

AN ANNOTATED CHECKLIST OF GESNERIACEAE TYPE SPECIMENS IN THE MARIE SELBY BOTANICAL GARDENS HERBARIUM (SEL)

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ABSTRACT. An annotated list of the type specimens of Gesneriaceae in the Marie Selby Botanical Gardens Herbarium (SEL), including the former holdings of the Gesneriad Research Foundation Herbarium (GES), is presented. The annotated list includes information on locations of the duplicates of the type specimens in other herbaria. We here publish two new combinations, *Columnnea robusta* (Wiehler) L.E. Skog and *C. tutunendana* (Wiehler) L.E. Skog; two new names, *Columnnea citriflora* L.E. Skog and *Columnnea filamentosa* L.E. Skog; seven newly designated neotypes; eight newly designated lectotypes; two lectotype corrections; and one name correction.

Key words: Gesneriaceae, taxonomy, neotropics, type

INTRODUCTION

In the spring of 2002, Hans Wiehler, founder of the Gesneriad Research Foundation in Sarasota, Florida, offered the Foundation's Herbarium (GES) to the Marie Selby Botanical Gardens Herbarium (SEL). He was moving due to declining health and made the offer because of his former association with Selby Gardens as a staff member in the 1970s and early 1980s. In April 2002, the complete GES collection was transferred to SEL.

The Gesneriad Research Foundation Herbarium (GES) contained the collections made primarily by Dr. Wiehler and his associates between 1970 and 1999. The collections contained nearly 2000 field collections, collections from cultivated plants, specimens preserved in liquid, and more importantly, more than 30 type collections for names of Gesneriaceae species published by Wiehler from 1972 to 1995. When received at Selby Gardens, the GES collection was in need of curation. Most of the dried specimens were not mounted and damage had accrued over time, resulting from less than optimal storage conditions. In an ongoing effort to curate and stabilize the GES collection and consolidate it with SEL, we have given priority to the curation and distribution of the type specimens.

Among the GES specimens were many type

collections intended for distribution to other herbaria. Wiehler based his new species both on collections from the wild and/or from greenhouse progeny of material gathered from the wild. It has been a challenge to determine, in many cases, which were the true type specimens and where they are located. During and after Wiehler's tenure at Selby Gardens, some type specimens were distributed with either or both field number and greenhouse accession number, adding to the complexity of determining the status of a particular specimen.

After Wiehler left to establish the Gesneriad Research Foundation in the 1980s, Selby Gardens distributed a number of his remaining gesneriad specimens. Apparently, in some cases, the number of specimens were insufficient to supply all of the herbaria designated in the species protologues. In a few cases, no type material was found for some species. As director of the Gesneriad Research Foundation, Wiehler continued to publish, but there is little evidence that he or his associates distributed any type specimens. Many of the designated types, if extant, remained in the GES collection. The goal of the Selby Gardens Herbarium is to distribute equably the remaining type specimens, following the distribution planned by Wiehler. Where possible, a type specimen from a wild collection is being designated for a herbarium in the country of origin, and often this specimen will be the holotype. This article thus describes the current distribution status of all Gesneriaceae types in the SEL herbarium, which now also includes the types formerly at GES.

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For each species listed below, the following sequence of data is used: basionym genus and species (in bold), author(s) of the species name, original place of publication, type locality if collected from the wild (or source of cultivated material), date collected, collector of type specimen, and collection number of type specimen. The distribution of types as listed in the original publication is then given followed by origin of cultivated material (if cultivated material was used for the type descriptions and specimens). The actual known distribution of types based on our findings then follows.

For those species where we have designated new types (i.e., neotypes or lectotypes), the above information is given as in the original publication, followed by the neotypification or lectotypification as needed. The currently accepted name for each species, if different from that published for the type, is also included. These are listed at the end of each section and are preceded by either "Basionym of" or "Synonym of" and followed by its place of publication. In the case of a new synonymy, an equal sign (=) precedes the accepted name. Finally, a brief commentary is included when warranted. In a few cases, we have included types from other herbaria that typify names of new species described by Wiehler, even though no specimen may now be present at SEL. For completeness of this checklist, the few gesneriad type specimens for species described by other authors and deposited at SEL also are included.

Efforts to determine the actual distribution of types for all species cited has included sight verification of specimens at various herbaria by L. Skog. We have reviewed online databases (particularly of the New York Botanical Garden, Missouri Botanical Garden, and the U.S. National Museum of Natural History) as well as the SEL and GES holdings; and we have corresponded with several herbaria, where staff members have verified institutional holdings. Only after completing a search of the entire GES collection did we choose to lectotypify or neotypify material in place of the completely missing types. In addition, we ask that institutions cited as having a particular specimen verify their type holdings, including verification of collection dates, for each specimen.

For clarification, the acronym MSBG is used to denote the greenhouse collections at the Marie Selby Botanical Gardens to differentiate these living plants from the preserved plants in the Selby Gardens Herbarium (SEL). Likewise, GRF represents the greenhouse collections of living plants from the former Gesneriad Research Foundation, and GES denotes the herbarium of the Foundation.

For digital images of most of the Gesneriaceae type specimens housed at SEL, see the Herbarium page on the Selby Gardens website (<http://www.selby.org/research/herb/herb.htm>).

ANNOTATED LIST OF GESNERIACEAE TYPES

Achimenes admirabilis Wiehler, Phytologia 73(3): 220. 1992 [see also: Gesneriana 1: 29, fig. 1. 1995]. **TYPE:** Type collection made from greenhouse-grown plant cultivated at GRF, accession no. G-1024, 5 Jan. 1984, *H. Wiehler* 8404 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: BH, K, MEXU, NY, SEL, US). Origin of cultivated material: Mexico. Oaxaca: Juchitán, headwaters of Río Coatzacoalcos, E of Santa María Chimalapa, above junction with Río Blanco; rhizomes collected Apr. 1966, *T.B. McDougall* 668.

ACTUAL TYPE DISTRIBUTION: Holotype: MEXU; isotypes: BH, K, NY, SEL, US.

Alloplectus dodsonii Wiehler, Selbyana 2(1): 67, pl. 19A. 1977. **TYPE:** Ecuador. Los Ríos: Río Palenque Science Center, km 56 between Quevedo and Santo Domingo, 19 Jul. 1971, *H. Wiehler & C.H. Dodson* 7105 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BR, K, MO, NY, QCA, S, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Besleria chiriquensis Wiehler, Selbyana 5(1): 73, pl. 1A. 1978. **TYPE:** Panama. Chiriquí: Vicinity of Bariles, 6–16 km S of Volcán, 25 Apr. 1971, *R.L. Dressler & N.H. Williams* 3988 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotype: MO).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotype: MO.

Besleria maasii Wiehler, Selbyana 5(1): 73, pl. 1B. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2186, 20 Aug. 1978, *H. Wiehler* 78123 [78132, in error] (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, CAY, K, NY, SEL, U, US). Origin of cultivated material: French Guiana. Saul. Seed from the collection *P. Maas* 2281 (U).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, CAY, K, NY, P, U, US, VEN.

Besleria steyermarkiorum Wiehler ex L.E. Skog, Opera Botanica 92: 233, fig. 6. 1987. **TYPE:** Venezuela. Yaracuy: Headwaters of

Quebrada El Amparo, 10 km N of Salom, 30 Nov. 1974, J. A. Steyermark et al. 111182 (PUBLISHED TYPE DISTRIBUTION: Holotype: VEN; isotypes: F, US).

ACTUAL TYPE DISTRIBUTION: Holotype: VEN; isotypes: F, SEL, US.

Bucinella nariniana Wiehler, Selbyana 2(1): 91, pl. 27. 1977. **TYPE:** Colombia. Nariño: At km 140; road between Altaquer and Junín, 10 May 1972, H. Wiehler et al. 72201 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: COL, GH, K, MO, NY, P, S, U, US, W).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: COL, GH, K, MO, NY, P, QCA, S, U, US, W.

Basionym of *Bucinellina nariniana* (Wiehler) Wiehler, Selbyana 5(3–4): 381. 1981 and *Columnea nariniana* (Wiehler) L.P. Kvist & L.E. Skog, Allertonia 6: 347. 1993.

Bucinella paramicola Wiehler, Selbyana 2(1): 91, pl. 28A. 1977. **TYPE:** Colombia. Nariño: Near Altaquer by waterfall, 10 May 1972, H. Wiehler & N.H. Williams 72221a (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: COL, GH, K, MO, NY, P, S, SEL, U, US, W).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: COL, F, GH, K, MO, NY, P, S, SEL, U, US, W, WAG.

Basionym of *Bucinellina paramicola* (Wiehler) Wiehler, Selbyana 5(3–4): 381. 1981 and *Columnea paramicola* (Wiehler) L.P. Kvist & L.E. Skog, Allertonia 6: 348. 1993.

Codonanthe chiricana Wiehler, Selbyana 2(1): 95, pl. 28C. 1977. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2267, 1 Jul. 1977, H. Wiehler 77110 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, MO, PMA, US). Origin of cultivated material: Panama. Chiriquí: near Valle Hornito and Cerro Hornito, Fortuna Dam site; cuttings collected Aug. 1976, R.L. Dressler s.n.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, MO, PMA, US.

Codonanthe corniculata Wiehler, Selbyana 2(1): 95, pl. 28D. 1977. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. G-932, 1 Jul. 1977, H. Wiehler 77111 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: F, K, MO, NY, US). Origin of cultivated material: Peru. Loreto; near Iquitos;

cuttings collected in 1965, R.L. Dressler s.n.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: F, NY, US.

Codonanthe digna Wiehler, Selbyana 5(2): 214, pl. 1A. 1979. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1139, 6 Sep. 1973, H. Wiehler 7330 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: F, HB, K, MO, NY, R, RB, SEL, SP, US). Origin of cultivated material: Plants of unknown origin, probably native to SE Brazil.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: F, HB, INPA, K, MO, NY, R, RB, SP, US.

Codonanthe elegans Wiehler, Selbyana 7(2–4): 344, pl. 5B. 1984. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG and GRF, accession no. W-2588, 29 Jul. 1983, H. Wiehler 8301 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: B, GH, K, MO, NY, SEL, US, W). Origin of cultivated material: Belize. Toledo: Abraham Camp, between San José and Edwards Central; collected about 1975, F. Boutin 5173.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Codonanthe erubescens Wiehler, Phytologia 73(3): 221. 1992 [see also: Gesneriana 1: 31, fig. 2. 1995]. **TYPE:** Ecuador. Morona-Santiago: 10 km S of Gualajiza, on road from Limón to Zamora, 22 Apr. 1988, H. Wiehler & GRF Expedition 88152 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: QCA, F, K, MO, NY, S, SEL, U, US).

ACTUAL TYPE DISTRIBUTION: NOT FOUND: NEOTYPE here designated: Gesneriana 1: 32, fig. 2. 1995. [reprinted in FIGURE 1 of this paper].

We have found no specimens attributable to *Codonanthe erubescens*, none of the type specimens cited in the original publication in *Phytologia*, nor any of the several specimens cited in the subsequent discussion of this species in *Gesneriana*. In addition, no other specimens of *Codonanthe* currently in herbaria that we have examined appear to be *C. erubescens*. Therefore, to serve as a nomenclatural type, following ICBN Article 9.6 (Greuter et al. 2000), we have selected the illustration of the species that first appeared in the 1995 *Gesneriana* article, and which was based on the original type col-

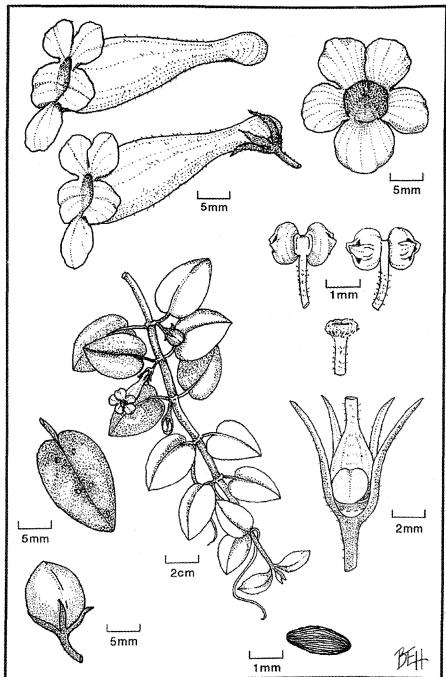


FIGURE 1. *Codonanthe erubescens*. Reprinted from *Gesneriana* 1: 32. 1995.

lection. Wiehler compared *Codonanthe erubescens* in the protologue with *C. crassifolia* (Focke) C.V. Morton, but we find Wiehler's species to be more similar to *C. uleana* Fritsch in having horned anther cells, similar size and coloration of the corolla, and in the indument of the filaments and style. However, *C. uleana* has larger leaves than illustrated for *C. erubescens* and also differs in having leaves with usually an acute leaf base and serrulate to serrate margins. Therefore, for the present, we maintain *C. erubescens* as a separate species.

