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Novae Gesneriaceae Neotropicarum VII: New Combinations

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ABSTRACT. Study of Gesneriaceae for the Flora of Ecuador and the Catalogue of the Vascular Plants of Ecuador has shown that some recently published new species need to be transferred with new combinations in Columnea: C. filifera, C. katzensteinii, C. mastersonii, C. medicinalis, C. ornata, and C. tandapiana, or included as synonyms of previously published species.

In early 1993 we published a revision of the genus Columnea for Ecuador (Kvist & Skog, 1993). While the 1993 paper was delayed in press by the unfortunate occurrence of Hurricane Iniki in Hawaii, another paper appeared (Wiehler, 1992) that dealt in part with some of the same species that we were describing as new, with names for some of these species under generic names that we consider to be synonyms of Columnea. Therefore, we are here making new combinations for some of the species published in 1992 just prior to our publication. In 1995 additional new species of Columnea and other genera were published by Wiehler, along with further discussion and citation of additional specimens for some of the species published as new in his 1992 paper. We are here making new transfers into Columnea for some of the species occurring in Ecuador and nearby countries published by Wiehler in 1992 and 1995. In most cases we have not seen the holotypes or isotypes because so far as we can determine the specimens have not yet been distributed from GES. However, some of the specimens that we cite as types or representative material in our 1993 paper were cited by Wiehler in his 1992 and 1995 papers. In addition, some of the specimens Wiehler cited in his papers we had also seen. For some of the other species of which we have not seen the types, we are confident from our reading of the descriptions that the species described belong to Columnea or other genera and are here making the transfers or new combinations.

Still other species from these papers require future study before we can determine their status.

Some of the new species published by Wiehler in 1992 had been transferred to *Columnea* in the interim before the 1995 papers appeared. However, no mention is made by Wiehler (1995a, 1995b) of the new species or combinations published in 1993 by Smith and Skog or in 1994 by Smith.

Columnea filifera (Wiehler) L. E. Skog & L. P. Kvist, comb. nov. Basionym: Dalbergaria filifera Wiehler, Phytologia 73: 224. 1992; Gesneriana 1: 39. 1995. TYPE: Ecuador. Esmeraldas: near new road from Lita and Alto Tambo towards San Lorenzo, Wiehler & GRF Expedition 9033 (holotype, GES not seen; isotypes, QCA, US none seen).

Columnea fililoba L. P. Kvist & L. E. Skog, Allertonia 6: 356. 1993. TYPE: Ecuador. Carchi: San Marcos, Kvist, Barfod & Nissen 48997 (holotype, AAU; isotypes, QCA, QCNE, US).

Wiehler (1995a: 39) included our 1993 species as a synonym under his *Dalbergaria filifera*. We agree that the species are synonymous and are therefore making a new combination in *Columnea*.

Columnea katzensteinii (Wiehler) L. E. Skog & L. P. Kvist, comb. nov. Basionym: Pentadenia katzensteinii Wiehler, Phytologia 73: 235. 1992; Gesneriana 1: 75. 1995. TYPE: Ecuador. Morona-Santiago: Cordillera del Boliche, ca. 60 km from Limón, Wiehler & GRF Expedition 88128 (holotype, GES not seen; isotypes, F, K, MO, NY, QCA, US none seen).

Columnea lavandulacea L. P. Kvist & L. E. Skog, Allertonia 6: 387. 1993. TYPE: Ecuador. Pichincha: Quito-Santo Domingo de los Colorados road, Kvist & Barfod 49066 (holotype, AAU).

Duplicates of a specimen cited by Wiehler (1995a: 75) were seen and cited by us as paratypes

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(Steyermark 52572 (F, MO, US)) of Columnea lavandulacea, which he cited as a synonym of Pentadenia katzensteinii. We agree that the species are the same and are here making a new combination in Columnea.

Columnea mastersonii (Wiehler) L. E. Skog & L. P. Kvist, comb. nov. Basionym: Dalbergaria mastersonii Wiehler, Phytologia 73: 225. 1992; Gesneriana 1: 43. 1995. TYPE: Ecuador. Pichincha: cloud forest of Tandápi, near village of Cornejo Astorga (Tandápi), Wiehler & Masterson 7968 (holotype, GES not seen; isotypes, SEL, NY not seen, QCA not seen, U not seen, US not seen).

Columnea cinerea L. P. Kvist & L. E. Skog, Allertonia 6: 351. 1993. TYPE: Ecuador. Pichincha: along Río Guayllabamba, Nuevo Azuay, Holm-Nielsen, Jaramillo & Coello 24587 (holotype, AAU; isotype, US).

