INTRODUCTION

Domingo Bello y Espinosa (1817–1884) was an attorney and naturalist from the Canary Islands who lived in Mayagüez (Puerto Rico) between 1848 and 1878. He is the author of a two-part publication dated 1881 and 1883, which represents one of the first contributions on plant taxonomy made by an island resident. These studies include a total of 88 new taxa. Eighty-four of them are new taxonomic descriptions (3 genera, 59 species, 22 varieties) and 4 of them are new combinations. Eight of these species are still accepted either as published originally by Bello (3 species) or as basionyms of subsequent taxonomic combinations (5 names). *Stahlia* Bello is also currently accepted. Twelve of Bello’s names are not legitimate (11 species, 1 variety). Bello did not leave a herbarium and published illustrations for only 3 of the new species that he described. Therefore, Bello’s names need to be interpreted on the basis of his descriptions and indirect accounts primarily provided by Ignatz Urban. This German botanist had access to illustrations (made by Leopold Krug) and plant collections (from Krug and Agustín Stahl) that were originally identified with Bello’s names. Here we assign neotypes for 42 of the 59 species described by Bello. The remaining 17 species not typified include 3 names typified in previous works, 9 illegitimate names, 3 names that we could not assign to any infrageneric taxon, and 2 names that are both illegitimate and can not be interpreted taxonomically. In addition, we lectotypify *Caesalpinia monosperma* (synonym of *Stahlia maritima*). We present a summary of the life of Domingo Bello that includes new data from archival research in the Canary Islands and Puerto Rico, as well as the only known portrait of him.

Keywords Antilles; botanical history; botanical nomenclature; Canary Islands; Caribbean Island Biodiversity Hotspot; neotypification; Puerto Rico

Supplementary Material The Electronic Supplement (Table S1) is available in the Supplementary Data section of the online version of this article at http://www.ingentaconnect.com/content/iapt/tax
presenting a taxonomic review of the plants he described for Puerto Rico. Given the scarce information published on the life of this naturalist, we also present a biography that incorporates data from primary sources, including archives in the Canary Islands (La Laguna, Tenerife: Archivo Municipal and Archivo Diocesano; Santa Cruz de Tenerife: Biblioteca Municipal) and Puerto Rico (Mayagüez: Archivo Histórico Municipal and Archivo Parroquial Catedral Nuestra Señora de la Candelaria).

Bello was born in La Laguna on 31 July 1817, and was baptized Domingo Francisco Ignacio Antonio del Salvamento in the parish church of Nuestra Señora de los Remedios on 2 August 1817. His parents were Domingo Bello Lenard, a university professor of mathematics, and Ana Espinosa y Carta, both native to La Laguna, (see: “Fondo Santo Domingo de Guzmán de La Laguna, libro 36, signatura 36”; Folios 244 [verso]–245 [recto] from Archivo Diocesano, La Laguna). We are not certain of the specific location where Bello was born, but by 1823, at the age of six, he lived with his parents, a brother and a sister at Calle del Laurel (see: “Padrón de habitantes varios municipios 1836–1841, P–I, S–II, 13” from Archivo Municipal, La Laguna). This street is currently known as Calle del Laurel. He obtained his law degree at the Universidad de San Fernando, at La Laguna, in 1842 (Izquierdo, 2005). At that time he was still living at Calle del Laurel with his mother (then a widow), a brother, and three sisters (see: “Padrón de habitantes La Laguna 1841–1847, P–V [3], S–II” from Archivo Municipal, La Laguna).

In 1848, Bello migrated to Puerto Rico and settled in the western port city of Mayagüez, a common destination for Canarian immigrants during the 19th century (Cifre de Loubriel, 1995). In Mayagüez, he married Leocadia Raldiris Fernández, a member of a distinguished Puerto Rican family of that city (see: “Libro de matrimonios 1851, Vol 9, folio 105” from Archivo Parroquial, Catedral Nuestra Señora de la Candelaria, Mayagüez), with whom he had a daughter (Isabel) and a son (José). While in Mayagüez, Bello practiced his profession as an attorney for a commercial company in the city (Wiley & al., 2014), and was the director of a school (see: “Documentos Históricos

![Fig. 1. Undated portrait of Domingo Bello y Espinosa (1817–1884) wearing his lawyer’s toga. This is, at present, the only known portrait of him. Courtesy of Carlos Gaviño de Franchy.](image1)

![Fig. 2. Title page of the first part of the Apuntes para la flora de Puerto-Rico (Bello, 1881).](image2)
de Mayagüez 1848, V–I” from Archivo Histórico Municipal de Mayagüez). After 30 years in Puerto Rico, Bello returned with his family to Tenerife in 1878 (Gundlach, 1880; Urban, 1898). By 1883 he was again living at Calle del Laurel in La Laguna (see: “Padrón de habitantes La Laguna 1883–1884, P–XXII [1], S–II, 1” from Archivo Diocesano, La Laguna). He died a few years after returning to the Canaries on 21 January 1884, in a house located at Calle de la Candelaria No. 9 in Santa Cruz de Tenerife (see: “Fondo Santo Domingo de Guzmán de La Laguna, libro 20, signatura 105”; Folios 112 [recto]–112 [verso] from Archivo Diocesano, La Laguna). Bello is buried in the old Cementerio de San Rafael y San Roque, in Santa Cruz de Tenerife (García Pulido, 2000; Santiago-Valentín & al., 2014).

Bello was a cultured, well-known public figure in the Canary Islands. Between 1845 and 1847, he was the secretary of the influential Colegio de Abogados de Santa Cruz de Tenerife (Bar Association of Santa Cruz de Tenerife) (Izquierdo, 2005). He became Mayor of La Laguna twice; first in 1842, and then shortly after his return from Puerto Rico, between 1881 and 1883 (Padrón Acosta, 1968; Izquierdo, 2005; Santiago-Valentín & al., 2010, 2014). His formal obligations did not divert him in any way from cultivating a deep interest in natural history, and he was instrumental in the publication of a catalog of plants from the Canary Islands written in 1808 by the most distinguished Canary Islands naturalist of the 18th and 19th centuries, José de Viera y Clavijo (1731–1813; Viera y Clavijo, 1882a, b, c). In addition, between 1879 and 1880 Bello published a novel in ten parts that was centered on the plants of an imaginary botanical garden located in Shanghai that was devoted to the cultivation of Canarian plants (Bello, 1879a–f, 1880a–d). Furthermore, shortly after his arrival to Tenerife, in 1878, he wrote an unpublished manuscript titled “Apuntes botánicos de las Islas Canarias” (Botanical notes on the Canary Islands) (Steffen, 1948; Francisco-Ortega & al., in prep.).

