

NOTES ON TIBOUCHINA AND CHARIANTHUS (MELASTOMATACEAE) IN THE LESSER ANTILLES

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FIVE SPECIES of *Tibouchina* are commonly recognized in the Lesser Antilles, but four of them are variously cited as to specific epithet and authors. The following notes are an attempt to clarify the nomenclature of the four species. The current typification of the genus *Charianthus* D. Don is in error, and a new combination is proposed for a second species.

***Tibouchina ornata* (Sw.) Baillon, Adansonia 12: 74. 1876.**

Melastoma ornata Sw. Prodr. 69. 1788 ("Jamaica," no specimens cited).

Rhexia strigosa Rich. Act. Soc. Hist. Nat. Paris 1: 108. 1792.

Rhexia inconstans Vahl, Eclog. 1: 37. 1796 (*nom. illeg.*).

Melastoma ciliata Desr. in Lam. Encycl. 4: 49. 1797 (*Badier*, Guadeloupe).

Osbeckia ornata (Sw.) Sw. Fl. Ind. Occ. 2: 647. 1798 (*Masson*, St. Kitts; *du Ponthieu*, Guadeloupe. Herb. Banks).

Rhexia ornata Rich. in Humboldt & Bonpland, Rhexies 69. t. 26. 1823.

Hephestionia strigosa Naud. Ann. Sci. Nat. ser. 3. 13: 36. 1849.

Chaetogastra strigosa DC. Prodr. 3: 134. 1828.

Pleroma strigosum Triana, Trans. Linn. Soc. 28: 47. 1871.

Pleroma ornatum Triana, *ibid.* t. 3, f. 31 p. 1871.

This species is generally known as *Tibouchina strigosa*, and the authority for the name has been cited in a great variety of ways. The plant involved was first described by Olaf Swartz in his *Prodromus*, and cited as from Jamaica, with no collector indicated. In a subsequent treatment in the *Flora Indiae Occidentalis*, Swartz referred to the *Prodromus* treatment, did not mention Jamaica, and cited collections by Masson on St. Kitts, and by du Ponthieu on Guadeloupe. Such specimens are preserved in the Banks Herbarium at the British Museum (Natural History), and several collections are mounted on one sheet and are numbered. The specimen labeled #1 is selected as the lectotype, being that of du Ponthieu from Guadeloupe in flowering condition.

The Swartz epithet *ornata* has been cited in synonymy by many authors, but has not been adopted for the species as is necessary. Baillon did make the combination *Tibouchina ornata*, but used the basionym *Pleroma ornatum* Triana. Triana had published the name *Pleroma strigosum* in the text of his treatment on the Melastomataceae, and cited in synonymy "Osbeckia ornata Tuz. Fl. Ind. Occ. 647," which is apparently a typographical error for Swartz, Fl. Ind. Occ. 647. In the explanation of the plates in the same work on page 162, Triana refers to *Pleroma ornatum* Tri. One can assume he was correcting the name used earlier in the text, and was using the Swartz name as a basionym.

The correct citation of name and authority is *Tibouchina ornata* (Sw.) Baillon.

This species has been collected on Montserrat, St. Kitts, Guadeloupe, and Dominica, within the Lesser Antilles. Cogniaux (DC. Monogr. Phan. 7: 267. 1891) also cites under *Tibouchina strigosa* collections from St. Vincent by Anderson and Masson, and from "Guiana anglica ad Demerara" by Parker. Gleason (Brittonia 1: 156. 1932) has already suggested the Parker specimen might be of a cultivated plant and not native to the Guianas. Alexander Anderson was the director of the botanic garden on St. Vincent (1783–1811) and might have had the species under cultivation there. Recent explorations of the Soufrière on St. Vincent, the logical location for the natural occurrence of the species, have failed to produce "*T. strigosa*," but quantities of *Tibouchina cistoides* instead. The vegetation of the summit area of the Soufrière was destroyed in the eruption of the volcano in 1902. It is possible that the species might have been eliminated in that eruption except for the fact that it has not been reported from Martinique, where perhaps the same situation prevails on the slopes of Mt. Pelée. Masson is known to have collected on St. Kitts where the species occurs today, but not on St. Vincent.

Tibouchina chamaecistus (Naud.) Cogn., DC. Monogr. Phan. 7: 267. 1891.

Hephestionia chamaecistus Naud. Ann. Sci. Nat. ser. 3. 13: 37. 1849.

Chaetogastra chamaecistus Griseb. Fl. Brit. W. I. Isl. 267. 1860.