Some specimens cited by Wiehler (1995a: 43) were seen and cited by us as paratypes: Gentry & Schupp 26651 (MO, US). In addition, Columnea cinerea was included as a synonym of Dalbergaria mastersonii by Wiehler (1995a). We saw an isotype of D. mastersonii from SEL and had included it as a paratype in our paper in 1993, therefore we are making a new combination in Columnea.

Columnea medicinalis (Wiehler) L. E. Skog & L. P. Kvist, comb. nov. Basionym: Dalbergaria medicinalis Wiehler, Phytologia 73: 226. 1992; Gesneriana 1: 45. 1995. TYPE: Ecuador. Pichincha: above Chiriboga, on old road from Quito to Santo Domingo, Wiehler & GRF Expedition 88215 (holotype, GES not seen; isotypes, K, MO, NY, QCA, SEL, US none seen).

Columnea densibracteata L. P. Kvist & L. E. Skog, Allertonia 6: 352. 1993. TYPE: Ecuador. Azuay: Chacanceo-Molleturo road, between Río Blanco and Río Norcay, Steyermark 52826 (holotype, US; isotype, F).

Some of the specimens cited by Wiehler (1995a: 45) had already been included by us either as the type of *Columnea densibracteata* (Steyermark 52826) or as paratypes: Mexia 8412 (MO, U, US). Our species, Columnea densibracteata, was included as a synonym of Dalbergaria medicinalis by Wiehler.

Columnea ornata (Wiehler) L. E. Skog & L. P. Kvist, comb. nov. Basionym: Dalbergaria ornata Wiehler, Phytologia 73: 227. 1992; Gesneriana 1: 47. 1995. TYPE: Cultivated material grown in GRF greenhouses as G-2665 from live material collected in Costa Rica by

John Hall in 1979, Wiehler 87105 (holotype, GES not seen; isotypes, CR, SEL none seen).

Although Columnea ornata is not from Ecuador, examination of specimens cited by Wiehler (1995a: 47) as additional material (Skutch 4780 (F, US)) shows this species to be Columnea, and we make a new combination in Columnea here. An additional collection near the site of the Skutch collection at ca. 1 mile beyond the divide between San Isidro del General and the coastal town of Dominical, 900 m, Prov. San José, Costa Rica, Croat 35314 (MO, US) is this same species.

Columnea tandapiana (Wiehler) L. E. Skog & L. P. Kvist, comb. nov. Basionym: Pentadenia tandapiana Wiehler, Phytologia 73: 238. 1992; Gesneriana 1: 84. 1995. TYPE: Ecuador. Pichincha: 7 km from San Miguel de los Bancos on road to Mindo, Wiehler & GRF Expedition 90133 (holotype, GES not seen; isotypes, QCA, US none seen).

Columnea inconspicua L. P. Kvist & L. E. Skog, Allertonia 6: 385. 1993. Pentadenia inconspicua (L. P. Kvist & L. E. Skog) Wiehler, Gesneriana 1: 122. 1995. TYPE: Ecuador. Pichincha: Tandápi, confluence between Río Tandápi with Río Pilatón, Sparre 17761 (holotype, S).

It is unclear to us what Wiehler intended to do with Columnea inconspicua for on p. 84 of his (1995a) publication the species was included as a synonym of Pentadenia tandapiana Wiehler, but on p. 122 (Wiehler, 1995b) the species was cited as the basionym of a new combination in Pentadenia. Since the holotype of Columnea inconspicua was included among specimens examined for Pentadenia tandapiana, we have included the synonym there.

Some of the names that appear in the 1992 and 1995 Wiehler publications will be included in the Flora of Ecuador, the Catalogue of the Vascular Plants of Ecuador, and elsewhere as synonyms of previously published taxa. We list these names below and comment on those taxa being included as heterotypic synonyms.

Columnea filipendula Wiehler, Phytologia 73: 222. 1992; Gesneriana 1: 33. 1995 = Columnea rubricaulis Standley, Field Mus. Publ. Bot. 17: 393. 1938.

Both Columnea filipendula and C. rubricaulis were originally described from nearby localities in Honduras, and it is remarkable that in the protologue Wiehler did not compare his new species with C. rubricaulis, instead comparing C. filipen-

dula with C. linearis Oersted from Costa Rica, and C. purpusii Standley and C. erythrophaea Decaisne both described from Mexico. The ternate leaves and slender pedicels of C. filipendula can also be seen in specimens of C. rubricaulis from Honduras and Nicaragua, and although no examples of the type specimen have been seen by us, no characters in the description of C. filipendula appear to distinguish the species from numerous collections of C. rubricaulis. The first author recently traveled to Honduras and saw C. rubricaulis in La Muralla National Park growing at a similar altitude and in a similar habitat as described for C. filipendula, reinforcing the belief that the species are synonymous.