Bello was part of the first generation of residents of Puerto Rico devoted to the study of its natural history. With the collaboration of scientists from abroad, these naturalists fostered a scientific “golden age” especially for botany (Santiago-Valentín & al., 2010, 2014). The group included the wealthy German businessman and naturalist enthusiast Leopold Krug (1833–1898), who also lived in Mayagüez, and Agustín Stahl (1842–1917), a physician native to Puerto Rico who resided in Bayamón (a town near the island capital, San Juan). Knowledge culled from their plant collections, illustrations, and publications was employed by Ignatz Urban (1848–1931), a professor at the Botanic Garden of Berlin and a leading taxonomist of Antillean plants, in the invaluable Symbolae antillanae (Howard, 1996; Liogier, 1996). Bello developed a friendship with Leopold Krug and together they studied the flora and fauna of Mayagüez and its environs (Howard, 1996). Krug was a patron of natural history studies. For instance, he provided support to the German naturalist (then settled in Cuba) Johannes Gundlach (1810–1896) during his expeditions to collect plants and animals of Puerto Rico in 1873, and 1875–1876, as well as to the German botanist Paul Sintenis (1847–1907), who collected an impressive number of plant specimens in Puerto Rico between 1884 and 1887 (Howard, 1996; Santiago-Valentín & González López, 2002).

Shortly after leaving Puerto Rico, Bello published his Apuntes as a two-part series in the journal of the Sociedad Española de Historia Natural (Bello, 1881, 1883). The first part was published in 1881, making the Apuntes one of the first taxonomic publications entirely devoted to the plants of Puerto Rico. Bello, however, acknowledged that the work was not a complete flora of the island: “Estos apuntes están muy lejos de formar un catálogo siquiera aproximado de la Flora de Puerto-Rico” (These notes are very far from constituting even an approximate catalog of the Flora of Puerto Rico). The Apuntes comprise a catalog of the 963 taxa of phanerogams and pteridophytes studied by him during his 30-year residence, focusing primarily on material from the floristically diverse western region of the island. Agustín Stahl’s Estudios sobre la flora de Puerto Rico (Stahl, 1883), and Estudios para la flora de Puerto Rico (Stahl, 1884, 1885, 1886, 1887, 1888) are the first attempt at a published flora for Puerto Rico.

■ METHODS

Bello (1881) mentioned that insects destroyed his herbarium. In addition, Urban (1902) indicated that Bello did not make a herbarium and that the original materials for his work became part of the Krug herbarium, housed at B. Unfortunately, Krug’s collections and illustrations were destroyed during the Second World War, when most of the Berlin herbarium was bombed (Hiepko, 1996). The first author visited this institution in 2010 and did not find any of Krug’s collections or illustrations relevant to the Apuntes, nor specimens collected by Bello. Therefore, we faced the challenge of not having original plant material to interpret his names. Bello’s Apuntes included line engravings, but for only four species (also shown by Santiago-Valentín & al., 2014); two of them (Bello, 1883) illustrating the endemic orchids Epidendrum kraenzlinii Bello (accepted name Psychilis kraenzlinii (Bello) Sauleda; Figs. 3, 4D) and E. krugii Bello (accepted name P. krugii (Bello) Sauleda; Figs. 3, 4C). The other two illustrations were for Tarenaya spinosa (Jacq.) Raf. (Cleomaceae, published by Bello, 1881 as Cleome pungens Willd.) and Meliosma herbertii Rolfe (Sabbiaceae, published by Bello, 1881 as Atelandra laurina Bello). It is not certain who authored the artwork to produce these line engravings, but we infer that they were made by Bello himself. A separate study of correspondence sent by Gundlach from Puerto Rico to Cuban colleagues confirms that by 1876 Bello made several illustrations of Puerto Rican plants, birds and butterflies, and that these were compiled into a pictorial album (Santiago-Valentín & González López, 2002). In addition, Bello (1881) also referred to his plant drawings in his accounts for Doyerea emetocathartica Grosouyrd (Cucurbitaceae, accepted name Anguria glomerata Eggers; Acevedo-Rodríguez & Strong, 2012) and Stellaria ovata Willd. ex Schldl. (Caryophyllaceae, accepted name Stellaria antillana Urb. var. antillana; Acevedo-Rodríguez & Strong, 2012). While the current work was in press, we located the original illustrations of plants from Puerto Rico, deposited at the Museo Municipal de Bellas Artes de Santa Cruz de Tenerife, in the Canary Islands. This material
is being assessed for a future publication (Santiago-Valentín & al., in prep.).

Our assessment of the new taxa in the Apuntes relied on our interpretations of the morphological descriptions provided by Bello. Crucial to our work was Ignatz Urban’s Symbolae antillanae (Urban, 1903, 1905, 1910, 1911). Urban (1911) considered that original materials for the Apuntes were Krug’s plants and illustrations, because these plants had been named by Bello and because Krug’s illustrations were, in a way, prepared under Bello’s supervision/guidance. In the fourth volume of Symbolae antillanae, Urban (1911) identified as “Bello!” 36 taxa for which a specimen with Bello’s name was available to him in the Krug herbarium (Electr. Suppl.: Table S1). In addition, Urban included localities for seven taxa that were based on information provided in the Apuntes, and were annotated as “ex Bello” (“according to Bello”).

Urban must have rigorously analyzed Bello’s descriptions even for those entities for which he had no material that came under Bello’s names. Urban was an astute and meticulous taxonomist, and many of his taxonomic contributions are still widely accepted today. He had the great advantage of comparing specimens from different collectors and from different areas in the Antilles. Urban’s studies not only included Krug’s collections from Puerto Rico, but also drawings made by the latter of plants from that island. Urban (1903, 1905, 1910, 1911) cites 66 of the new names (3 genera, 42 species, 21 varieties) published by Bello as related to Krug’s drawings, indicating that these illustrations were originally accessioned under Bello’s names (Electr. Suppl.: Table S1). In addition, Urban (1903, 1910, 1911) reported specimens for nine species (Ateleandra laurina Bello, A. obtusifolia Bello, Bignonia odorata Bello, Crescentia microcarpa Bello, Heteropterys pubiflora (DC.) Bello, Magnolia portoricensis Bello, Psychotria pseudopavetta Bello, Spathodea portoricensis Bello, Tephrosia aniloides Bello) and seven varieties (five within Mangifera indica L. and two within Anacardium occidentalis L.) from Stahl’s collections that were originally labeled using Bello’s names (Electr. Suppl.: Table S1).