Codonanthe luteola Wiehler, Selbyana 1(2): 159, fig. 1. 1975. **TYPE:** Panama. Panamá: Cerro Jefe, ca. 20 km N of Tocumen airport; near road to Dressler's Orchidarium, 11 Aug. 1971, H. Wiehler & R.L. Dressler 71184 (PUBLISHED TYPE DISTRIBUTION: Holotype: US; isotypes: B, F, GH, K, MO, NY, P, PMA, SEL, UC).

ACTUAL TYPE DISTRIBUTION: Holotype: US; isotypes: B, F, GH, K, MO, NY, P, PMA, SEL, UC.

Codonanthe paula Wiehler, Selbyana 5(2): 215, pl. 1B. 1979. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2368, 8 Aug.

1979, H. Wiehler 79360 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: F, HB, K, MO, NY, R, RB, SP, US). Origin of cultivated material: Brazil. Nursery outside São Paulo, obtained by Jean Hurlburt of Miami in 1976, and thought to be native to vicinity of São Paulo.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotype: US.

Codonanthopsis peruviana Wiehler, Selbyana 7(2-4): 346, pl 5C. 1984. **TYPE:** Type collection made from greenhouse-grown plant cultivated at GRF and MSBG, accession no. W-2235, 29 Jul. 1983, H. Wiehler 8302 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: GH, K, MO, NY, SEL, US, W). Origin of cultivated material: Peru. Huanuco: Panguana, 1976, R.L. Dressler s.n.

ACTUAL TYPE DISTRIBUTION: Holotype: USM; isotypes: CUZ, GH, K, MO, NY, SEL, US, W.

Columnea aurantia Wiehler, Selbyana 5(3-4): 379, pl. 1B. 1981. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2443, 15 Jan. 1980, H. Wiehler 8018 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL). Origin of cultivated material: Panama. Coclé: About 8 km N of El Copé, May 1977, R.L. Dressler s.n.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: AAU, COL, CR, K, L, MO, NY, P, PMA, U, UMICH, UC, US, WAG.

Columnea canarina Wiehler, Selbyana 2(1): 96, pl. 29A. 1977. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2264, 2 Jul. 1977, H. Wiehler 77112 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, MO, NY, PMA, US). Origin of cultivated material: Panama. Chiriquí: near Valle Hornito and Cerro Hornito, Fortuna Dam site; cuttings collected Aug. 1976, R.L. Dressler s.n.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, MO, NY, PMA, US.

Columnea capillosa L.P. Kvist & L.E. Skog, Allertonia 6(5): 349, fig. 3. 1993. **TYPE:** Ecuador. Pastaza: Mera, 22 Apr. 1969, H. Lugo S. 1158 (Holotype: GB; isotype: SEL).

Columnea chiricana Wiehler, Selbyana 5(1): 77, pl. 2A. 1978. **TYPE:** Panama. Chiriquí: Bajo Grande above Cerro Punto, 23 Dec. 1974, R.L. Dressler 4906 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: US, PMA (2).

Columnea dielsii Mansfeld, Biblioth. Bot. 116: 145. 1937; neotypified by H. Wiehler in Selbyana 5(3–4): 381. 1981. **TYPE:** Ecuador. Carchi: Towards Maldonado, on road from Tulcán, 21 Feb. 1978, C.A. Luer, J. Luer & A. Hirtz 2663 (Neotype: SEL).

Synonym of *Alloplectus peruviana* (Zahlb.) L.P. Kvist & L.E. Skog, Allertonia 6: 395. 1993.

Columnea dodsonii Wiehler, Selbyana 2(1): 70, pl. 20A. 1977. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1500, 10 Jun. 1977, H. Wiehler 77108 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: B, BH, BM, BR, C, COL, F, G, GH, HBG, K, L, LE, M, MO, NY, P, QCA, RPSC, S, SEL, U, UC, WAG). Origin of cultivated material: Ecuador. Manabí: 15 km W of Santo Domingo on the road to Chone, 23 Jul. 1971, H. Wiehler & C.H. Dodson 7108.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: B, BH, BM, BR, C, COL, F, G, GH, HBG, K, L, LE, M, MO, NY, P, QCA, QCNE, RPSC, S, U, UC, WAG.

Synonym of *Columnea kienastiana* Regel according to L.P. Kvist & L.E. Skog, Allertonia 6: 371. 1993.

Columnea dressleri Wiehler, Selbyana 2(1): 98, pl. 29B. 1977. **TYPE:** Panama. Chiriquí: Cerro Fortuna, 16 Aug. 1976, R.L. Dressler 5400 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotype: PMA.

Columnea filipendula Wiehler, Phytologia 73(3): 222. 1992 [see also: Gesneriana 1: 33, fig. 3. 1995]. **TYPE:** Type collection made from greenhouse-grown plant cultivated at GRF and MSBG, accession no. G-3063, 6 May 1987, H. Wiehler 87103 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: EAP, F, K, MO, NY, SEL, US). Origin of cultivated material: Honduras: S of Copán; live cuttings collected Jun. 1981, C. Herzog, s.n.

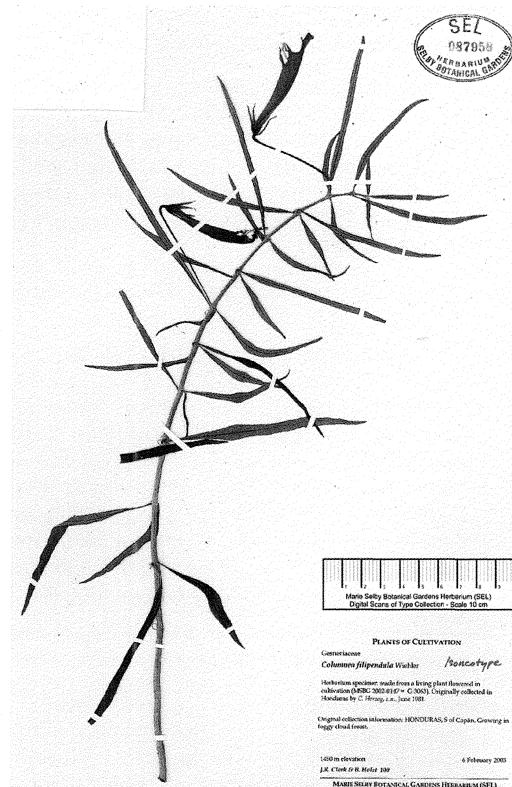


FIGURE 2. *Columnea filipendula*. Neotype at SEL.

ACTUAL TYPE DISTRIBUTION: NOT FOUND; **NEOTYPE** here designated: Neotype collection made from greenhouse-grown plant cultivated at MSBG, accession no. G-3063, 6 Feb. 2003, J.R. Clark & B.K. Holst 100 (Neotype: SEL; Isoneotypes: COL, EAP, F, K, MO, NY, US). Origin of cultivated material: same wild collection as above.

FIGURE 2.
 Synonym of *Columnea rubricaulis* Standley according to L.E. Skog & L.P. Kvist, Novon 7: 414. 1997.

None of the type specimens of *Columnea filipendula* cited in the original publication were found nor were the specimens cited in the subsequent Gesneriana article. Fortunately, clonotype material of G-3063 is still growing at MSBG, and from which specimens were gathered and designated as the neotype collection.

Columnea fimbrialyx L.P. Kvist & L.E. Skog, Allertonia 6(5): 373, fig. 9. 1993. **TYPE:** Ecuador. Carchi: Trail between San Marcos and San Antonio located along trail before Gualpi Bajo, 25 Nov. 1983, L.P. Kvist, A.

Barfod & D. Nissen 48971 (Holotype: AAU; isotypes: QCA, QCNE, SEL, US).

Columnnea gallicauda Wiehler, Selbyana 2(1): 99, pl. 29C. 1977. **TYPE:** Panama. Veraguas: 12–15 km NW of Santa Fé, between third branch of Río Santa María and continental divide, 29–30 Mar. 1975, *R.L. Dressler* 5000 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: PMA (2), US.

Columnnea glicensteinii Wiehler, Phytologia 73(3): 223. 1992 [see also: Gesneriana 1: 35, fig. 4. 1995]. **TYPE:** Type collection made from greenhouse-grown plant cultivated at GRF, accession no. W-2674, 8 Jun. 1979, *H. Wiehler* 8401 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: CR, K, NY, SEL, US). Origin of cultivated material: Costa Rica. Type locality and habitat not specified, 1987, *L. Glicenstein* 13.

ACTUAL TYPE DISTRIBUTION: Holotype: CR; isotypes: SEL, K, NY, US.

Columnnea hiantiflora Wiehler, Selbyana 2(1): 100, pl. 29D. 1977. **TYPE:** Panama. Chiriquí: Near Valle Hornito and Cerro Hornito, Fortuna Dam site, 24 Sep. 1976, *R.L. Dressler* 5445 [published as "5443"] (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotype: PMA.

Columnnea laevis L.P. Kvist & L.E. Skog, Allertonia 6(5): 376, fig. 10. 1993. **TYPE:** Ecuador. Carchi: Above San Marcos de los Coaiqueres on trail towards Gualpi Bajo, 7 Feb. 1985, *B. Øllgaard et al.* 57367 (Holotype: AAU; isotypes: COL, G, GB, MO, NY, QCA, QCNE, SEL, US).

Columnnea minutiflora L.P. Kvist & L.E. Skog, Allertonia 6(5): 379. 1993. **TYPE:** Ecuador. Carchi: 12 km W of Maldonado, Chical, wet montane forest along Río San Juan, 29 May 1978, *M.T. Madison et al.* 4755 (Holotype: AAU; isotypes: F, SEL).

Columnnea ovatifolia L.P. Kvist & L.E. Skog, Allertonia 6(5): 393, fig. 14. 1993. **TYPE:** Ecuador. Carchi: Campamento Machines, road Tulcán-Maldonado, ca. 10 km SE of Maldonado, 28 Nov. 1974, *G. Harling & L. Andersson* 12316 (Holotype: GB; isotype: SEL).

Columnnea purpurimarginata L.P. Kvist & L.E. Skog, Allertonia 6(5): 365, fig. 8. 1993. **TYPE:** Ecuador. Esmeraldas: Environs of

Lita on the Ibarra-San Lorenzo RR, Jun. 1978, *M.T. Madison et al.* 5000 (Holotype: SEL).

Columnnea zebranella Wiehler, Selbyana 5(1): 80, pl. 2B. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1595, 25 Aug. 1978, *H. Wiehler* 78133 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, F, K, MO, NY, PMA, SEL, U, US). Origin of cultivated material: Panama. Panamá: Cerro Jefe, 11 Aug. 1971, *H. Wiehler & R.L. Dressler* 71186B.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: B, COL, CR, GH, MO, NY, P, PMA, US, WAG.

Corytoplectus cutucuensis Wiehler, Gesneriana 1: 35, fig. 5. 1995. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG & GRF, accession no. G-2412, 8 Jul. 1984, *H. Wiehler* 8406 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES). Origin of cultivated material: Ecuador. Morona-Santiago: Cordillera de Cutucu, W slope, along trail from Logrono to Yaupi, Nov. 1976, *M.T. Madison et al. s.n.*

ACTUAL TYPE DISTRIBUTION: Holotype: QCA; isotype: SEL.