- Dalbergaria albiflora (L. P. Kvist & L. E. Skog) Wiehler, Gesneriana 1: 121. 1995 ≡ Columnea albiflora L. P. Kvist & L. E. Skog, Allertonia 6: 348. 1993.
- Dalbergaria cappilosa [sic] (L. P. Kvist & L. E. Skog) Wiehler, Gesneriana 1: 121. 1995 ≡ Columnea capillosa L. P. Kvist & L. E. Skog, Allertonia 6: 349. 1993.
- Dalbergaria evolvens Wiehler, Phytologia 73: 223. 1992; Gesneriana 1: 37. 1995 = Columnea guttata Poeppig, in Poeppig & Endlicher, Nov. Gen. et Sp. Pl. 3: 1. 1840.

We have compared the description of Dalbergaria evolvens with the holotype of Columnea guttata (Poeppig D1481 at W), as well as other specimens of the species, and believe that D. evolvens falls within the limits of the older taxon. We had already in 1993 included as a synonym of C. guttata, D. madisonii Wiehler with which Wiehler compared his new species. Columnea guttata, like D. evolvens, has leaves with contrasting red tips, nearly sessile flowers with similar calyx lobes, and an unequal corolla limb, among other similar characters. Both species are known from Napo province in Ecuador, although C. guttata was originally described from Peru.

- Dalbergaria fuscihirta (L. P. Kvist & L. E. Skog) Wiehler, Gesneriana 1: 121. 1995 ≡ Columnea fuscihirta L. P. Kvist & L. E. Skog, Allertonia 6: 358. 1993.
- Dalbergaria gigantifolia (L. P. Kvist & L. E. Skog) Wiehler, Gesneriana 1: 121. 1995 ≡ Columnea gigantifolia L. P. Kvist & L. E. Skog, Allertonia 6: 360. 1993.
- Dalbergaria incredibilis (L. P. Kvist & L. E. Skog)
 Wiehler, Gesneriana 1: 43. 1995 ≡ Columnea incredibilis L. P. Kvist & L. E. Skog, Nordic J. Bot. 8: 253. 1988.

- Dalbergaria longinervosa (L. P. Kvist & L. E. Skog) Wiehler, Gesneriana 1: 121. 1995 ≡ Columnea longinervosa L. P. Kvist & L. E. Skog, Allertonia 6: 363. 1993.
- Dalbergaria nematoloba (L. P. Kvist & L. E. Skog) Wiehler, Gesneriana 1: 121. 1995 ≡ Columnea nematoloba L. P. Kvist & L. E. Skog, Brittonia 44: 479. 1992.
- Dalbergaria purpurimarginata (L. P. Kvist & L. E. Skog) Wiehler, Gesneriana 1: 121. 1995 ≡ Columnea purpurimarginata L. P. Kvist & L. E. Skog, Allertonia 6: 365. 1993.
- Dalbergaria rubribracteata (L. P. Kvist & L. E. Skog) Wiehler, Gesneriana 1: 122. 1995 ≡ Columnea rubribracteata L. P. Kvist & L. E. Skog, Allertonia 6: 368. 1993.
- Dalbergaria variabilis Wiehler, Gesneriana 1: 51.
 1995 = Columnea rubriacuta (Wiehler) L. P.
 Kvist & L. E. Skog, Allertonia 6: 367. 1993.

Although we have seen neither the type specimens of *Dalbergaria variabilis*, nor some of the additional specimens examined cited with this species as being at US (apparently not yet distributed from GES), a few that were cited had been seen by us and annotated before our 1993 publication as *Columnea rubriacuta*. Based on the specimens we have seen and the description of *D. variabilis*, we believe that this species is a synonym of *C. rubriacuta*.