Among the plant specimens from Puerto Rico evaluated by Urban were those collected by Paul Sintenis between 1884 and 1887 (Liogier, 1996), right after the publication of the second part of the Apuntes (Bello, 1883). The collection, which became part of the “Krug & Urban herbarium” (located at B) was studied by Urban and associates (e.g., Karl M. Schumann, 1851–1904, a German botanist, determined specimens of Cereus quadricostatus Bello and Opuntia repens Bello, both Cactaceae) with duplicates sold to several U.S. and European herbaria (Howard, 1996). Therefore, Sintenis’s specimens are linked to names published by Bello by means of the thorough taxonomic work of Urban published in his fourth volume of Symbolae antillanae. Although most of the original set of Sintenis (located at B) was lost, his many duplicates represent the largest number of Puerto Rico specimens surviving from that period, thus serving as an invaluable material for typification.

In his work, Stahl included Bello’s names listed in the Apuntes, and indicated that they were difficult to interpret and that the identification of many of them were incorrect and taxonomically questionable. However, Stahl acknowledged that he was unfamiliar with several of the plants listed by Bello. From this we concluded that Stahl did not study many of the original plant collections used by Bello for his new descriptions. However, based on Bello’s account for Stellaria ovata (see accepted name above), we infer that he was familiar with some of the illustrations of Puerto Rican plants made by Stahl (see Acevedo-Rodríguez, 2007 for a review of Stahl’s illustrations and collections).

In this work we assign neotypes to 42 of the 59 new species described by Bello. The remaining 17 species include 3 names typified in previous works. The orchids Epidendrum kraenzlinii Bello and Epidendrum krugii Bello, were lectotypified by Sauleda (1988) using Bello’s published illustration. In addition,
Fig. 4. Species that are widely accepted by taxonomists, either as they were originally published by Bello or as basionyms of other taxa. A, Vriesea macrostachya (Bello) Mez; B, Metastelma lineare Bello; C, Psychilis krugii (Bello) Suleida; D, Psychilis kraenzlinii (Bello) Suleida; E, Meliosma obtusifolia (Bello) Krug & Urb. — Photo credit: A & E, E. Santiago-Valentín; B, R. Joglar; C, A. Cuevas-Pradó; D, J. Ackerman.
Grant (1997) assigned neotype and isoneotypes to Caragouata macrostachya Bello (Bromeliaceae, accepted name Vriesea macrostachya (Bello) Mez; Fig. 4A). The limited descriptions of 3 of these 17 species did not allow unequivocal determinations and thus they were not typified. Furthermore, nine of the species that were taxonomically determined correspond to illegitimate names. Finally, two of Bello’s species names are both illegitimate and can not be interpreted taxonomically. In this study we lecotypify the name Caesalpinia monosperma Tul., which is synonym of Stahlia maritima Bello (see entry below for Stahlia maritima).

Bello (1881, 1883) made use of codes to identify taxa not found in the botanical literature consulted by him, and for which he gave a name and a description. New species were marked with one asterisk and new genera with two asterisks. These notations helped us to interpret Bello’s names since five of them (e.g., “Galactia filiformis”, “Jacquemontia tannifolia”, “Miconia pyramidalis”, “Pimenta vulgaris”, “Rumex berlandieri”) were not marked with asterisks but were given full Latin/Spanish descriptions although they lacked authorships. We believe that authorities for these names were not included because of typographical errors. Therefore, we did not consider these to be new names and assume that they refer to taxa previously described by other authors (see Discussion below with details on the interpretation of these five names and their authorities). Bello also described 22 new infraspecific taxa, although did not use codes to identify them in the way he did for his new species and genera. Only two of them (Emilia sonchifolia (L.) DC. var. rosea Bello, Rivinia humilis L. var. canescens Bello) were clearly labelled as varieties, but the rest were not assigned to any infraspecific rank. We have regarded all of these names as varieties, and their taxonomic interpretation is also included in our study.

Our research was also based on other bibliographic/taxonomic database resources, including the Kew Bibliographic Database (Royal Botanic Gardens, Kew, 2013), the International Plant Name Index (IPNI, 2013), the Plant List (The Plant List, 2013), the World Checklist of Selected Plant Families (Govaerts & al., 2000, 2008, 2013a, b), and the Melpighiaceae Nomenclature Website (Anderson & al., 2008). Besides the aforementioned Puerto Rican Floras by Stahl (1883, 1884, 1885, 1886, 1887, 1888) and Urban (1903, 1905, 1910, 1911) we also consulted subsequent floristic studies made by Britton & Wilson (1923, 1924a–c, 1925a–b), Liogier (1985, 1988, 1994, 1995, 1997), Acevedo-Rodriguez (2005a), Acevedo-Rodriguez & Strong (2005), and Axelrod (2011). The recent catalog of seed plants of the West Indies (Acevedo-Rodriguez & Strong, 2012) was useful to compile lists of synonyms to Bello’s names. Furthermore, we consulted taxonomy specialists (see the Acknowledgments section below) to guide us in the taxonomic interpretation of these names. We studied plant collections from the Caribbean Islands deposited at B, GH, NY, SJ, UPR, UPRPP, as well as digital specimens from B, BM, G, GH, K, LD, MO, NY, P, S, US, and W.

The new taxonomic descriptions and taxonomic combinations published by Bello (1881, 1883) are presented below in the same sequence as originally found in his works. We have only focused on those names that Bello considered as novelties (see above). For each of these names we provide a list of synonyms. Currently accepted names appear in bold face italics type. In addition, we provide a discussion of each of these names with details pertinent to: (1) interpretation of these names in taxonomic/floristic works and (2) references to Bello’s names originally assigned to Stahl’s specimens (as Stahl!) and Krug’s illustrations/specimens as indicated by Urban (1903, 1905, 1910, 1911). Table SI (Elec. Suppl.) provides a list of names published by Bello (1881, 1883) with their current taxonomic interpretation and assigned types. This table also provides details on those names for which there was material and/or illustrations from Krug or Stahl. As neotypes we have mostly chosen herbarium specimens collected by Sintenis that Urban associated to Bello’s names. We assigned neotypes from collections by A.A. Heller (three specimens) or A. Stahl (two specimens) that were also evaluated by Urban, in those instances when we were unable to select Sintenis’s material. Fifteen taxa could not be typified with specimens cited in Urban’s work.

### NAMES PUBLISHED BY DOMINGO BELLO Y ESPINOSA IN 1881


Urban (1905) considered this a good species based on plant material collected by Stahl and one illustration made by Krug that originally were identified with Bello’s name (Electr. Suppl.: Table SI). Stahl (1884) accepted this name, although he indicated that plants of this species were unknown to him. Subsequent taxonomists working in the region (e.g., Britton & Wilson, 1924a; Liogier, 1985; Acevedo-Rodriguez & Strong, 2012) have followed Urban’s (1905) taxonomic interpretation. Magnoliaceae specialists accept Bello’s name (Magnolia Society International, 2007) and we concur with this placement. This species is endemic to Puerto Rico.