Cremosperma maculatum L.E. Skog, Brittonia 30: 320. 1978. **TYPE:** Panama. Chiriquí: N of San Felix at Chiriquí-Bocas del Toro border, on Cerro Colorado copper mine road along continental divide, 4 May 1975, *S. Mori & J. Kallunki* 5828 (Holotype: US; isotypes: MO, SEL).

Cremosperma occidentale Wiehler, Selbyana 5(1): 74, pl. 1C. 1978. **TYPE:** Panama. Chiriquí: Trocha 3 de Noviembre, between Alto de Guayabo and Paso de la Zorra, 25 Sep. 1976, *R.L. Dressler* 5475 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Cremosperma veraguanum Wiehler, Selbyana 5(1): 76, pl. 1D ('veraguense'). 1978. **TYPE:** Panama. Veraguas: About 8 km NW of Santa Fé, along first branch of Río Santa María. 2.7 km from Escuela Agrícola Alto Piedra, 18 May 1975, *R.L. Dressler* 5034 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Dalbergaria ampliata Wiehler, Selbyana 2(1): 101, pl. 30A. 1977. **TYPE:** Panama. Veraguas: Buenos Aires, N slope of ridge E of Cerro Tute, NW of Santa Fé, 24 Dec. 1976,

R.L. Dressler 5543 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL. Basionym of *Columnea ampliata* (Wiehler) L.E. Skog, Ann. Missouri Bot. Gard.: 844. 1978.

Dalbergaria asteroloma Wiehler, Selbyana 2(1): 70, pl. 20B. 1977. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2247, 10 Jun. 1977, *H. Wiehler* 77109 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, QCA, RPSC, US). Origin of cultivated material: Ecuador. Pichincha: Montañas de Ila, at km 12 on road from Patricia Pilar to village of 24 de Mayo, 30 May 1976, *R.L. Dressler* 6100.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: AAU, GH, K, MO, NY, P, QCA, RPSC, U, US.

Basionym of *Columnea asteroloma* (Wiehler) L.E. Skog, Taxon 30: 506. 1981.

Dalbergaria eburnea Wiehler, Selbyana 5(3-4): 378, pl. 1A. 1981. **TYPE:** Ecuador. Pichincha: Old road Quito-Santo Domingo, below Chiriboga, 27 Apr. 1979, *H. Wiehler & D. Masterson* 79108 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotype: QCA.

Basionym of *Columnea eburnea* (Wiehler) L.P. Kvist & L.E. Skog, Allertonia 6: 354. 1993.

Dalbergaria evolvens Wiehler, Phytologia 73(3): 223. 1992 [see also: Gesneriana 1: 37, fig. 6. 1995]. **TYPE:** Type collection made from greenhouse-grown plant cultivated at GRF, accession no. G-2757, 8 Jun. 1984, *H. Wiehler* 8403 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: QCA, K, MO, NY, S, SEL, US). Origin of cultivated material: Ecuador. Napo: km 71 on road from Baeza to Lago Agrio, 4 May 1979, *H. Wiehler & D. Masterson* 79304.

ACTUAL TYPE DISTRIBUTION: Holotype: QCA; isotypes: K, MO, NY, SEL, US.

Synonym of *Columnea guttata* Poeppig according to L.E. Skog & L.P. Kvist, Novon 7: 415. 1997.

Dalbergaria filifera Wiehler, Phytologia 73(3): 224. 1992 [see also: Gesneriana 1: 39. 1995]. **TYPE:** Ecuador. Esmeraldas: near new road from Lita and Alto Tambo towards San Lorenzo, about 20 km W of Alto

Tambo, on the Chocó Escarpment, 22 Apr. 1990, *H. Wiehler & GRF Expedition* 9033 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: QCA, US).

ACTUAL TYPE DISTRIBUTION: Holotype: QCA; isotypes: SEL, US.

Basionym of *Columnea filifera* (Wiehler) L.E. Skog & L.P. Kvist, Novon 7: 413. 1997.

Dalbergaria madisonii Wiehler, Selbyana 5(1): 90, pl. 4C. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2420, 30 Aug. 1977, *H. Wiehler* 77133 [holotype erroneously has "79133"] (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: AAU, F, K, NY, QCA, S, US). Origin of cultivated material: Ecuador. Morona-Santiago: Cordillera de Cutucú, 25 km SE of Logroño, Nov. 1976, *M.T. Madison et al.* s.n.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: F GH, MO, NY, P, QCA, U, US.

Synonym of *Columnea guttata* Poeppig according to L.P. Kvist & L.E. Skog, Allertonia 6: 361. 1993.

Dalbergaria mastersonii Wiehler, Phytologia 73(3): 225. 1992 [see also: Gesneriana 1: 43, fig. 7. 1995]. **TYPE:** Ecuador. Pichincha: Tandapi, near village of Cornejo Astorga (Tandapi), about 1.5 km from bridge over Río Pilatón, 24 Apr. 1979, *H. Wiehler & D. Masterson* 7968 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: QCA, NY, US, U, SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: QCA; isotypes: SEL, U, US.

Basionym of *Columnea mastersonii* (Wiehler) L.E. Skog & L.P. Kvist, Novon 7: 414. 1997.

Dalbergaria medicinalis Wiehler, Phytologia 73(3): 226. 1992 [see also: Gesneriana 1: 45, fig. 8. 1995]. **TYPE:** Ecuador. Pichincha: Above Chiriboga on old road from Quito to Santo Domingo, 26 Apr. 1988, *H. Wiehler & GRF Expedition* 88215 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: QCA, K, MO, NY, SEL, US).

ACTUAL TYPE DISTRIBUTION: Holotype: QCA; isotypes: COL, K, MO, NY, SEL, US.

Basionym of *Columnea medicinalis* (Wiehler) L.E. Skog & L.P. Kvist, Novon 7: 414. 1997.

Dalbergaria ornata Wiehler, Phytologia 73(3): 227. 1992 [see also: Gesneriana 1: 47, fig. 9. 1995]. **TYPE:** Type collection made from

greenhouse-grown plant cultivated at GRF, accession no. G-2665, 8 May 1987, *H. Wiehler 87105* (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: CR, SEL). Origin of cultivated material: Costa Rica. San José: about 30 km SW of San José along Río Negro, Jan. 1979, *J. Hall s.n.*

ACTUAL TYPE DISTRIBUTION: Holotype: CR; isotypes: SEL, US.

Basionym of *Columnea ornata* (Wiehler) L.E. Skog & L.P. Kvist, Novon 7: 414. 1997.

Dalbergaria polyantha Wiehler, Selbyana 2(1): 102, pl. 30B. 1977. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1152, 26 Jun. 1974, *H. Wiehler 7424* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: CR, K, MO, NY, PMA, US). Origin of cultivated material: Panama. Chiriquí: Vicinity of Barriles, 6–16 km S of Volcán, 25 Apr. 1971, *R.L. Dressler & N.H. Williams 3987*.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: CR, K, MO, NY, PMA, SEL, U, UC, US.

Basionym of *Columnea polyantha* (Wiehler) L.E. Skog, Ann. Missouri Bot. Gard.: 878. 1979.

Dalbergaria puyana Wiehler, Selbyana 2(1): 104, pl. 30C. 1977. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2040, 7 Jul. 1977, *H. Wiehler 77117* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, NY, QCA, S, U, US). Origin of cultivated material: Ecuador. Pastaza: rainforest outside Puyo at Río Pindo Grande; cuttings collected in Dec. 1975, *R.L. Dressler et al. s.n.*

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: NY, QCA, U, US.

Synonym of *Columnea guttata* Poeppig according to L.P. Kvist & L.E. Skog, Allertonia 6: 361. 1993.

Dalbergaria robusta Wiehler, Gesneriana 1: 48. 1995. **TYPE:** Type collection made from greenhouse-grown plant cultivated at GRF, accession no. G-3278, 15 Oct. 1988, *H. Wiehler 88241* (PUBLISHED TYPE DISTRIBUTION: Holotype: HUA; isotypes: COL, GES, MO, NY, US). Origin of cultivated material: Colombia. Chocó: road from Bolívar to Quibdó; found in middle of road, complete specimen not seen in natural habitat; 14 Mar. 1987, *H. Wiehler & GRF Expedition 8713A*.

ACTUAL TYPE DISTRIBUTION: NOT FOUND; **LECTOTYPE** here designated: Wild collection cited above, *H. Wiehler & GRF Expedition 8713A* (Lectotype: SEL).

= *Columnea robusta* (Wiehler) L.E. Skog, **comb. nov.** (basionym: *Dalbergaria robusta* Wiehler, Gesneriana 1:48. 1995).

No examples of the type specimens were found; however, a specimen was found of the wild collection that was the origin of the cultivated material. This collection from the wild is here designated the lectotype.

Dalbergaria rubriacuta Wiehler, Selbyana 2(1): 72, pl. 20D. 1977. **TYPE:** Ecuador. Los Ríos: Río Palenque Science Center, km 56 between Quevedo and Santo Domingo, 19 Jul. 1971, *H. Wiehler & C.H. Dodson 7102* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, NY, QCA, S, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL. Basionym of *Columnea rubriacuta* (Wiehler) L.P. Kvist & L.E. Skog, Allertonia 6: 367. 1993.

Dalbergaria tutunendana Wiehler, Phytologia 73(3): 228. 1992 [see also: Gesneriana 1: 49. 1995]. **TYPE:** Colombia. Chocó: E of Tutunendo, on road Quibdó to Bolívar, Alto de Veinte, hacienda of Rubén Jaramillo, 15 Mar. 1987, *H. Wiehler & GRF Expedition 8722* (PUBLISHED TYPE DISTRIBUTION: Holotype: HUA; isotypes: COL, GES, US).

ACTUAL TYPE DISTRIBUTION: Holotype: HUA; isotypes: COL, SEL, US.

= *Columnea tutunendana* (Wiehler) L.E. Skog, **comb. nov.** (basionym: *Dalbergaria tutunendana* Wiehler, Phytologia 73(3): 228. 1992).

Dalbergaria variabilis Wiehler, Gesneriana 1: 51, fig. 10. 1995. **TYPE:** Ecuador. Esmeraldas: vicinity of Lita, half-way between Alto Tambo and Escarpment, along roadside cuts, 23 Apr. 1995, *H. Wiehler & GRF Expedition 9544* (PUBLISHED TYPE DISTRIBUTION: Holotype: QCNE; isotypes: GES, K, MO, QCA, US).

ACTUAL TYPE DISTRIBUTION: Holotype: QCNE; isotypes: K, MO, QCA, SEL, US.

Synonym of *Columnea rubriacuta* (Wiehler) L.P. Kvist & L.E. Skog according to L.E. Skog & L.P. Kvist, Novon 7: 415. 1997.

Dalbergaria vittata Wiehler, Selbyana 2(1): 104, pl. 30D. 1977. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2265, 8 Jul. 1977, *H. Wiehler 77118* (PUBLISHED

TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, MO, NY, PMA, U, US). Origin of cultivated material: Panama. Chiriquí: Valle Hornito, near Cerro Hornito, Fortuna Dam site, 12 Aug. 1976, *Dressler* 5324.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL. Basionym of *Columnea vittata* (Wiehler) L.E. Skog, Ann. Missouri Bot. Gard. 65: 886. [1978] 1979.

Drymonia aciculata Wiehler, Selbyana 2(1): 105, pl. 31A. 1977. **TYPE:** Panama. Panamá: Cerro Jefe, 11 Aug. 1971, *H. Wiehler & R.L. Dressler* 71189 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, MO, NY, PMA, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: MO, NY, PMA.

Drymonia brochidodroma Wiehler, Gesneriana 1: 53, fig. 11. 1995. **TYPE:** Colombia. Nariño: around La Planada above Ricaurte, 2 Nov. 1979, *C.A. Luer et al.* 4566 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Drymonia chiribogana Wiehler, Phytologia 73(3): 229. 1992 [see also: Gesneriana 1: 55, fig. 12. 1995]. **TYPE:** Ecuador. Pichincha: old road from Quito to Santo Domingo, near Chiriboga, 26 Apr. 1988, *H. Wiehler & GRF Expedition* 88222 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: QCA, K, NY, US).