The basionym for this combination is usually attributed to Grisebach, who cited the Naudin work at the generic level only. However, Naudin has used the specific epithet in his publication, and it is presumed that Grisebach implied a transfer and a new combination. The type specimen was collected by Mme. Rivoire on the slopes of Mt. Pelée in Martinique, the only known location for this species.

Tibouchina chironioides (Griseb.) Cogn., DC. Monogr. Phan. 7: 267. 1891.

Chaetogastra chironioides Griseb. Fl. Brit. W. I. Isl. 267. 1860.

Cogniaux made the combination indicated above; cited the species in his monograph; and referred to collections by Imray, Morris, Ramage, and to Eggers 714, all from Dominica. He did confuse subsequent workers, however, by also citing *Chaetogastra chironioides* Griseb. "part" in the synonymy of his *Tibouchina strigosa*. Karl Domin has already indicated (Acta Bot. Bohemica 9: 35. 1930) that Grisebach cited but a single collector, Imray, and although all of the Imray collections I have seen are clearly referable to this species, a specimen in the Gray Herbarium bears an old annotation in an unknown hand as "*Chaetogastra strigosa*."

Depauperate plants of *Tibouchina ornata* collected on Dominica led some scholars to associate *T. ornata* and *T. chironioides* as a single species,

judging from the annotations. The leaves of *Tibouchina ornata* are trinerved and ovate. The Imray collection, which is the type of *T. chironioides*, and such subsequent collections as Eggers 714, W. H. & B. T. Hodge 1860, Wilbur et al. 8244 all have narrowly lanceolate leaves 6–7 mm. long and rarely exceeding 1 mm. in width. *Tibouchina chironioides* appears to be endemic to Dominica at altitudes of 1900 to 2100 feet.

Tibouchina longifolia (Vahl) Baill. ex Cogn., DC. Monogr. Phan. 7: 264. 1891.

Rhexia longifolia Vahl, Eclog. 1: 39. 1796.

The author of this name is generally considered to be Baillon in Adansonia 12: 74. 1876, although other references and authors have been cited. Baillon did not make the combination, but only implied it, when he noted that *Pleroma* of Don should be included within a variable *Tibouchina*. For other species, such as *Tibouchina ornata* (Sw.) Baillon, he did cite a full basionym.

Pleroma longifolia Triana (Trans. Linn. Soc. 28: 45. t. 3, f. 31 n. 1871) is based on *Rhexia longifolia* Vahl. The correct basionym appears to be cited first by Cogniaux as indicated, although he attributed it to Baillon. For accuracy the authority should be cited as Baillon ex Cogniaux.

This species is reported to occur from Bolivia to Venezuela, in Central America, the Lesser Antilles, and the Greater Antilles. The type is a collection of von Rohr from "America meridionali," probably the Guianas.

The genus *Charianthus* was established by David Don (Mem. Wernerian Soc. 4: 327. 1823), at which time he cited three species, *C. coccineus* (L. C. Rich.) D. Don, *C. purpureus* D. Don, and *C. tinifolius* D. Don. In a monograph of the genus, W. H. Hodge (Contrib. Gray Herb. 135: 115–133. 1941) indicated the "type species" to be *Charianthus corymbosus* (L. C. Rich.) Cogniaux. Since this species was not within the original material cited by D. Don, it cannot stand as the lectotype of the genus, and accordingly I select *Charianthus purpureus* D. Don, which is based on *Melastoma coccinea* Vahl, Eclog. 1: 48. 1796, not L. C. Richard, Act. Soc. Hist. Nat. Paris 1: 109. 1792.

Charianthus alpinus (Sw.) R. A. Howard, comb. nov.

Melastoma alpina Sw. Prodr. 71. 1788; Fl. Ind. Occ. 2: 800. 1797.

Melastoma coccinea L. C. Rich. Act. Soc. Hist. Nat. Paris 1: 109. 1792.

Charianthus coccineus (L. C. Rich.) D. Don, Mem. Wernerian Soc. 4: 328. 1823.

David Don listed as the first species in his new genus *Charianthus*, *C. coccineus* (L. C. Rich.) D. Don, based on *Melastoma coccinea* L. C. Rich. However, he cited in synonymy *Melastoma alpina* Sw. giving as a reference only Flora Indiae Occidentalis 2: 800. Pages 641 to 928 of this work are said to have appeared in 1797 (Stafleu, Taxonomic Literature, Reg. Veg. 52: 462. 1967). However, Swartz did refer to his earlier use

of the basic reference, his *Prodromus* 71. 1788. Don and subsequent authors have ignored this earlier valid basionym and a new combination is necessary.

The supporting specimen cited by Swartz was collected by du Ponthieu in the alpine mossy forest region of the Soufrière on Guadeloupe, and such a specimen is in the Banks Herbarium (BM).

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