This is an undetermined taxon within Capparaceae. Urban (1905) mentioned one plate from Krug to refer to this taxon and considered this variety a synonym of “Capparis cynophallophora” L. var. angustifolia Eichl. in Mart.” From the brief description provided by Bello it is not certain if this taxon belongs to Cynophalla (DC.) J.Presl (as C. flexuosa (L.) J.Presl) or to Quadrella (DC.) J.Presl (as Q. cynophallophora (L.) Hutch., Capparaceae; X. Cornejo, pers. comm.). Therefore, we leave Bello’s variety as an unplaced taxon within the Capparaceae.

See Iltis & Cornejo (2010b) for a synopsis of Quadrella lophora this variety and considered Bello’s name as Cynophalla amplissima (X. Cornejo, pers. comm.). Based on Urban’s account this name has been tentatively assigned to Capparis sima Urb. (accepted name = description this taxon is tentatively assigned to Cynophalla flexuosa (X. Cornejo, pers. comm.). See Iltis & Cornejo (2010b) for a synopsis of Quadrella.


Urban (1905) examined one plate from Krug that referred to this variety and merged this taxon within “Capparis cynophallophora L. var. α normalis Eichl. in Mart.” Bello’s description highlights the presence of axillary glands, a feature of Cynophalla that does not occur in Quadrella (X. Cornejo, pers. comm.). From Bello’s description this taxon is tentatively assigned to Cynophalla flexuosa (X. Cornejo, pers. comm.). See Iltis & Cornejo (2010b) for a synopsis of Quadrella.


Urban (1905) examined one plate from Krug that referred to this variety and merged this taxon within “Capparis cynophallophora L. var. α normalis Eichl. in Mart.” From Bello’s description this taxon is tentatively assigned to Cynophalla flexuosa (X. Cornejo, pers. comm.).


Urban (1905) examined one plate from Krug that referred to this variety and considered this taxon a synonym of Capparis portoricensis Urb. (accepted name Cynophalla amplissima (Lam.) Ittis & Cornejo; X. Cornejo, pers. comm.). Based on Urban’s account this name has been tentatively assigned to Cynophalla amplissima (X. Cornejo, pers. comm.).


Urban (1905) studied one plate from Krug that referred to this variety and considered Bello’s name as Capparis cynophallophora L. “Var. α normalis Eichl in Mart.”


Urban (1905) examined one plate from Krug that referred to this variety and merged this taxon within Capparis jamaiicensis Jacq. (accepted name Quadrella cynophallophora; X. Cornejo, pers. comm.). Based on Urban’s account this name has been tentatively assigned to Q. cynophallophora (X. Cornejo, pers. comm.). Iltis & Cornejo (2010a) provided a taxonomic revision for the Q. cynophallophora complex. In here we followed X. Cornejo (pers. comm.) and do not recognize Quadrella jamaiicensis (Jacq.) J.Presl. as a distinct species but as part of Q. cynophallophora s.l. (X. Cornejo, pers. comm.).


See entry for Capparis breynia L. var. atropurpurea Bello for a taxonomic discussion of this name.


This is an undetermined taxon within Malvaceae. Urban (1910) cited this taxon as a “Species dubia”, although he examined plant material and one illustration from Krug’s collections (Electr. Suppl.: Table S1) that originally were labeled with Bello’s name. Stahl (1884) accepted the name, but he did not study any plant material belonging to this species. Britton & Wilson (1924c) also accepted Bello’s name yet indicating that it was only known from the original description and that they were not certain about its generic placement. Blanchard (O. Blanchard, pers. comm.) suggested that Bello’s original description suitably matches Melochia pyramidata L. (Malvaceae). However, the taxon described by Bello has its flowers on terminating axillary branchlets. In contrast, M. pyramidata has inflorescenses opposite the leaves (P.A. Fryxell, pers. comm.). Dorr (2012) suggests that the name corresponds to a species of Kosteletzya C.Presl (Malvaceae). Because of these taxonomic uncertainties, we have decided to leave this name as an unplaced taxon within the family.


= Hibiscus unilateralis Cav., Diss. 3: 158. 1787.


For interpreting *Bombycella betulina* and *B. phoenicea* (see next entry) it is necessary to examine: (1) the meaning of the question marks (“?”) as quoted by Bello, and (2) the actual account provided by Bello to propose these two names. Bello used the question marks when he identified a taxon based on a name reported in the literature that he consulted, but doubted that the name corresponded to the plant he studied. In these cases he highlighted characters that differ between the taxon described in the literature and the samples he studied. Bello listed these names (*Hibiscus betulinus*, *H. bancroftianus*, *H. phoeniceus*, *H. unilateralis*) but was not sure that they were taxonomically correct nor that they were part of *Hibiscus*. We believe that Bello created new combinations; support for this comes from the clarification provided by Bello himself at the end of the entries for *Bombycella betulina* and *B. phoenicea*. There, he stated that there are four characters robust enough to segregate *Hibiscus* sect. *Bombycella* as a distinct genus. The actual text is as follows: “me parecen caractères suficientes para tomar como gênero la seccion *Bombycella* [sic] de los Hibiscos” (I think they are good enough characters to place section *Bombycella* [sic] of Hibiscus as a genus).

Bello incorrectly cited Grisebach as the species authority for *Hibiscus bancroftianus*, instead of *H. betulinus* Macfad. (accepted name *H. poepigii* (Spreng.) Garcke; Dorr 2012). Urban (1910) studied two illustrations made by Krug that originally were assigned to *Bombycella betulina* (Electr. Suppl.: Table S1). However Urban (1910) considered Bello’s name a synonym of *H. brasiliensis*. Subsequent taxonomists have merged *B. betulina* within *H. brasiliensis* (Britton & Wilson, 1924c) or *H. phoeniceus* (Acevedo-Rodriguez & Strong, 2012). The names *H. brasiliensis* L. and *H. phoeniceus* Jacq. have been considered by some authors to refer to the same taxon. However, as indicated by Fryxell & Berazain (2007), the former name cannot be typified as from the original description it is not clear to what plants Linnaeus (1763) referred. Therefore, Fryxell & Berazain (2007) proposed to reject this name and instead to accept the later name *H. phoeniceus* for nomenclatural stability. The Nomenclature Committee for Vascular Plants accepted the proposal (Brummitt, 2009).


See entry for *Bombycella betulina* (DC.) Bello for a discussion concerning the use of *Hibiscus brasiliensis* vs. *H. phoeniceus*. Bello (1881) recognized two morphs of *B. phoenicea*. The first one has “petalis splendidè purpureis”, the second form has “petalis roseis”. He was not certain if this entity should still be considered part of *Hibiscus* (either as *H. phoeniceus* or as *H. unilateralis*), see entry for *Bombycella betulina* (DC.) Bello for an explanation on the segregation of *Hibiscus* sect. *Bombycella* as a distinct genus. None of the taxonomists working in the region have followed Bello’s name and they have placed *B. phoenicea* within *Hibiscus*: either as *H. brasiliensis* (Urban, 1910; Britton & Wilson, 1924c) or as *H. phoeniceus* Jacq (Stahl, 1884; Dorr, 2012). Urban (1910) studied one illustration made by Krug that was originally identified as belonging to *B. phoenicea* (Electr. Suppl.: Table S1).