ACTUAL TYPE DISTRIBUTION: Holotype: QCA; isotypes: SEL, K, NY, US.

Drymonia dressleri Wiehler, Selbyana 5(1): 80, pl. 2C. 1978. **TYPE:** Panama: Panamá: El Llano-Cartí highway 10–12 km N of El Llano, 2 Mar. 1974, *R.L. Dressler* 4619 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotype: US.

Drymonia ecuadorensis Wiehler, Selbyana 2(1): 74, pl. 22A. 1977. **TYPE:** Ecuador. Los Ríos: Río Palenque Science Center, km 56 between Quevedo and Santo Domingo, 19 Jul. 1971, *H. Wiehler [& C.H. Dodson]* 7106 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, NY, QCA, S, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotype: US.

Drymonia killipii Wiehler, Selbyana 2(1): 106, pl. 31B. 1977. **TYPE:** Colombia. El Valle: old road from Cali to Buenaventura, near

Río Sabaletas, on path above creek, 2 May 1972, *H. Wiehler et al.* 72142 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: COL, K, MO, NY, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: COL, MO.

Drymonia laciniosa Wiehler, Selbyana 2(1): 76, pl. 22B. 1977. **TYPE:** Ecuador. Los Ríos: Río Palenque Science Center, km 56 between Quevedo and Santo Domingo, 24 Jul. 1971, *H. Wiehler & C.H. Dodson* 71309 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, NY, QCA, S, US).

ACTUAL TYPE DISTRIBUTION: NOT FOUND; **LECTOTYPE** here designated: Ecuador. Los Ríos: Río Palenque Biological Station, km 56 between Quevedo and Santo Domingo, 3 Sep. 1972, *C.H. Dodson & M. McMahon* 5054 (Lectotype: SEL).

No examples of type material of *Drymonia laciniosa* were found. We have selected as lectotype the only other collection cited in the protologue.

Drymonia microphylla Wiehler, Selbyana 5(1): 81, pl. 2D. 1978. **TYPE:** Panama. Panamá: between Cerro Azul and Cerro Jefe, 28 Aug. 1971, *R.L. Dressler* 4093 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: PMA, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotype: PMA.

Drymonia pilifera Wiehler, Selbyana 5(1): 82. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2008, 29 Oct. 1975, *H. Wiehler* 75272 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, F, K, MO, NY, PMA, SEL, U, UC, US). Origin of cultivated material: Panama. Veraguas: Guabral (Río Dos Bocas), about 16 km NW of Santa Fé, 1974, *R.L. Dressler* 4786.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, CR, F, K, MO, NY, PMA, U, UC, US.

Drymonia pulchra Wiehler, Selbyana 2(1): 109, pl. 31C. 1977. **TYPE:** Ecuador. Pastaza: Puyo, rainforest near Río Pindo Grande, 3 km outside of village, 30 Jul. 1971, *H. Wiehler* 7167 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, K, MO, NY, P, QCA, S, U, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Drymonia punctulata Wiehler, Phytologia 73(3): 230. 1992 [see also: Gesneriana 1:

57, fig. 14. 1995]. **TYPE:** Type collection made from greenhouse-grown plant cultivated at GRF, accession no. G-3548, 31 Aug. 1992, *H. Wiehler* 9206 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: QCA, MO, NY, SEL, US). Origin of cultivated material: Ecuador. El Oro: road from Buena Vista to Paccha, at km 32, 16 Apr. 1989, *Williams et al.* s.n.

ACTUAL TYPE DISTRIBUTION: NOT FOUND; **LECTOTYPE** here designated: Wild collection cited above, *N.H. Williams et al.* s.n. (Lectotype: SEL).

None of the type specimens were found, thus we have selected as lectotype the collection from the wild that is the source of the greenhouse-grown plants.

Drymonia rhodoloma Wiehler, Selbyana 2(1): 77, pl. 22D. 1977. **TYPE:** Ecuador. Los Ríos: Río Palenque Science Center, km 56 Quevedo-Santo Domingo, 24 Jul. 1971, *H. Wiehler & C.H. Dodson* 71311 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, NY, QCA, S, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, NY, QCA, S, US.

Drymonia sulphurea Wiehler, Selbyana 2(1): 109, pl. 31D. 1977. **TYPE:** Panama. Panamá: Cerro Jefe, 11 Aug. 1972, *H. Wiehler & R.L. Dressler* 71213 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, MO, NY, PMA, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotype: PMA.

Drymonia uninervia Wiehler, Phytologia 73(3): 231. 1992 [see also: Gesneriana 1: 59, fig. 14. 1995]. **TYPE:** Type collection made from greenhouse-grown plant cultivated at Cornell University and GRF, accession no. G-796, 28 Apr. 1973, *H. Wiehler* 7327 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: B, CR, F, G, GH, K, L, M, MO, NY, P, SEL, U, UC, US, W). Origin of type material: Costa Rica. Locality not specified; collected in 1960, *E.J. Alexander* s.n.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Drymonia urceolata Wiehler, Selbyana 5(1): 85, pl. 3B. 1978, based on *Hypocyrta macrophylla* Poeppig, in Poeppig & Endlicher, Nov. Gen. Sp. Pl. 3: 3. 1840, not *Drymonia macrophylla* (Oersted) H.E. Moore, Baileya 3(3): 109. 1955. **TYPE:** Peru. Cuchero, *Poeppig* 1056 (Holotype: W; isotype: W).

Wiehler cited a type, *Wiehler* 7162 (SEL), for his replacement name, *Drymonia urceolata*, perhaps because he could not locate the Poeppig type at W, and may have assumed it was lost. However, the Poeppig type specimens were merely on loan and a replacement type was unnecessary. Following ICBN Article 7.3 (Greuter et al. 2000), *Poeppig* 1056 becomes the type of the new name for the taxon.

Gasteranthus atratus Wiehler, Selbyana 5(1): 86, pl. 3C. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2480, 16 Nov. 1978, *H. Wiehler* 78166 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: AAU, BH, F, K, NY, QCA, S, U, US). Origin of cultivated material: Ecuador. Pichincha: Montañas de Iña, near La Centinella at km 12 on road from Patricia Pilar to Flor de Mayo, Apr. 1977, *M.T. Madison* s.n.

ACTUAL TYPE DISTRIBUTION: Holotype: QCA; isotypes: AAU, BH, F, K, NY, S, SEL, U, US.

Skog and Kvist (2000) lectotypified *Gasteranthus atratus* because, at the time, the type specimen, *Wiehler* 78166, could not be found at SEL and was presumed lost (see L.E. Skog & L.P. Kvist, Syst. Bot. Monogr. 59: 40. 2000). Fortunately, the types were located when the Wiehler collections at GRF were donated to MSBG. Thus, the lectotypification is unnecessary and is here nullified.

Gasteranthus atrolimbus M. Freiberg, Brittonia 52(2): 205, fig. 2. 2000. **TYPE:** Ecuador. Cotopaxi; on border of Bosque Protector Otanga, 30 Sep. 1998, *M. Freiberg* 98096 (PUBLISHED TYPE DISTRIBUTION: Holotype: QCA; isotypes: GES, QCNE, ULM).

ACTUAL TYPE DISTRIBUTION: Holotype: QCA; isotypes: QCNE, SEL, ULM.

Gasteranthus aurantiacus M. Freiberg, Brittonia 52(2): 203, fig. 1. 2000. **TYPE:** Ecuador. Cotopaxi; on border of Bosque Protector Otanga, 30 Sep. 1998, *M. Freiberg* 98095 (PUBLISHED TYPE DISTRIBUTION: Holotype: QCA; isotypes: GES, QCNE, ULM).

ACTUAL TYPE DISTRIBUTION: Holotype: QCA; isotypes: QCNE, SEL, ULM.

Gasteranthus bilsaensis L.E. Skog & L.P. Kvist, Syst. Bot. Monogr. 59: 41, fig. 17. 2000. **TYPE:** Ecuador. Esmeraldas: Bilsa Bi-

ological Station, Rana Roja Trail, 25 Oct. 1995, *P. Mendoza-T.*, *J.L. Clark*, *L.P. Kvist* & *L.E. Skog* 561 (Holotype: QCNE; isotypes: AAU, COL, QCA, SEL, US).

Gasteranthus carinatus Wiehler, Selbyana 2(1): 77, pl. 23D. 1977. **TYPE:** Ecuador. Los Ríos: Montañas de Ila, 12 km E of Río Palenque Science Center, 9 Apr. 1977, *M.T. Madison* 3802 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Gasteranthus dressleri Wiehler, Selbyana 2(1): 127, pl. 35C. 1977. **TYPE:** Panama. Colón; about 1–2 km upstream from bridge and road to Portobelo on Río Gauche, 10 Aug. 1971, *H. Wiehler* & *R.L. Dressler* 71165 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotype: US.

Gasteranthus extinctus L.E. Skog & L.P. Kvist, Syst. Bot. Monogr. 59: 65, fig. 26. 2000. **TYPE:** Ecuador. Los Ríos or Pichincha: Montañas de Ila, near La Centinela, km 12, on road from Patricia Pilar to Flor de Mayo, 4 Oct. 1981, *C.H. Dodson* 11595 (Holotype: QCNE; isotypes: MO, Q, SEL).

Gasteranthus glaber L.E. Skog & L.P. Kvist, Syst. Bot. Monogr. 59: 67, fig. 27. 2000. **TYPE:** Ecuador. Pichincha; old Quito-Santo Domingo road (between new road and Chiriboga), 28 Oct. 1995, *P. Mendoza-T.*, *J.L. Clark*, *L.P. Kvist* & *L.E. Skog* 624 (Holotype: QCNE; isotypes: AAU, B, BM, CAS, COL, E, F, GB, GH, HUA, LE, MO, NY, P, PE, QCA, S, SEL, TULV, US, VEN, WU).

Gasteranthus macrocalyx Wiehler, Selbyana 2(1): 78, pl. 24B. 1977. **TYPE:** Ecuador. Los Ríos: Montañas de Ila, 12 km E of Patricia Pilar and Río Palenque Science Center, 9 Apr. 1977, *M.T. Madison* 3806 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Gasteranthus maculatus Wiehler, Selbyana 5(1): 87, pl. 3D. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2454, 16 Nov. 1978, *H. Wiehler* 78167 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, MO, PMA, US). Origin of cultivated material: Panama. Darién: Cerro Pirre, E side of ridge, Jul. 1977, *R.L. Dressler* s.n.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: COL, K, MO, PMA, US.

Synonym of *Gasteranthus delphinoides* (Seemann) Wiehler, according to L.E. Skog & L.P. Kvist, Syst. Bot. Monogr. 59: 59. 2000.

Gasteranthus orientandinus L.E. Skog & L.P. Kvist, Syst. Bot. Monogr. 59: 82, fig. 32. 2000. **TYPE:** Ecuador. Morona-Santiago: Río Paute, 2–3 km W of Mendez, 13 Dec. 1944, *W.H. Camp* E-1492 (Holotype: QCA; isotypes: NY, S, SEL, US).

Gasteranthus recurvatus L.E. Skog & L.P. Kvist, Syst. Bot. Monogr. 59: 93, fig. 36. 2000. **TYPE:** Colombia. Valle del Cauca: trail from Campoalegro into area controlled by Corporación Valle del Cauca, 16 Feb. 1989, *J.F. Smith*, *R. Bernal*, *X. Londoño* & *W. Devia* 1314 (Holotype: COL; isotypes: SEL, TULV, US, WIS).

Gasteranthus ternatus L.E. Skog & L.P. Kvist, Syst. Bot. Monogr. 59: 98. 2000. **TYPE:** Ecuador. Pichincha: Old Quito-Santo Domingo road, above Chiriboga, 28 Oct. 1995, *P. Mendoza-T.* et al. 623 (Holotype: QCNE; isotypes: AAU, B, COL, GB, K, MO, NY, QCA, SEL, US).