- Pentadenia ovatifolia (L. P. Kvist & L. E. Skog) Wiehler, Gesneriana 1: 122. 1995 ≡ Columnea ovatifolia L. P. Kvist & L. E. Skog, Allertonia 6: 393. 1993.
- Pentadenia hypocyrtantha Wiehler, Phytologia 73: 234. 1992; Gesneriana 1: 74. 1995 ≡ Columnea hypocyrtantha (Wiehler) J. F. Smith & L. E. Skog, Novon 3: 190. 1993.
- Pentadenia manabiana Wiehler, Phytologia 73:
 236. 1992; Gesneriana 1: 77. 1995 ≡ Columnea manabiana (Wiehler) J. F. Smith & L. E. Skog, Novon 3: 189. 1993.
- Pentadenia rileyi Wiehler, Phytologia 73: 236.
 1992; Gesneriana 1: 79. 1995 ≡ Columnea rileyi (Wiehler) J. F. Smith, Syst. Bot. Monogr. 44: 68. 1994.
- Pentadenia rubriacuta Wiehler, Phytologia 73: 237. 1992; Gesneriana 1: 81. 1995 (not Columnea rubriacuta L. P. Kvist & L. E. Skog) = Columnea spathulata Mansfeld, Notizbl. Bot. Gard. Berlin-Dahlem 14(121): 37. 1938.

Again, we have not seen any of the type specimens as they probably have not yet been distributed from GES. However, of the five collections cited as additional material examined for *Pentadenia*

rubriacuta, four of the collections had previously been seen by us, and were cited by Smith (1994) as representing Columnea spathulata.

Rhoogeton panamensis Wiehler, Phytologia 73: 239.
1992; Gesneriana 1: 88. 1995 = Paradrymonia pedunculata L. E. Skog, Brittonia 30: 325.
1978.

Living material of this taxon and source of the type specimens has been in cultivation since 1978. We have seen and identified living plants as Paradrymonia pedunculata, which has a range from eastern Costa Rica to southern Chocó in Colombia and is well within the range of the genus Paradrymonia. The genus Rhoogeton has a range apparently restricted to the Guayana highlands of Venezuela and Guyana. An additional specimen, "Biolley 343 or Pittier & Durand 2654," cited by Wiehler as being at US has not been found, but Biolley 2654 at BR, believed to be part of the same gathering, was seen and identified as Paradrymonia pedunculata.

- Trichantha fimbricalyx (L. P. Kvist & L. E. Skog)
 Wiehler, Gesneriana 1: 122. 1995 ≡ Columnea fimbricalyx L. P. Kvist & L. E. Skog, Allertonia 6: 373. 1993.
- Trichantha laevis (L. P. Kvist & L. E. Skog) Wiehler, Gesneriana 1: 122. 1995 ≡ Columnea laevis L. P. Kvist & L. E. Skog, Allertonia 6: 376. 1993.
- Trichantha minutiflora (L. P. Kvist & L. E. Skog)
 Wiehler, Gesneriana 1: 122. 1995 ≡ Columnea minutiflora L. P. Kvist & L. E. Skog, Allertonia 6: 379. 1993.
- Trichantha rubricalyx (L. P. Kvist & L. E. Skog)
 Wiehler, Gesneriana 1: 122. 1995 ≡ Columnea rubricalyx L. P. Kvist & L. E. Skog, Allertonia 6: 380. 1993.
- Trichantha tenella Wiehler, Gesneriana 1: 95. 1995
 = Columnea tenella L. P. Kvist & L. E. Skog,
 Allertonia 6: 380. 1993.

This last species requires some discussion and clarification as it has the same epithet as a previously described species of Columnea. Columnea tenella L. P. Kvist & L. E. Skog was published in 1993 as a new name for Trichantha gracilis Wiehler (Selbyana 7: 339. 1984), not Columnea gracilis (Martius) O. Kuntze [basionym: Hypocyrta gracilis Martius; = Codonanthe gracilis (Martius) Hanstein], since the epithet could not be transferred to Columnea. The new species, Trichantha tenella Wiehler, is based on a different type from Trichantha gracilis Wiehler and Columnea tenella L. P. Kvist & L. E. Skog. We believe Trichantha tenella Wiehler to be a synonym of our earlier Columnea tenella L. P. Kvist & L. E. Skog. Although we have not seen the holotype of Trichantha tenella Wiehler, one of the paratypes (Madison & Besse 7011 at SEL) is clearly Columnea tenella L. P. Kvist & L. E. Skog and was cited as such in 1993.

Finally, to prevent new combinations from being recorded incorrectly, we should note here that the following two combinations that appear as new (Wiehler, 1995a, b) had been published previously:

- Corytoplectus pulcher (N. E. Brown) Wiehler, Gesneriana 1: 37. 1995 [as comb. nov.] = Corytoplectus pulcher (N. E. Brown) Wiehler, Selbyana 5: 61. 1978.
- Paradrymonia longipetiolata (J. D. Smith) Wiehler, Gesneriana 1: 122. 1995 [as comb. nov.] = Paradrymonia longipetiolata (J. D. Smith) Wiehler, Selbyana 5: 54. 1978 ("longipedunculata").

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