= *Gossypium purpurascens* Poir. in Lamarck, Encycl., Suppl. 2: 369. 1811.


= *Gossypium divaricatum* Raf., Sylva Tellur.: 17. 1838.


Urban (1910) examined plant material sent to him by Krug and Stahl that originally was labeled as *Gossypium janiphi-folium* (Electr. Suppl.: Table S1). Stahl (1884), Urban (1910) and Britton & Wilson (1924c) recognized *G. janiphi-folium* as an endemic species for Puerto Rico. Nevertheless, Stahl (1884) indicated that this species was unknown to him and Britton & Wilson (1924c) stated that they were never able to find the plant in the field. Fryxell (1979) and Dorr (2012) treated this species as a synonym of *G. lanceolatum* Tod.; however, the latter is currently considered to be a synonym of the widespread *G. hirsutum* (P.A. Fryxell, pers. comm.). Liogier (1994) merged Bello’s species with *G. hirsutum* var. *marie-galante* (G.Watt) J.B.Hutch.
material, and was doubtful about its generic status. Urban (1899) studied plant material from Krug’s collections (Electr. Suppl.: Table S1) and was aware that Bello’s name was a homonym of what was previously published by Lamarck. Urban described Heteropterys bellonis as a new species that was dedicated to Bello, to accommodate this taxon. Later, Urban (1905) considered both Banisteria chrysophylla Bello and H. bellonis as synonyms of H. wydleriana. Stahl (1884) accepted Banisteria chrysophylla Bello but was not familiar with the plant. He identified this species as “Stigmaphyllum (Banisteria) chrysophylla Bello”. We are not certain if this was a new combination that Stahl proposed to include Bello’s name within Stigmaphyllum A.Juss. (Malpighiaceae), or if he wanted to point out that he was not sure about the generic placement of this taxon. Britton & Wilson (1924b) considered Bello’s name a synonym of B. wydleriana. Other taxonomists working in the region (e.g., Liogier, 1988; Acevedo-Rodríguez & Strong, 2012) followed Urban’s taxonomic assignment. The most recent nomenclature treatment for the family (Anderson & al., 2008) also agreed with this taxonomic interpretation for Bello’s name. This species is endemic to Puerto Rico.


Urban (1905) examined one illustration made by Krug and plant material from Stahl’s and Krug’s collections that originally were labeled with Bello’s name (Electr. Suppl.: Table S1). Stahl (1884) recognized Bello’s species. However, Urban (1905) assigned this species to synonymy under Heteropterys laurifolia as did Britton & Wilson (1924b). Other taxonomists working in the region (e.g., Liogier, 1988; Acevedo-Rodríguez & Strong, 2012) have followed Urban’s taxonomic interpretation. Anderson & al. (2008) considered H. laurifolia an accepted name.


= Tetrapterys inaequalis Cav., Diss. 9: 433. 1790.

Stahl (1884) recognized Tetrapterys paniculata but suggested that it might refer to Stigmaphyllum fulgens Juss. (Malpighiaceae, accepted name S. emarginatum (Cav.) Juss.; Anderson & al., 2008; listed as “S. fulgens L.” by Stahl, 1884). Stahl (1884) accepted Bello’s name, but indicated that he was not familiar with this species. Urban (1905) did not study any plant material or illustrations referring to Bello’s name but merged Tetrapterys paniculata with T. citrifolia (Sw.) Pers., a species that he considered also to include T. inaequalis. Other taxonomists working in the region (e.g., Britton & Wilson, 1924b; Liogier, 1988; Acevedo-Rodríguez, 2005a) have followed Urban’s taxonomic interpretation. The most recent nomenclature treatment for the family (Anderson & al., 2008)

considered Bello’s name simply as Tetrapterys sp. However, we believe that T. paniculata corresponds to the Caribbean endemic T. inaequalis as it is the only species of the genus found in Puerto Rico and T. citrifolia is a species endemic to Jamaica (Acevedo-Rodríguez & Strong, 2012).

Turpinia glandulosa Bello in Anales Soc. Esp. Hist. Nat. 10: 250. 1881 (Staphyleaceae, placed in Celastraceae by Bello). This is an undetermined taxon.

Urban (1910) did not study any plant material or illustrations referring to Bello’s name and wrote the following statement for this taxon: “in dubio haeret; an hujus familiae?” (there is a doubt as to the family?). Stahl (1886) accepted Turpinia glandulosa, indicating that he was not familiar with the plant. Britton & Wilson (1924c) and Acevedo-Rodríguez & Strong (2012) also treated Bello’s species as an uncertain species. Croat (1976) included Bello’s taxon as a synonym of Turpinia occidentalis subsp. occidentalis and incorrectly listed two specimens collected by L. Picarda (790, 833) from Haiti as types.


= Goetzea elegans Wydler in Linn.aea 5: 423. 1830 (Solanaeeae).

This species is endemic to Puerto Rico, and we are not certain why it was assigned to the Aquifoliaceae by Bello (1881). Clearly, he was not aware that this species had previously been described by Wydler (1830) within the Antillean endemic genus Goetzea Wydler. Urban (1911) did not study original plant material or illustrations with Bello’s name, and yet he considered this species referable to G. elegans. Stahl (1886) accepted Bello’s name but indicated that he was not familiar with the plant. All subsequent taxonomists working in the region (e.g., Britton & Wilson, 1925b; Liogier, 1995; Knapp, 2012) have followed Urban’s taxonomic interpretation and we concur with this view.


Bello (1881) described two varieties within the cultivated cashew. We place Bello’s varieties without any taxonomic rank in Anacardium occidentale.


See entry for Anacardium occidentale L. var. rubrum Bello for a taxonomic discussion of this name.

Stahlia monosperma

genus dedicated to Agustín Stahl, but in doubt that a tree fairly
Stahlia

was also identified with the Spanish name “Mangó de puerco.” We place Bello’s variet-
ies without any taxonomic rank in Mangifera indica.


Mangifera indica L. var. macrocarpa Bello for a taxonomic discussion of this name. This particular variety was also identified with the Spanish name “Mangó de Filipinas”.