Gloxinia dodsonii Wiehler, Selbyana 2(1): 80, pl. 24D. 1977. **TYPE:** Ecuador. Pichincha: along Río Baba (=Río Quevedo), 28 km S of Santo Domingo de los Colorados, 3 Nov. 1961, *C.H. Dodson* & *L.B. Thien* 1173 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, K, US, WIS).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, BUS, K, US, WIS.

Monopyle grandiflora Wiehler, Selbyana 5(1): 88, pl. 4A. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2455, 21 Nov. 1978, *H. Wiehler* 78168 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, MO, NY, PMA, US). Origin of cultivated material: Panama. Darién: Cerro Pirre, Jul. 1977, *R.L. Dressler* 5670.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: CR, K, MO, NY, PMA, US.

Napeanthus bullatus Wiehler, Selbyana 2(1): 110, pl. 32A. 1977. **TYPE:** Panama. Panamá: Canal Zone, on steep banks near Río Agua Salud, Navy reservation N of Gamboa, 11 Sep. 1971, *R.L. Dressler* 4098 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: F, K, MO, NY, PMA, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: COL, CR, F, K, MO, NY, PMA, US.

Synonym of *Napeanthus apodemus* J.D. Smith according to L.E. Skog, Ann. Missouri Bot. Gard. 65: 952. [1978] 1979.

Napeanthus costaricensis Wiehler, Selbyana 2(1): 112, pl. 32B. 1977. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1701, 12 Jul. 1977, H. Wiehler 77119 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: CR, K, MO, NY, US). Origin of cultivated material: Costa Rica. San José: near San Cristóbal, ca. 19.4 km SW of San Isidro, 4 Mar. 1972, R.L. Dressler & R. Andrews 4168.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: CR, K, MO, NY, US.

Nautilocalyx antioquensis Wiehler, Gesneriana 1: 63, fig. 16. 1995. **TYPE:** Type collection made from greenhouse-grown plant cultivated at GRF, accession no. G-3217, 18 Oct. 1988, H. Wiehler 88242 (PUBLISHED TYPE DISTRIBUTION: Holotype: COL; isotypes: GES, HUA, K, NY, US). Origin of cultivated material: Colombia. Antioquia: road Medellín-Puerto Triunfo; valley and drainage area of Río Magdalena, Río Claro gorge, inside Refugio Ecológico del Cañón del Río Claro, 20 Nov. 1986, H. Wiehler 86298.

ACTUAL TYPE DISTRIBUTION: Holotype: COL; isotypes: HUA, K, NY, SEL, US.

Nautilocalyx cataractarum Wiehler, Selbyana 1(2): 166, fig. 1. 1975. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1799, 21 May 1975, H. Wiehler 75159 (PUBLISHED TYPE DISTRIBUTION: Holotype: US; isotypes: NY, SEL, VEN). Origin of cultivated material: Venezuela. Bolívar: Auyan-tepui, Río Churún, base of Angel Falls; living plants collected in 1972, G.C.K. Dunsterville et al. s.n.

ACTUAL TYPE DISTRIBUTION: Holotype: US; isotype: SEL.

Nautilocalyx colombianus Wiehler, Selbyana 2(1): 113, pl. 32C. 1977. **TYPE:** Panama. Colón; along Río Guanche, SSW of Portobelo, 10 Aug. 1971, H. Wiehler & R.L. Dressler 71160 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, COL, F, K, MO, NY, PMA, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, COL, F, INB, K, MO, NY, PMA, US.

Nautilocalyx colonensis Wiehler, Selbyana 5(1): 89, pl. 4B. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2573, 24 Aug. 1978, H. Wiehler 78137 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, K, MO, NY, PMA, US). Origin of cultivated material: Panama. Colón: Río Escandaloso (tributary of Río Boquerón) near Mina #2, 20 May 1978, Dressler 5817.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, K, MO, NY, PMA, US.

Nautilocalyx dressleri Wiehler, Selbyana 2(1): 114, pl. 32D. 1977. **TYPE:** Panama. Coclé: hills N of El Valle de Anton, 17 Jan. 1973, R.L. Dressler 4258 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotype: MO).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotype: MO.

Nautilocalyx ecuadoranus Wiehler, Selbyana 5(1): 31, pl. 9A. 1978. **TYPE:** Ecuador. Pastaza: Puyo, near Río Pindo Grande, 30 Jul. 1971, H. Wiehler 7150 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: NY, QCA, S, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Nautilocalyx glandulifer Wiehler, Selbyana 5(1): 32, pl. 9B. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1573, 28 Jul. 1978, H. Wiehler 77130 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, GH, K, MO, NY, QCA, S, SEL, U, US). Origin of cultivated material: Ecuador. Napo: western side of Tena, 4 Aug. 1971, Wiehler 7196.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Nautilocalyx leticianus Wiehler, Selbyana 5(1): 34, pl. 9C. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1955, 3 Nov. 1976, H. Wiehler 76245 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, COL, F, GH, K, MO, NY, S, SEL, US). Origin of cultivated material: Colombia. Amazonas: near Leticia, Jun. 1974, R.L. Dressler s.n.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotype: COL.

Nautilocalyx mulfordii Wiehler, Selbyana 5(1): 37, pl. 9D. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG as *Episcia* 'Amazon

White', accession no. G-116, 5 Apr. 1977, *H. Wiehler 77105* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, GH, IAN, INPA, K, MO, NY, SEL, U, US). Origin of cultivated material: Brazil. Amazonas: 15 km W of Manaus, near Río Negro; collected about 1952, *M.R. Mulford s.n.*

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: MO, NY, R, US.

Nautilocalyx peruvianus Wiehler, Selbyana 5(1): 39, pl. 11A. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. 2129, 27 May 1976, *H. Wiehler 76177* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, F, GH, K, MO, NY, SEL, US, USM). Origin of cultivated material: Peru. Huanuco: Finca Panguana on Río Llullapichis, 1 hour walk from village of Llullapichis on Río Pachitea, 25 Jan.–15 Feb. 1975, *R.L. Dressler 4932*.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, CUZ, F, GH, K, MO, NY, P, SEL, U, US, USM.

Nautilocalyx punctatus Wiehler, Selbyana 5(1): 40, pl. 11B. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1821, 28 Jul. 1977, *H. Wiehler 77131* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, K, MO, MY, NY, SEL US, VEN). Origin of cultivated material: Venezuela. Amazonas: Cerro Yapacana; between base camp and Sabana Grande, 7 May 1970, *J.A. Steyermark & G. Bunting 103207*.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, K, MO, MY, NY, TFAV, U, UC, US, VEN.

Nautilocalyx speciosus Wiehler, Selbyana 5(1): 42, pl. 11C. 1978. **TYPE:** Panama. Bocas del Toro: Trocha 3 de Noviembre, near Los Guártires, 28 Jul. 1978, *R.L. Dressler 5803* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Nautilocalyx vinosus Wiehler, Selbyana 5(1): 43, pl. 11D. 1978. **TYPE:** Ecuador. Pastaza: Puyo, 30 Jul. 1971, *H. Wiehler 7154* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Nematanthus australis A. Chautems, Candollea 39(1): 287, fig. 4. 1984. **TYPE:** Brazil. Paraná: Piste vers Colonia de Santa Andra-

de, 25 km depuis carrefour avec BR 376, 7 Apr. 1983, A. Chautems & G. Hatschbach 81 (PUBLISHED TYPE DISTRIBUTION: Holotype: G; isotypes: E, GES, K, MBM, NY, S, SP, US).

ACTUAL TYPE DISTRIBUTION: Holotype: G; isotypes: E, K, MBM, MO, NY, S, SEL, SP, US.

Neomortonia alba Wiehler, Gesneriana 1: 65, fig. 17. 1995. **TYPE:** Type collection made from greenhouse-grown plant cultivated at University of Miami, accession no. G-1606, 17 Feb. 1974, *H. Wiehler 7427* (PUBLISHED TYPE DISTRIBUTION: Holotype: PMA; isotypes: GES, MO). Origin of cultivated material: Panama. Panamá: ca. 6 km upstream on Río Pasiga, 28 Oct. 1971, *H. Kennedy 1194*.

ACTUAL TYPE DISTRIBUTION: Holotype: PMA; isotypes: SEL, MO.

Neomortonia rosea Wiehler, Selbyana 1(1): 17, fig. 1–8. 1975. **TYPE:** Colombia. Valle: Pacific slope of Cordillera Occidental, old road from Cali to Buenaventura, about 10 km W of La Elsa, 29 Apr. 1972, *H. Wiehler, R.L. Dressler, N.H. Williams & N.F. Williams 7241* (PUBLISHED TYPE DISTRIBUTION: Holotype: US; isotypes: B, BR, COL, CR, F, GH, HBG, K, LE, M, MO, NY, P, PAN, SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: US; isotypes: B, BR, BH, GH, HBG, MO, SEL, USM.

Niphaea peruviana Wiehler, Gesneriana 1: 65, fig. 18. 1995. **TYPE:** Peru. Huanuco: Finca "Panguana," 1 hour walk from Llullapichis (on Río Pachitea) on Río Llullapichis, 25 Jan.–15 Feb. 1975, *R.L. Dressler 4935* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Oerstedina cerricola Wiehler, Selbyana 2(1): 116, pl. 33A. 1977. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2285, 16 Jul. 1977, *H. Wiehler 77120* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: MO, PMA, US). Origin of cultivated material: Panama. Chiriquí: Cerro Fortuna, ca. 20 km ESE of Boquete, Sep. 1976, *Dressler s.n.*

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Oerstedina mexicana Wiehler, Selbyana 2(1): 116, pl. 33B. 1977. **TYPE:** Type collection

made from greenhouse-grown plant cultivated at MSBG, accession no. W-2180, 16 Jul. 1977, *H. Wiehler 77121* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: MEXU, US). Origin of type material: Mexico. Guerrero: road between Ocote and Xextla, 17 Jun. 1973, *Dressler s.n.*

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Paliavana lasiantha Wiehler, Selbyana 7(2-4): 341, pl. 4. 1984. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. G-997, 30 Jul. 1983, *H. Wiehler 8303* (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: HB, K, NY, R, RB, SEL, US). Origin of cultivated material: Brazil. Minas Gerais: outside Diamantina, 1965, *R. Wilson W65-13*.

ACTUAL TYPE DISTRIBUTION: Holotype: R; isotypes: SEL, US.

Paradrymonia alba Wiehler, Selbyana 5(1): 46, pl. 12A. 1978. **TYPE:** Panama. Bocas del Toro: Filo de Almirante, valley beyond ridge when approaching from Almirante, 22 May 1972, *H. Wiehler & R.L. Dressler 72303* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Paradrymonia aurea Wiehler, Selbyana 5(1): 46, pl. 12B. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1747, 13 May 1975, *H. Wiehler 75269* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: AAU, K, NY, QCA, S, US). Origin of cultivated material: Ecuador. Napo: ca. 3 km S of Tena, 3 Aug. 1971, *Wiehler 7199*.

ACTUAL TYPE DISTRIBUTION: NOT FOUND; NEOTYPE here designated: Ecuador. Pastaza: road Puyo to Canelos, 8 km E of Puyo, 21 Apr. 1986, *H. Wiehler & GRF Expedition 86129* (Neotype: SEL; isoneotype: US).

FIGURE 3.

Neither the type material of *Paradrymonia aurea* nor the additional specimens cited with the protologue have been found. Thus, a more recent collection, one that had been annotated as this species by Wiehler, is selected as the neotype. Given the poor quality of the selected neotype, however, the illustration published with the original description (Selbyana 5: 47, pl. 12B, 1978) should also serve to identify this species.

