* 9: 5. 1938; K. V. O. Dahlgren, *Svensk. Bot. Tidsk.* 32: 231. 1938; Jiménez, *List Nom. Vernac.* 8. 1961; Moldenke, *Phytologia* 7: 395—398. 1961.

Recent collectors describe this plant as a shrub or tree, 2—10 m. tall, the trunk 20 cm. in diameter, the leaves aromatic, and the fruit black when mature, growing in dry woodlands, low windswept woods on headlands, *Copernicia* savannas on gray soil, and the edges of thickets in alluvial soil, at 420 meters altitude. The flowers are described as "blue" on J. S. Beard 502, "lavender" on Webster, Ellis, & Miller 9079, and "bluish-purple" on G. L. Webster 3877.

Dahlgren (1938) places this taxon in the *Labiatae*. Jiménez (1961) records the vernacular name "palo vidrio" for it. The Gilly & Hernandez Xolocotzi 109, distributed under this name, is actually *C. latifolia* (H.B.K.) Moldenke, while Lawrance 764 is *C. microcalycina* var. *pulverulenta* Moldenke.

Additional & emended citations: CUBA: Oriente: Pollard, Palmer, & Palmer 193 (W—403120); Shafer 3490 (F—286225, W—697474), 3988 (F—286328, W—697615), 8303 (W—696505); G. L. Webster 3877 (Mi); C. Wright 3178 (E—118984). HISPANIOLA: Dominican Republic: Abbott 1452 (W—1078623), 2558 (W—1145721), 2756 (W—1147222), 2892 (W—1147334); Eggers 1538 (W—1323341); Faris 85 (W—1049404); Fuertes 102 (E—706687, F—385116, W—658193); Raunkiaer 1119 (W—1110135); Sauer 2046 (Ws); Wright, Parry, & Brummel 222 (W—57687), 357 (F—575086). PUERTO RICO: Eggers 426 (W—1159324), 626 (W—1323345). WINDWARD ISLANDS: Grenada: Eggers 6296 (W—

1323344). Martinique: A. Duss 1965 (W--849741); R. F. Finch 28 (Mi); Hahn 899 (Ca--332487, W--57688), s.n. [1870] (F--367191); Kohaut s.n. [Sieber Fl. Mart. 158] (E--118980); Stehlé & Stehlé 4474 (W--2453688), 5937 (W--2453685), 6141 (W--2453641), 5875 (W--2453687). St. Lucia: J. S. Beard 502 (Ca--797552). LEEWARD ISLANDS: Dominica: Stehlé & Stehlé 6413 (W--2453686). Guadeloupe: A. Duss 2384 (W--849815); H. Stehlé 2759 (W--2453706); Webster, Ellis, & Miller 9079 (Mi). CULTIVATED: Trinidad: W. E. Broadway s.n. [Trin. Bot. Gard. Herb. 1376] (W--1323342); Trin. Bot. Gard. Herb. 1949 (W--1323343); Warming 185 (W--1234846).

CORNUTIA PYRAMIDATA var. ISTHMICA Moldenke

Additional bibliography: Moldenke, Phytologia 7: 398--399. 1961.

Emended citations: MEXICO: Campeche: C. L. Lundell 852 (Ca--486942--isotype, E--1017100--isotype, F--700445--isotype, W--1494712--isotype). Vera Cruz: C. D. Mell s.n. [Minatitlan] (W--1406477). GUATEMALA: El Petén: Cook & Martin 128 (W--1084608); C. L. Lundell 3450 (F--685306). BRITISH HONDURAS: C. L. Lundell 41 (F--598950, W--149099), 104 (F--598051), 433 (E--980201, F--712045, W--1472698); Winzerling III.20 [tree no. 20] (F--573771).

CORNUTIA THYRSOIDEA Banks & Moldenke

Additional synonymy: Cornutia thyrsoides Moldenke, in herb.

Additional bibliography: Moldenke, Phytologia 7: 399 (1961) and 14: 424. 1967.

Proctor describes this plant as a small bushy tree, 5 m. tall, with violet flowers in May, growing along roadsides at an altitude of 2300--2500 feet. It was previously misidentified and distributed in herbaria as C. jamaicensis Moldenke.

Additional & emended citations: JAMAICA: N. L. Britton 3766 (W--656325); W. Harris 5731 (F--145496), 6349 (F--145395), 11066 (W--699858); Proctor 19689 (N, W--2286942).

-----  
 ADDITIONAL NOTES ON THE GENUS CITHAREXYLUM. IV

Harold N. Moldenke

CITHAREXYLUM B. Juss.

Additional synonymy: Citharexyllum Bocq., Rev. Verbenac. 128, sphalm. 1863.

Additional & emended bibliography: Bocq., Adansonia 2: 85, 88, 89, 96, 105, 109, 117, 118, 123, 126--128, 130, 131, 135, 136, 141, 142, 145--147, 152, 154, 157, & 160 (1862) and 3: 180, 182--185, 194, 197, & 222--224, pl. 13. 1863; Bocq., Rev. Verbenac. 85,