Stahlia maritima Bello in Anales Soc. Esp. Hist. Nat. 10: 255. 1881 (Fabaceae) – Type (designated here): PUERTO RICO. Guánica, in sylvis inter Barina et la Boca, 2 Mar 1886, P.E.E. Sintenis 713 (NY barcode 00993999; iso-


Bello (1881) described the species within a new unspecific genus dedicated to Agustín Stahl, but in doubt that a tree fairly well known for its excellent wood was not described until the publication of his Apuntes. Stahl saw living individuals of the tree (Stahl, 1885) and accepted Bello’s name, but was doubtful of its validity. Bello was not aware that this plant had previously been described by Tulasne (1844) within Caesalpinia L. Urban (1900) subsequently proposed the combination S. monosperma. The name S. monosperma is widely accepted (e.g., Liogier, 1988; Axelrod, 2011; Acevedo-Rodríguez & Lewis, 2012). Urban (1905) studied one illustration made by Krug that was originally associated with Bello’s name (Electr. Suppl.: Table S1).

The original description of Caesalpinia monosperma refers to three specimens (Louis Claude Richard s.n. from St. Lucia, A. Plée 713, A. Plée 971 from Puerto Rico), all of which are deposited in P. We designated Plée 713 as the lecto-type because this collector is repeatedly cited throughout the original morphological description, and because it is the only of Plée’s specimens annotated by Tuslane. The genus Stahlia is considered as endemic to Puerto Rico and the Dominican Republic, although there is a syntype specimen of Caesalpinia monosperma collected by L.C. Richard (P, P03090065) attributed to the island of St. Lucia.


Urban (1905) examined plant material from Stahl’s collections (Electr. Suppl.: Table S1) that originally was identified as Tephrosia aniloides, but Urban did not accept Bello’s name, merging it with Cracca caribaea. Stahl (1885) suggested that T. aniloides should be placed in another genus, but without giving an alternative name. Taxonomists working in the region have assigned Bello’s name to Benthamanatha caribaea (Britton & Wilson, 1924b), Cracca caribaea (Liogier, 1988), or Coursetia caribaea (Acevedo-Rodríguez & Lewis, 2012). We accept the nomenclature proposed by Lavin (1988) in his monograph of Coursetia DC.


= Aeschynomena sensitiva Sw. var. sensitiva, Prod.: 107. 1788.

Urban (1905) examined two illustrations made by Krug that originally were labeled with Bello’s name (Electr. Suppl.: Table S1). However, Urban (1905) assigned this to Aeschynomena sensitiva. Stahl (1885) gave little credit to this species since it was described on the basis of sterile material that easily could
be confused with other members of the genus. Subsequent taxonomists working in the region (e.g., Britton & Wilson, 1924b; Acevedo-Rodriguez & Lewis, 2012) and legume specialists (Rudd, 1955) have followed Urban’s taxonomic interpretation for Bello’s name.


= _Cajanus flavus_ DC., Cat. Pl. Horti Mons.: 85. 1813.

= _Cajanus indicus_ Spreng., Syst. Veg. 3: 248. 1826.

Bello (1881) was uncertain about the placement of this species and even suggested that it might be a mere variety of _Cajanus indicus_. He also indicated that this was a cultivated species. Indeed, _C. cajan_ is the only species of the genus reported for Puerto Rico (Acevedo-Rodriguez & Strong, 2012). Urban (1905) did not study plant material or illustration referring to Bello’s collection, but merged this species with _C. indicus_. Stahl (1885) also considered Bello’s taxon to be a synonym of _C. indicus_. Subsequent taxonomists working in the region (e.g., Britton & Wilson, 1924b; Liogier, 1988; Acevedo-Rodríguez & Lewis, 2012) have regarded Bello’s species as a synonym of _C. cajan_, an opinion agreed with by L. Rico (pers. comm.).


Urban (1905) examined one illustration and plant material from Krug’s collections that originally were labeled with Bello’s name (Electr. Suppl.: Table S1) and assigned this species to _Phaseolus ovatus_ Benth. Stahl (1885) accepted Bello’s name, although he indicated that he did not study plant material. Britton & Wilson (1924b) assigned the species to _P. trichocarpus_. Other taxonomists working in the region (e.g., Liogier, 1988; Acevedo-Rodriguez, 2005a; Acevedo-Rodriguez & Lewis, 2012) have considered Bello’s name a synonym of _Vigna longifolia_ (Benth.) Verdc. However, Delgado-Salinas & al. (in prep.) indicated that the lanceolate and peltate stipules reported in Bello’s description clearly suggest that this species should be assigned to _Vigna trichocarpa_.


= _Leptospron adenanthum_ (G.Mey.) A.Delgado in Amer. J. Bot. 98: 1710. 2011 (Fabaceae) ≡ _Phaseolus adenanthus_ G.Mey., Prim Fl. Esseq.: 239. 1818 ≡ _Vigna adenantha_ (G.Mey.) Maréchal, Mascherpa & Stainier in Taxon 27: 202. 1978. Urban (1905) examined one illustration and plant material from Krug’s collections that originally were labeled with Bello’s name (Electr. Suppl.: Table S1). He considered this species to be a synonym of _Phaseolus adenanthus_. This placement was accepted by Britton & Wilson (1924b). Stahl (1885) included Bello’s name in his work but did not study material of this species. Acevedo-Rodriguez & Lewis (2012) followed Urban’s taxonomic interpretation, placing it within _Vigna_ as _V. adenantha_.


Bello (1881) distinguished two varieties within _Phaseolus cochleatus_ (“α violacea”, “β pallida”). Urban (1905) only recognized var. _violacea_ as a synonym of _P. adenanthus_. For var. _pallida_, Urban stated: “mihi ignotus” (it is unknown to me). We consider these two morphs as mere variants within _Leptospron adenanthum_ and we do not give them any taxonomic recognition. We have followed the latest taxonomic arrangements suggested for this group by Delgado-Salinas & al. (2011).


See our discussion under _Phaseolus cochleatus_ Bello var. _pallidus_ Bello.


= _Acuan bahamense_ Britton & Rose in Briton, N. Amer. Fl. 23(2): 132. 1928 (Fabaceae).


Urban (1905) examined one illustration and plant material from Krug’s collections that originally were labeled with Bello’s name (Electr. Suppl.: Table S1), concluding that this species is a synonym of _Desmanthus virgatus var. strictus_. Stahl (1885) admitted that he was not familiar with the plant, and he mistakenly rendered the name as “Albizza leptosperma” Bello” (Fabaceae). We are not certain if this was a typographical error and, therefore, Stahl (1885) instead referred to _Acacia leptosperma_...
Bello. Another possibility is that he intended to transfer the taxon to *Albizia* Durazz., thus making a new combination under this genus. Britton & Wilson (1924b) considered Bello’s name a synonym of *Acuuan virgatum* (L.) Medik. (accepted name *D. virgatus* (L.) Willd.; Luckow, 1993). Both Liogier (1988) and Acevedo-Rodriguez & Lewis (2012) merged *Acacia leptosperma* with *D. virgatus*. In her taxonomic monograph of *Desmanthus* Willd., Luckow (1993) placed Bello’s taxon under the category of “doubtful and excluded names” and tentatively considered this species a synonym of *D. virgatus*. However, in our study we follow Urban’s taxonomic interpretation of this species since he examined material labeled with Bello’s name.