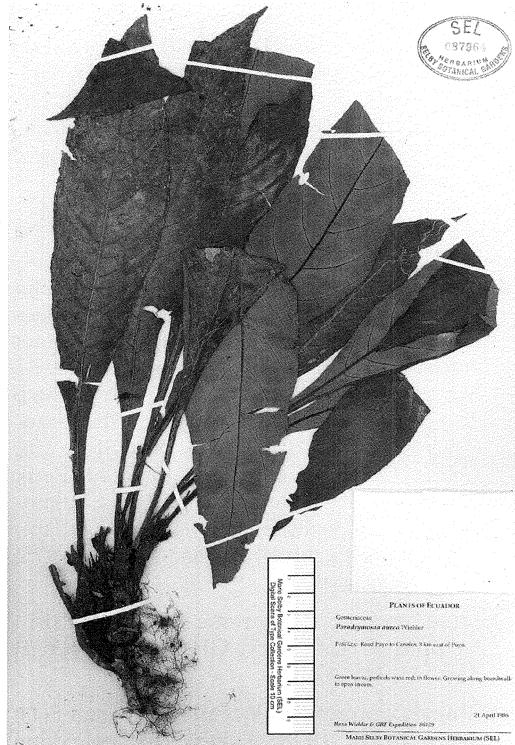


FIGURE 3. *Paradrymonia aurea*. Neotype at SEL.

Paradrymonia binata Wiehler, Phytologia 73(3): 231. 1992 [see also: Gesneriana 1: 67, fig. 19. 1995]. **TYPE:** Type collection made from greenhouse-grown plant cultivated at GRF, accession no. G-3384, 20 Aug. 1992, *H. Wiehler 9205* (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: NY, QCA, US). Origin of cultivated material: Ecuador. Esmeraldas: 5 km W of Lita, 24 Apr. 1990, *H. Wiehler & GRF Expedition 9071*.

ACTUAL TYPE DISTRIBUTION: NOT FOUND; NEOTYPE here designated: Ecuador. Esmeraldas: km 5–18 on road Lita to Alto Tambo, 18 Jan. 1987, *C.H. Dodson, A. Hirtz, D. Benzing, C. Luer & J. Luer. 16833* (Neotype: SEL; isoneotype: MO).

None of the type specimens of *Paradrymonia binata* cited in the protologue were found. In the subsequent 1995 *Gesneriana* discussion of this species, an additional collection is mentioned, *C.H. Dodson et al. 16833*, and is here designated as the neotype.

Paradrymonia flava Wiehler, Selbyana 5(1): 51, pl. 12C. 1978. **TYPE:** Panama. Colón:

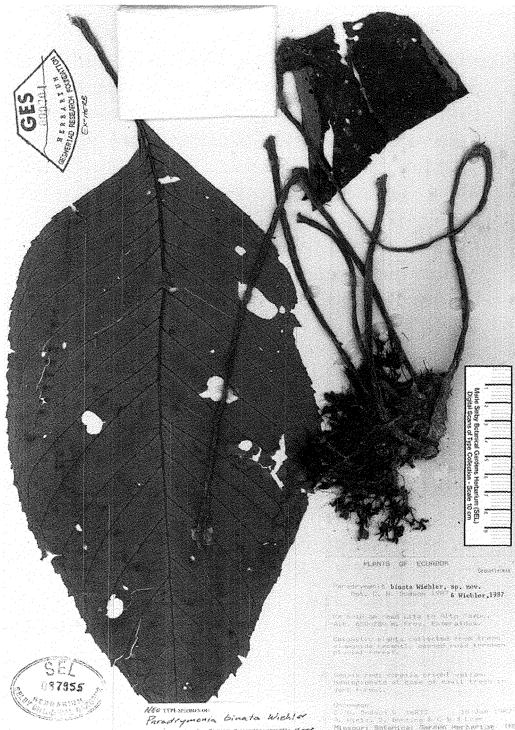


FIGURE 4. *Paradrymonia binata*. Neotype at SEL.

Río Guanche, near Portobelo, 10 Aug. 1971, H. Wiegler & R.L. Dressler 71158 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, F, GH, K, MO, NY, PMA, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: MO, PMA.

Paradrymonia fuquaiana Wiegler, Phytologia 73(3): 69. 1992 [see also: Gesneriana 1: 69, fig. 20. 1995]. **TYPE:** Type specimen made from greenhouse-grown plant cultivated at GRF, accession no. G-3590, 20 Aug. 1992, H. Wiegler 9204 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: QCA, NY, US, others to be distributed). Origin of cultivated material: Ecuador. Napo; N of Tena, road Hollin-Loreto, old road construction camp, at km 17 from Hollin, 6 Jan. 1990, R. Determann et al. s.n.

ACTUAL TYPE DISTRIBUTION: NOT FOUND; **NEOTYPE** here designated: Ecuador. Napo; road Hollin-Loreto, 27 Apr. 1995, H. Wiegler & GRF Expedition 95116 (Neotype: SEL).

No type material of *Paradrymonia fuquaiana* has been found. However, one of

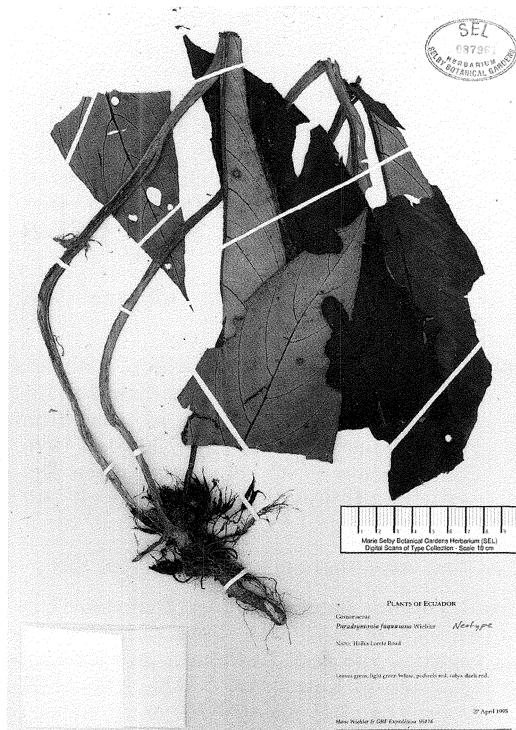


FIGURE 5. *Paradrymonia fuquaiana*. Neotype at SEL.

the specimens cited in the subsequent 1995 *Gesneriana* discussion of the species, H. Wiegler & GRF Expedition 95116, is available and is here designated as the neotype.

Paradrymonia gibbosa Wiegler, Selbyana 5(1): 52, pl. 12D. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1663, 3 Nov. 1976, H. Wiegler 76246 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: COL, NY, US, VALLE). Origin of cultivated material: Colombia. Valle: old road from Cali to Buenaventura, ca. 10 km below Queremal, 1 May 1972, H. Wiegler et al. 72120.

ACTUAL TYPE DISTRIBUTION: NOT FOUND; **LECTOTYPE** here designated: Colombia. Valle: old road from Cali to Buenaventura, near La Elsa, 30 Apr. 1972, H. Wiegler & R.L. Dressler 7278 (Lectotype: SEL).

No type material of *Paradrymonia gibbosa* has been found, but the paratype from the original publication, H. Wiegler et al. 7278, has been selected as the lectotype.

Paradrymonia gigantea Wiegler, Selbyana

5(1): 53, pl. 13A. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1687, 3 Nov. 1976, *H. Wiehler et al.* 76247 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, COL, F, GH, K, MO, NY, U, US, VALLE). Origin of cultivated material: Colombia. Valle: old road from Cali to Buenaventura, near La Elsa, 30 Apr. 1972, *H. Wiehler et al.* 7236.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotype: US.

Paradrymonia hypocyrtia Wiehler, Selbyana 2(1): 82, pl. 25C. 1977. **TYPE:** Ecuador. Los Ríos: Montañas de Ila, km 12, road from Patricia Pilar to 24 de Mayo, 30 May 1976, *C.H. Dodson* 6092 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, NY, QCA, S, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Paradrymonia lacera Wiehler, Selbyana 7(2-4): 343, pl. 5A. 1984. **TYPE:** Ecuador. Cotopaxi: 3 km E of El Palmar, on road from Quevedo to Latacunga, 5 Apr. 1980, *C.H. Dodson & A.H. Gentry* 10194 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: QCA, QCNE.

Paradrymonia macrophylla Wiehler, Selbyana 5(1): 56, pl. 13B. 1978. **TYPE:** Panama. Colclé: Hills N of El Valle de Anton, 15 Aug. 1971, *H. Wiehler & R.L. Dressler* 71286 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: F, K, MO, NY, PMA, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Paradrymonia prististoma Wiehler, Phytologia 73(3): 233. 1992 [see also: Gesneriana 1: 70. 1995]. **TYPE:** Ecuador. Napo: unfinished road from Tena to Latacunga, along Río Pano, 16–18 km from Tena, 23 Apr. 1986, *H. Wiehler & GRF Expedition* 86184 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotype: QCA).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Paradrymonia sericea Wiehler, Selbyana 5(1): 57, pl. 13C. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1644, 13 May 1975, *H. Wiehler* 75270 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL). Origin of cultivated material: Colombia. Valle: old road from Cali to Buenaventura, below La Elsa, 30 Apr. 1972, *Wiehler et al.* 7261.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Paradrymonia tylocalyx Wiehler, Selbyana 5(1): 58, pl. 13D. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1691, 13 May 1975, *H. Wiehler* 75271 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, COL, F, K, NY, US, VALLE). Origin of cultivated material: Colombia. Valle: old road from Cali to Buenaventura, below La Elsa, 30 Apr. 1972, *Wiehler et al.* 7253.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Parakohleria abunda Wiehler, Selbyana 5(1): 5, pl. 1A. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2405, 11 Dec. 1977, *H. Wiehler* 77129 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, NY, QCA, S, US). Origin of cultivated material: Ecuador. Morona-Santiago: Cordillera de Cutucú, western slopes along a trail from Logroño to Yaupi, Nov. 1976, *Madison et al.* 3194.

ACTUAL TYPE DISTRIBUTION: HOLOTYPE LOST; LECTOTYPE here designated from extant isotype specimens: Lectotype: SEL; isolectotypes: K, QCA, US.

Basionym of *Pearcea abunda* (Wiehler) L.P. Kvist & L.E. Skog, Smithson. Contr. Bot. 84: 20. 1996.

The holotype of *Parakohleria abunda*, *H. Wiehler* 77129, was lost in the mail when a loan of specimens was being returned to SEL from US. An extant isotype at SEL is thus selected as lectotype, with the other known isotypes at K, QCA, and US becoming isolectotypes.

Parakohleria hispidissima Wiehler, Selbyana 5(1): 6, pl. 1B. 1978. **TYPE:** Ecuador. Pastaza: 4 km E of Puyo on road to Veracruz, 31 Jul. 1971, *H. Wiehler* 7176 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: US, NY, K, SEL).

ACTUAL TYPE DISTRIBUTION: NOT FOUND; NEOTYPE here designated: Ecuador. Pastaza: Cantón Puyo. Parroquia Veracruz. La Esperanza (Siguin); Finca Salina (de Hilda Perez). Premontane wet forest, km 14 on the Puyo-Macas road, 800–1000 m, 01°32'40"S, 077°53'53"W, 24 Jun. 2003, *J.L. Clark & J. Katzenstein* 8300 (Holotype: QCNE; isotypes: AAU, COL, F, GH, K, MO, NY, P, QCA, SEL, SRP, US, USM, VEN, WU).

FIGURE 6.



FIGURE 6. *Parakohleria hispidissima*. Isoneotype at US.

Basionym of *Pearcea hispidissima* (Wiehler) L.P. Kvist & L.E. Skog, Smithson. Contr. Bot. 84: 29. 1996.

The only known specimen of type material of *Parakohleria hispidissima* was lost in the mail on return to SEL from US along with paratypes cited in the original publication. No other examples of the type collection are known to exist. Thus, the neotype has been selected from appropriate material, collected from near the type locality.

Parakohleria vinicolor Wiehler, Selbyana 5(1): 9, pl. 1D. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. G-489, 20 Jul. 1975, H. Wiehler 75266 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL). Origin of cultivated material: Peru. Loreto: Boquerón del Padre Abad, between Divisoria and Aguaytia, 30 Apr. 1960, H.E. Moore et al. 8387.

ACTUAL TYPE DISTRIBUTION: NOT FOUND; **LECTOTYPE** here designated: Wild collection cited above, H.E. Moore et al. 8387 (Lectotype: US; isolectotypes: BH, GH, USM).

Synonym of *Pearcea sprucei* (Britton) L.P. Kvist & L.E. Skog according to L.P. Kvist & L.E. Skog, Smithson. Contr. Bot. 84: 40. 1996.