Bello (1881) listed two names for this taxon: “*Jussiaea erecta, DC. var. plumeriana*” (without any description and without an author for the varietal rank; p. 266) and “*J. plumeriana*” (with a Latin description but without an author or asterisk). It is unclear why Bello used two different names for this taxon. We believe that there was a typographic error, and that it is likely that with this variety Bello intended to refer to *Jussiaea erecta* L. var. *plerumeriana* DC., as the name “*Jussiaea erecta DC.*” was not published by Augustin de Candolle. We interpret Bello’s name, *J. plumeriana*, as a new combination (basionym: *J. erecta* L. var. *plerumeriana* DC.). Urban (1910) examined one illustration made by Krug that was labeled *J. erecta var. plumeriana* (Electr. Suppl.: Table SI) and considered this variety as well as *J. plumeriana* to be synonyms of *J. erecta*. Britton & Wilson (1925a) followed Urban’s taxonomic interpretation. Stahl (1886) erroneously assigned *J. plumeriana* to Augustin de Candolle, but merged this taxon within *J. acuminata*. Subsequent taxonomists and Onagraceae specialists (e.g., Raven, 1963; Liogier, 1995; Acevedo-Rodriguez & Strong, 2012; P. Hoch, pers. comm.) considered Bello’s combination a synonym of *Ludwigia erecta*.


Urban (1905) examined one illustration and plant material from Krug’s collections that originally were labeled with Bello’s name (Electr. Suppl.: Table SI). He considered the species to be a synonym of *Nepsera aquatica*. Subsequent taxonomists working in the region and with Melastomataceae (e.g., Stahl, 1886; Britton & Wilson, 1925a; Liogier, 1995; Michelangel & Béguer-Granados, 2012; W. Judd, pers. comm.) have followed Urban’s taxonomic interpretation of Bello’s name.


= *Myrtus acri* Sw., Prodr.: 79. 1788.


Urban (1910) examined plant material of this species sent to him by Krug (Electr. Suppl.: Table SI) that originally was identified with Bello’s name, and considered this to be a synonym of *Amomis caryophyllata*. Britton & Wilson (1925a) followed Urban’s taxonomic treatment. Stahl (1886) recognized *Pimenta acuminata* although he indicated that he was not familiar with the plant. Other subsequent taxonomists (e.g., Liogier, 1994; Acevedo-Rodriguez & Strong, 2012) have considered Bello’s name a synonym of *P. racemosa* var. *racemosa*. Landrum (1886), in his monograph of *Pimenta* Lindl., used a question mark for the placement of *P. acuminata*. In our study we follow Urban’s treatment, as he studied plant material originally identified with Bello’s name.


= *Eugenia domingensis* O.Berg in Linnaea 27: 296. 1856.

Urban (1910) examined one illustration and plant material from Krug’s collections that originally were labeled with Bello’s name (Electr. Suppl.: Table SI). He considered this species to be a synonym of *Eugenia aeruginea* DC. However, Urban (1910) misapplied *E. aeruginea* to the taxon known as *E. domingensis* (Sandwith, 1934). Britton & Wilson (1925a) also assigned this species to *E. aeruginea* sensu Urban (1910); Stahl (1886) suggested that this species may correspond to *E. portoricensis* (Sandwith, 1934). Britton & Wilson (1925a) followed Urban’s taxonomic treatment. Stahl (1886) suggested that this species may correspond to *E. portoricensis* (Sandwith, 1934). Britton & Wilson (1925a) also assigned this species to *E. aeruginea* sensu Urban (1910); Stahl (1886) suggested that this species may correspond to *E. portoricensis* (Sandwith, 1934). Britton & Wilson (1925a) followed Urban’s taxonomic treatment. Stahl (1886) suggested that this species may correspond to *E. portoricensis* (Sandwith, 1934).


Urban (1910) examined one illustration and plant material from Krug’s collections that originally were identified with Bello’s name (Electr. Suppl.: Table S1). He regarded this species to be a synonym of Mouriri domingensis (as “Mouriria”). Stahl (1886) considered Eugenia tetrasperma to be a distinct species. Subsequent taxonomists (e.g., Britton & Wilson, 1925a; Liogier, 1995; Michelangeli & Bécquer-Granados, 2012) have followed Urban’s taxonomic interpretation of Bello’s name. Morley (1976) in his monograph of tribe Memecyleae (Melastomataceae) also agreed with Urban’s taxonomic placement although indicating, based on Bello’s description, that some of the morphological traits of this species are of dubious application to Mouriri Aubl.


Urban (1910) examined one illustration from Krug’s collections that originally were labeled with Bello’s name (Electr. Suppl.: Table S1). He was uncertain of the identity of this material and reported it as “Species dubia”. Previously, Urban (1895a) suggested that this taxon might be a synonym of Eugenia eggersii Kiaersk. Stahl (1886) recognized E. paniculata Bello, although he did not study any plant material. Britton & Wilson (1925a) stated that the species “has not been identified to which taxon Bello referred. Because we cannot rule out that Bello observed plants of Eugenia with abnormal flowers, we have chosen to assign this name to an undetermined species within this genus."


= Eugenia yunuryensis O.Berg in Linnaea 27: 234. 1856.

= Eugenia matanzensis O.Berg in Linnaea 27: 235. 1856.

Urban (1910) examined one illustration made by Krug that was labeled with Bello’s name (Electr. Suppl.: Table S1), and assigned this species to Eugenia axillaris. Stahl (1886) accepted Psidiastrum dubium, but indicated that Bello’s morphological observations were erroneous, and what Bello (1881) considered to be many seeds were in reality fruit debris that resulted from insect damage. Still, Stahl (1886) stated that he was not familiar with this species, but indicated that Bello’s description matched that of E. flavovirens O.Berg. According to Acevedo-Rodriguez & Strong (2012) Stahl’s concept of E. flavovirens is referable to E. axillaris. Subsequent taxonomists and Eugenia specialists (e.g., Britton & Wilson, 1925a; Liogier, 1994; Acevedo-Rodriguez & Strong, 2012; F. Barrie, pers. comm.) followed Urban’s taxonomic interpretation of Bello’s name.

(designated here): PUERTO RICO. Dorado, 11 Feb 1959, R.O. Woodbury s.n. (UPR barcode UPR 08580)
= Trichosanthes taminifolia Poir. in Lamarck, Encycl., Suppl. 1: 386. 1810 (Cucurbitaceae).