The only example of the type collection, Wiehler 75266, was lost in the mail. However, the wild collection that was the origin of cultivated material and cited in the protologue is extant and thus designated as the lectotype.

Pearcea gracilis L.P. Kvist & L.E. Skog, Smithson. Contr. Bot. 84: 27, fig. 17. 1996. **TYPE:** Ecuador. Morona-Santiago; 9–10 km SE of San Juan Bosco, 27 Jan. 1987, A.H. Gentry, C. Bonifaz & J. Loor C. 30865 (Holotype: QCA; isotypes: K, MO, NY, SEL).

Pentadenia angustata Wiehler, Selbyana 2(1): 118, pl. 33C. 1977. **TYPE:** Colombia. Valle: old road from Cali to Buenaventura, 8 km past La Elsa, 30 Apr. 1972, H. Wiehler, R.L. Dressler & N.H. Williams 7276 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: COL, K, MO, NY, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL. Basionym of *Columnea angustata* (Wiehler) L.E. Skog according to L.E. Skog, Ann. Missouri Bot. Gard. 65: 844. [1978] 1979.

Pentadenia byrsina Wiehler, Selbyana 2(1): 119, pl. 33D. 1977. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2138, 17 Jul. 1977, H. Wiehler 77122 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: COL, K, NY, QCA, S, US). Origin of cultivated material: Ecuador. Napo: woods near Baeza; seed collected in Dec. 1974, Dressler et al. s.n.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL. Basionym of *Columnea byrsina* (Wiehler) L.P. Kvist & L.E. Skog, Allertonia 6: 384. 1993.

Pentadenia colombiana Wiehler, Selbyana 2(1): 120, pl. 34A. 1977. **TYPE:** Colombia. Valle: along Río Dagua, near Buenaventura, on old road from Buenaventura to Cali, 1 May 1972, H. Wiehler et al. 72130 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, COL, F, K, MO, NY, P, S, U, US, W).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL. Basionym of *Columnea colombiana* (Wiehler) L.P. Kvist & L.E. Skog, Allertonia 6: 385. 1993.

Pentadenia crassicaulis Wiehler, Selbyana 2(1): 122, pl. 34B. 1977. **TYPE:** Colombia. Na-

riño: near Ricaurte, at km 79 on road from Túquerres to Tumaco, along Río Gaubo, 9 May 1972, *H. Wiehler & N.H. Williams* 72185 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: COL, K, MO, NY, S, U, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL. Basionym of *Columnea crassicaulis* (Wiehler) L.P. Kvist & L.E. Skog, Allertonia 6: 385. 1993.

Pentadenia ecuadorana Wiehler, Selbyana 2(1): 82, pl. 25D. 1977. **TYPE:** Ecuador. Pastaza: Puyo, on trees surrounding Hotel Turingia, 30 Jul. 1971, *H. Wiehler* 7163 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: B, GH, K, MO, NY, QCA, S, U, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL. Basionym of *Columnea ecuadorana* (Wiehler) L.E. Skog, Taxon 33: 126. 1984 and synonym of *Columnea angustata* (Wiehler) L.P. Kvist & L.E. Skog, Allertonia 6: 384. 1993.

Pentadenia katzensteiniae ['katzensteinii'] Wiehler, Phytologia 73(3): 235. 1992 [see also: Gesneriana 1: 75, fig. 23. 1995]. **TYPE:** Ecuador. Morona-Santiago; about 60 km from Limón S to Gualauiza, 21 Apr. 1988, *H. Wiehler & GRF Expedition* 88128 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: QCA, F, K, MO, NY, US).

ACTUAL TYPE DISTRIBUTION: Holotype: QCA; isotypes: COL, F, K, MO, NY, SEL, US. Basionym of *Columnea katzensteiniae* (Wiehler) L.P. Kvist & L.E. Skog, Novon 7: 413. 1997.

The specific epithet suffix of *Pentadenia katzensteiniae* has been corrected to reflect the gender of the person for whom the species is named, Jeanne Katzenstein, a participant in the GRF Expeditions.

Pentadenia manabiana Wiehler, Phytologia 73(3): 236. 1992 [see also: Gesneriana 1: 75, fig. 24. 1995]. **TYPE:** Type collection made from greenhouse-grown plant cultivated at GRF accession no. G-2462, 8 Jul. 1987, *H. Wiehler* 87102 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: QCA, B, F, HBG, K, MO, NY, SEL, U, US). Origin of cultivated material: Ecuador. Manabí: km 67 on road from Chone to Santo Domingo, 31 Jul. 1977, *C.H. Dodson* 6791.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL. Basionym of *Columnea manabiana* (Wiehler)

J.F. Smith & L.E. Skog, Novon 3: 189. 1993.

Pentadenia orientandina Wiehler, Selbyana 2(1): 123, pl. 34D. 1977. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2273, 20 Jul. 1977, *H. Wiehler* 77123 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, F, GH, K, MO, NY, P, QCA, S, U, US). Origin of cultivated material: Ecuador. Morona-Santiago: Cordillera de Cutucú, 25 km SE of Logroño, 15 Jan. 1976, *M.T. Madison & F.R. Coleman* 2537.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotype: US. Basionym of *Columnea orientandina* (Wiehler) L.P. Kvist & L.E. Skog, Allertonia 6: 392. 1993.

Pentadenia rileyi Wiehler, Phytologia 73(3): 236. 1992 [see also: Gesneriana 1: 79, fig. 25. 1995]. **TYPE:** Ecuador. Napo: 37 km from Baeza on road to Lago Agrio, 24 Apr. 1986, *H. Wiehler & GRF Expedition* 86243 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: QCA, F, K, MO, NY, SEL, U, US).

ACTUAL TYPE DISTRIBUTION: Holotype: QCA; isotypes: COL, F, K, MO, NY, SEL, U, US. Basionym of *Columnea rileyi* (Wiehler) J.F. Smith, Syst. Bot. Monogr. 44: 68. 1994.

Pentadenia rubriacuta Wiehler, Phytologia 73(3): 237. 1992 [see also: Gesneriana 1: 81, fig. 26. 1995]. **TYPE:** Type collection made from greenhouse-grown plant cultivated at GRF accession no. G-3200, 8 Jul. 1990, *H. Wiehler* 90175 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: B, F, HBG, K, MO, NY, QCA, SEL, U, US). Origin of cultivated material: Ecuador. El Oro: road Loja-Santa Rosa, ca. 20 km past Piñas, 17 Apr. 1986, *H. Wiehler & GRF Expedition* 8648.

ACTUAL TYPE DISTRIBUTION: NOT FOUND; **LECTOTYPE** here designated: Wild collection cited above, *Hans Wiehler & GRF Expedition* 8648 (Lectotype: QCA; isolectotypes: F, HBG, K, MO, NY, SEL, U, US). Basionym of *Columnea spathulata* Mansfeld according to L.E. Skog & L.P. Kvist, Novon 7: 415. 1997.

None of the type specimens of *Pentadenia rubriacuta* were located. The wild collection that is the origin of cultivated material is thus selected as the lectotype.

Pentadenia tandapiana Wiehler, Phytologia 73(3): 238. 1992 [see also: Gesneriana 1: 84, fig. 27. 1995]. **TYPE:** Ecuador. Pichincha: 7 km from San Miguel de los Bancos on road to Mindo, 30 Apr. 1990, H. Wiehler & GRF Expedition 90133 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: QCA, US).

ACTUAL TYPE DISTRIBUTION: Holotype: QCA; isotypes: SEL, US.

Basionym of *Columnea tandapiana* (Wiehler) L.E. Skog & L.P. Kvist, Novon 7: 414. 1997.

Pentadenia zapotalana Wiehler, Selbyana 2(1): 85, pl. 26B. 1977. **TYPE:** Ecuador. Los Ríos: Nuevo Zapotal, 2 km N of Ventanas, ca. 20 km S of Quevedo, 20 Jun. 1971, H. Wiehler et al. 71312 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, MO, NY, QCA, S, U, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: COL, F, MO, NY, QCA, S, U, US.

Basionym of *Columnea zapotalana* (Wiehler) L.E. Skog, Taxon 33: 126. 1984 and synonym of *Columnea microsepalata* (C.V. Morton) L.P. Kvist & L.E. Skog, Allertonia 6: 391. 1993.

Phinaea ecuadoriana Wiehler, Gesneriana 1: 84, fig. 28. 1995. **TYPE:** Ecuador. El Oro: along road from Loja to Santa Rosa, 20 km past Piñas, 17 Apr. 1986, H. Wiehler & GRF Expedition 8652 (PUBLISHED TYPE DISTRIBUTION: Holotype: QCNE; isotypes: B, E, GES, K, MO, NY, QCA, SEL, US).

ACTUAL TYPE DISTRIBUTION: Holotype: QCNE; isotypes: B, E, K, MO, NY, QCA, SEL, US.

Phinaea macrophylla Wiehler, Gesneriana 1: 86, fig. 29. 1995. **TYPE:** Colombia. Antioquia: road Medellín-Bogotá, at Refugio Ecológico del Cañón del Río Claro, a tributary of Río Magdalena, 21 Nov. 1986, H. Wiehler 86299 (PUBLISHED TYPE DISTRIBUTION: Holotype: HUA; isotypes: COL, GES, NY, US).

ACTUAL TYPE DISTRIBUTION: Holotype: HUA; isotypes: COL, K, NY, SEL, US.

Reldia alternifolia Wiehler, Selbyana 2(1): 124, pl. 35A. 1977. **TYPE:** Panama. Panamá: El Llano-Cartí highway, about 17 km n of El Llano, 16 Jan. 1974, R.L. Dressler 4540 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: K, MO, SEL, US).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: AAU, CR, K, MO, NY, PMA, SEL, US.

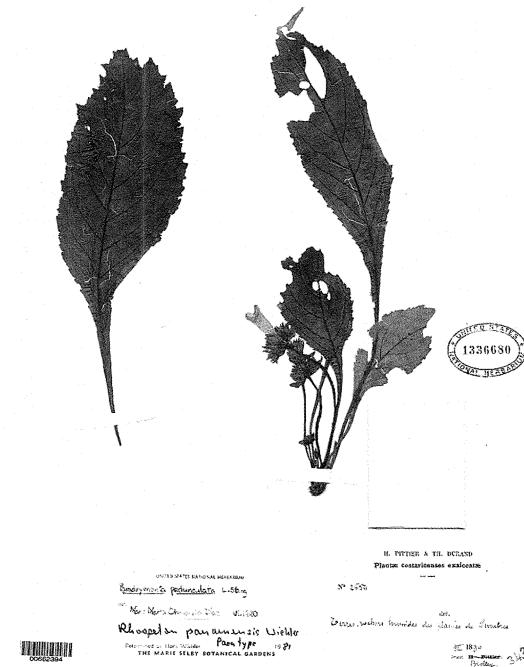


FIGURE 7. *Rhoogiton panamensis*. Neotype at US.

Reldia veraguensis Wiehler, Selbyana 2(1): 127, pl. 35B. 1977. **TYPE:** Panama. Veraguas: between third branch of Río Santa María and continental divide, 13–14 km NW of Santa Fé, 16 Nov. 1974, R.L. Dressler 4831 (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL. Basionym of *Reldia minutiflora* (L.E. Skog) L.P. Kvist & L.E. Skog var. *veraguensis* (Wiehler) L.P. Kvist & L.E. Skog, Nordic J. Bot. 8: 609. 1987.

Rhoogiton panamensis Wiehler, Phytologia 73(3): 239. 1992 [see also: Gesneriana 1: 88, fig. 30. 1995]. **TYPE:** Type collection made from greenhouse-grown plant cultivated at GRF, accession no. G-2633, 8 Jul. 1985, H. Wiehler 8536 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: PMA, K, MO, NY, SEL, US). Origin of cultivated material: Panama. Coclé: La Mesa; Jun. 1978, Dressler s.n.

ACTUAL TYPE DISTRIBUTION: NOT FOUND; NEOTYPE here designated: Costa Rica. "Terres, roches humides des plaines de Surubres," Jul. 1890, H. Pittier & H.T. Durand 2654 [Bolley 343] (Neotype: US; Iso-neotype: BR).

FIGURE 7.

Synonym of *Paradrymonia pedunculata* L.E. Skog according to L.E. Skog & L.P. Kvist, Novon 7: 416. 1997.

No sheets of the type collection have been located. The additional specimen cited in the 1995 *Gesneriana* discussion of this species is, however, at US with a presumed duplicate at BR. This specimen is thus designated as the neotype. At US, the sheet is numbered 2654 near the top of the label, below the names H. Pittier & H.T. Durand, "legit H. Pittier" has been crossed and Biolley is written in, in association with the number 343. It is not clear who is[are] the collector[s]. Wiehler notes the specimen at US as "Biolley 343 or Pittier & Durand 2654." The sheet at BR labelled "Biolley 2654" is undoubtedly part of the same gathering. The Pittier field books at US show his number 2654 to be a different plant.

Rhytidophyllum acunae C.V. Morton, Brittonia 9(1): 23. 1957. **TYPE:** Cuba. Oriente: Montecristo, Eastern-most part of the province, 15, 16 Jan. 1956, C.V. Morton & Bro. Alain [H. Liogier] 9181 (PUBLISHED TYPE DISTRIBUTION: Holotype: US; isotypes: BM, GH, US).

ACTUAL TYPE DISTRIBUTION: Holotype: US; isotypes: BM, GH, SEL.

Rufodorsia intermedia Wiehler, Selbyana 1(2): 144, fig. 3. 1975. **TYPE:** Panama. Coclé: hills N of El Valle de Anton, 14 Aug. 1971, H. Wiehler & R.L. Dressler 71249 (PUBLISHED TYPE DISTRIBUTION: Holotype: US; isotypes: B, BR, F, GH, HBG, K, L, LE, M, MO, NY, P, PMA, SEL, UC).

ACTUAL TYPE DISTRIBUTION: Holotype: US; isotypes: BR, MO, NY, PMA, SEL.

Rufodorsia major Wiehler, Selbyana 1(2): 140, fig. 1. 1975. **TYPE:** Panama. Panamá: Cerro Jefe, ca. 20 km N of Tocumen, 11 Aug. 1971, H. Wiehler & R.L. Dressler 71176 (PUBLISHED TYPE DISTRIBUTION: Holotype: US; isotypes: B, BR, CR, F, GH, HBG, K, L, LE, MO, NY, P, PMA, SEL, UC).

ACTUAL TYPE DISTRIBUTION: Holotype: US; isotypes: BR, HBG, MO, NY, P, PMA, SEL.

Rufodorsia minor Wiehler, Selbyana 1(2): 142, fig. 2. 1975. **TYPE:** Panama. Panamá: Cerro Jefe, ca. 20 km N of Tocumen, 11 Aug. 1971, H. Wiehler & R.L. Dressler 71175 (PUBLISHED TYPE DISTRIBUTION: Holotype: US; isotypes: B, BR, CR, F, GH, HBG, K, L, LE, MO, NY, P, PMA, SEL, UC).

ACTUAL TYPE DISTRIBUTION: Holotype: US; isotypes: BR, COL, HBG, MO, NY, P, PMA, SEL.

Sinningia harleyi Wiehler & A. Chautems, Candollea 46: 414, fig. 2. 1991. **TYPE:** Brazil. Bahia: Jussiape, proximo da cidade de Rio de Contas, cachoeira da Fraga, 11 Feb. 1991, A.M. de Carvalho & A. Chautems 3235 (PUBLISHED TYPE DISTRIBUTION: Holotype: CEPEC; isotypes: G, GES, US).

ACTUAL TYPE DISTRIBUTION: Holotype: CEPEC; isotypes: G, R, SEL, US.

Smithiantha aurantiaca Wiehler, Gesneriana 1: 90, fig. 31. 1995. **TYPE:** Type collection made from greenhouse-grown plant cultivated at GRF, accession no. G-3878, 8 Jul. 1995, H. Wiehler 95159 (PUBLISHED TYPE DISTRIBUTION: Holotype: MEXU; isotypes: GES, BH, K, NY, SEL, US). Origin of cultivated material: Mexico. Oaxaca: Uxpanapan, near Matias Romero and Rte. 185 (also found near Veracruz state border), seed collected Feb. 1994, A. Lau 9410002.

ACTUAL TYPE DISTRIBUTION: Holotype: MEXU; isotypes: SEL, US.

Smithiantha canarina Wiehler, Phytologia 73(3): 239. 1992 [see also: *Gesneriana* 1: 90, fig. 32. 1995]. **TYPE:** Type collection made from greenhouse-grown plant cultivated at GRF, accession no. G-3584, 6 Dec. 1991, H. Wiehler 91240 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: BH, K, MEXU, NY, SEL, US). Origin of cultivated material: Mexico. Oaxaca; area of Temaxcal near dam overflow of Presa Miguel Alemán, rhizomes collected, 24 Apr. 1991, H. Wiehler et al. 9105.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Smithiantha laui Wiehler, Phytologia 73(3): 240. 1992 [see also: *Gesneriana* 1: 92, fig. 33. 1995]. **TYPE:** Type collection made from greenhouse-grown plant cultivated at GRF, accession no. G-3588, 6 Dec. 1991, H. Wiehler 91241 (PUBLISHED TYPE DISTRIBUTION: Holotype: GES; isotypes: BH, K, MEXU, NY, SEL, US). Origin of cultivated material: Mexico. Oaxaca; about halfway between Valle Nacional and Oaxaca on road #75, 25 Apr. 1991, H. Wiehler et al. 9117.

ACTUAL TYPE DISTRIBUTION: NOT FOUND; LECTOTYPE here designated: Mexico. Oaxaca; on road Valle Nacional-Oaxaca between km 69–70, 25 Apr. 1991, H. Wiehler & GRF Expedition 9117 (Lectotype: MEXU; isolectotypes: K, NY, SEL, US).

No specimens of the type collection were found. The wild source of the cultivated material, Wiehler *et al.* 9117, is extant and thus designated here as the lectotype.

Trichantha angustifolia Wiehler, Selbyana 7(2–4): 336, pl. 3A. 1984. **TYPE:** Type specimen made from greenhouse-grown plant cultivated as MSBG, accession no. W-2816, 10 Nov. 1980, *H. Wiehler 80202* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL). Origin of cultivated material: Ecuador. Pastaza; vicinity of Puyo, garden of Hotel Turingia in Puyo, 1 May 1979, *H. Wiehler & D. Masterson 79201*.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Columnea elongatifolia L.P. Kvist & L.E. Skog, Allertonia 6: 373, 1993, is a replacement name for *Trichantha angustifolia* Wiehler (not *Columnea angustifolia* (DC.) O. Kuntze, a different species) when the species is transferred to *Columnea*.

Trichantha brenneri Wiehler, Selbyana 1(1): 40, fig. 3. 1975. **TYPE:** Type collection made from greenhouse-grown plant cultivated at University of Miami, accession no. W-1501, 3 Aug. 1972, *H. Wiehler 72335* (PUBLISHED TYPE DISTRIBUTION: Holotype: US; isotype: SEL). Origin of cultivated material: Ecuador. Napo: garden of Hotel Turingia in Puyo, 30 Jul. 1971, *H. Wiehler 7178*.

ACTUAL TYPE DISTRIBUTION: Holotype: US; isotype: SEL.

Basionym of *Columnea brenneri* (Wiehler) B.D. Morley, Garden (London) 100: 438. 1975.

Trichantha ciliata Wiehler, Selbyana 2(1): 129, pl. 36B. 1977. **TYPE:** Ecuador. Pichincha: road from Allurquin to Chiriboga, 20 Apr. 1977, *M.T. Madison 4065* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL. Basionym of *Columnea ciliata* (Wiehler) L.P. Kvist & L.E. Skog, Allertonia 6: 372. 1993.

Trichantha citrina Wiehler, Selbyana 5(1): 92, pl. 4D. 1978. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2451, 21 Nov. 1978, *H. Wiehler 78169* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, F, K, MO, NY, PMA, US). Origin of cultivated material: Panama. Darién: Cerro Pirre, Jul. 1977, *R.L. Dressler s.n.*

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, F, K, MO, NY, PMA, US.

= *Columnea citriflora* L.E. Skog, **nom. nov.** (basionym: *Trichantha citrina* Wiehler, Selbyana 5(1): 92, pl. 4D. 1978), not *Columnea citrina* C.V. Morton, Ann. Missouri Bot. Gard. 29:44. 1942 [= *Columnea kalbreyeriana* Masters].

Trichantha dodsonii Wiehler, Selbyana 7(2–4): 338, pl. 3B. 1984. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-2983, 10 Nov. 1980, *H. Wiehler 80201* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL). Origin of cultivated material: Ecuador. Morona-Santiago: N of Gualاقiza, hill near Río Calagras, 19 Sep. 1980, *C.H. Dodson et al. 10564*.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.

Columnea flexiflora L.P. Kvist & L.E. Skog, Allertonia 6: 375, 1993, is a replacement name for *Trichantha dodsonii* Wiehler (not *Columnea dodsonii* Wiehler, a different species) when the species is transferred to *Columnea*.

Trichantha filifera Wiehler, Selbyana 2(1): 130, pl. 36C. 1977. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1631, 23 Jul. 1977, *H. Wiehler 77127* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL). Origin of cultivated material: Colombia. Valle: Old road from Cali to Buenaventura, about 10 km beyond Queremal, on path down to Río Anchicayá, no date, *H. Wiehler 7286*.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotype: COL.

= *Columnea filamentosa* L.E. Skog, **nom. nov.** (basionym: *Trichantha filifera* Wiehler, Selbyana 2(1): 130, pl. 36C. 1977), not *Columnea filifera* (Wiehler) L.E. Skog & L.P. Kvist, Novon 7: 413. 1997.

Trichantha pulchra Wiehler, Selbyana 2(1): 132, pl. 36D. 1977. **TYPE:** Type collection made from greenhouse-grown plant cultivated at MSBG, accession no. W-1910, 11 May 1975, *H. Wiehler 75267* (PUBLISHED TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, BM, GH, F, K, MO, NY, P, PMA, S, U, US, W). Origin of cultivated material: Panama. Panamá: about 19 km N of El Llano, El Llano-Carti highway, 10 Mar. 1973, *R.L. Dressler 4300*.

ACTUAL TYPE DISTRIBUTION: Holotype: SEL; isotypes: BH, C, F, GH, HBG, K, MO, NY, P, S, UC, US.

Basionym of *Columnea pulchra* (Wiehler)
L.E. Skog, Ann. Missouri Bot. Gard.: 879.
1979.

Trichantha tenella Wiehler, Gesneriana 1: 95,
fig. 34. 1995. **TYPE:** Ecuador. Carchi: Mal-
donado, 2 km E of town, on boulders along
Río San Juan, 19 Apr. 1993, H. Wiehler &
GRF Expedition 93129 (PUBLISHED TYPE
DISTRIBUTION: Holotype: GES).

ACTUAL TYPE DISTRIBUTION: Holotype: SEL.
Synonym of *Columnea tenella* L.P. Kvist &
L.E. Skog, Allertonia 6: 380. 1993. For a
discussion of the relationship of the two
names for this taxon, see Novon 7: 416.
1997.

Trichantha tenensis Wiehler, Selbyana 1(1):
39, fig. 2. 1975. **TYPE:** Type collection
made from greenhouse-grown plant cul-
tivated at University of Miami, accession no.
W-1584, 11 Mar. 1973, H. Wiehler 7318
(PUBLISHED TYPE DISTRIBUTION: Holotype:
US; isotype: SEL). Origin of cultivated ma-
terial: Ecuador. Napo: above Misión Evan-
gelica, past Hacienda Dos Ríos, about 4 km
N of Tena, 1971, H. Wiehler 71122a.

ACTUAL TYPE DISTRIBUTION: Holotype: US;
isotypes: F, GH, K, NY, QCA, S, SEL, U,
US.

Basionym of *Columnea tenensis* (Wiehler)
B.D. Morley, Garden (London) 100: 438.
1975.

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