Urban (1911) studied one illustration made by Krug that originally was labeled with Bello's name (Electr. Suppl.: Table S1) and considered this species to be a synonym of Cephalocereus angustiloba Cogn. (accepted name Cephalocereus americana; Acevedo-Rodríguez & Strong, 2012). The original description of var. angustiloba did not refer to Bello. Stahl (1886) accepted Cionandra angustiloba as a distinct species but indicated that he was not familiar with this plant. Acevedo-Rodríguez & Strong (2012) and Nee (unpub.) considered Bello's name a synonym of Cephalocereus americana.


Urban (1910) studied material from Krug's collections that originally were labeled with Bello's name (Electr. Suppl.: Table S1). Previously, Urban (1883) accepted Bello's name as the basionym of Piriqueta ovata. Stahl (1886) followed Urban's interpretation for this taxon, although indicating that he was not familiar with the species. Both Britton & Wilson (1924c) and Liogier (1994) also considered P. ovata a distinct species. We have followed the taxonomic conclusions by Arbo (1995) who monographed Piriqueta AUBL. and suggested that Bello's name is a synonym of P. racemosa. Acevedo-Rodríguez & Strong (2012) also agreed with this taxonomic placement.


Urban (1910) studied one illustration made by Krug that originally was labeled with Bello's name (Electr. Suppl.: Table S1) and accepted Cereus quadricostatus as a distinct species. Stahl (1886) also cited the name, although he stated that he was not familiar with the species. Subsequent taxonomists and Cactaceae specialists (e.g., Britton & Rose, 1913; Britton & Wilson, 1924c; Liogier, 1994; Hunt, 2006; Acevedo-Rodríguez & Strong, 2012) have considered Leptocereus quadricostatus to be the correct name for this species.


Urban (1910) studied one illustration from Krug's collections that originally were labeled with Bello's name (Electr. Suppl.: Table S1), and considered this species to be a synonym of Pilosocereus rozenii (as “rozenii”). Earlier, Stahl (1886) regarded Bello's species as a synonym of Cereus swartzii. Britton & Wilson (1924c) placed Cereus leiocarpus in synonymy under Cephalocereus rozenii. Other taxonomic specialists followed Urban's interpretation for this species (Liogier, 1994; Acevedo-Rodríguez & Strong, 2012). Bello's description indicated that his species has smooth fruits, and P. rozenii is the only cereoid cactus found in Puerto Rico with that diagnostic character (C.M. Taylor, pers. comm.).


The name “Opuntia repens Karw.” (in Salm-Dyck, Hort. Dyck.: 361. 1834) is a nomen nudum as it was published without a description (Crook & Mottram, 2002). In addition, this name referred to plants from Mexico (Salm-Reifferscheid-Dyck, 1834) that do not occur in Puerto Rico. Opuntia repens is a species endemic to Puerto Rico and the Virgin Islands (Acevedo-Rodríguez & Strong, 2012). Bello (1881) suggested that this
species might be a variety of *O. spinosissima* Mill. (accepted name *Consolea spinosissima* (Mill.) Lem., Cactaceae; Hunt, 2006). Urban (1910) examined one illustration made by Krug that originally was labeled with Bello’s name (Electr. Suppl.: Table S1). *Opuntia repens* has been widely accepted by other taxonomists working in the region and by Cactaceae specialists (e.g., Stahl, 1886 [indicating that he was not familiar with flowers/fruits of the species]; Britton & Wilson, 1924c; Liogier, 1994; Hunt, 2006; Acevedo-Rodríguez & Strong, 2012).


≡ *Phoradendron antillarum* Trel. var. antillarum, Phoradendron: 111. 1916.


Urban (1905) examined one illustration made by Krug that originally was labeled with Bello’s name (Electr. Suppl.: Table S1). However, he considered this name to be a synonym of *Phoradendron quadrangularare*. Britton & Wilson (1924a) accepted Bello’s name as the basionym of *P. randiae*, and Liogier (1985) also followed this taxonomic arrangement. Subsequent taxonomists working in the region agreed with Urban’s taxonomic interpretation for this species (e.g., Liogier, 1997; Kuijt, 2003, 2012).


Bello (1881) described this variety for the cultivated coffee tree, and we place this taxon without any taxonomic rank in *Coffea arabica*.


Urban (1911) examined one illustration made by Krug and plant material collected by Stahl that originally were labeled with Bello’s name (Electr. Suppl.: Table S1). Urban considered the species to be a synonym of *Palicourea domingensis*. Britton & Wilson (1925a) agreed with Urban’s taxonomic placement, while Stahl (1887) regarded Bello’s name as a synonym of *Palicourea pavetta*. Subsequent taxonomists working in the region (e.g., Liogier, 1997; Acevedo-Rodríguez & Strong, 2012) interpreted Bello’s name as a synonym of *Psychotria domingensis*. Taylor & al. (2010) proposed that the correct name for *Psychotria domingensis* is *Palicourea domingensis*, and in our study we follow their taxonomic conclusions.


≡ *Geophila cordata* Miq. in *Linnaea* 17: 72. 1843.

Urban (1911) examined one illustration made by Krug that originally was labeled with Bello’s name (Electr. Suppl.: Table S1), and considered this species to be a synonym of *Geophila herbacea* (accepted name *G. repens*; Johnston, 1949). In addition, Urban (1911) indicated that Bello’s name did not refer to *G. cordata* Miq. The latter was described from Suriname and has generally been treated as a synonym of *G. repens* (Steyermark, 1972; C.M. Taylor, pers. comm.). Britton & Wilson (1925a) agreed with Urban’s placement of this species. Acevedo-Rodríguez & Strong (2012) regarded Bello’s species as a synonym of *G. repens*. Taylor (C.M. Taylor, pers. comm.) agreed with this taxonomic placement, as it is the only species of the genus present in Puerto Rico and because of its distinct cordate leaves.


Urban (1911) examined one illustration made by Krug that originally was labeled with Bello’s name (Electr. Suppl.: Table S1), and considered this species a synonym of *Psychoxia uliginosa*. Stahl (1887) accepted *Cephaelis triplocephala*, but was not familiar with this plant. Britton & Wilson (1925b) and Liogier (1997) agreed with Urban’s taxonomic placement for this species. Taylor (2001) proposed that *P. uliginosa* should be transferred to *Notopleura uliginosa*, and Acevedo-Rodríguez & Strong (2012) placed Bello’s name as a synonym of the latter. 

*Diodia nitens* Bello in Anales Soc. Esp. Hist. Nat. 10: 283. 1881 (Rubiaceae) – *Neotype (designated here)*: PUERTO RICO. Mayagüez, along the beach, 2 Feb 1900, A.A. Heller 4508 (NY barcode 00875529).


= *Spermacoce commutata* Schult. in Roemer & Schultes, Mant. 3: 208. 1827 = *Diodia maritima* Thonn var. commutata (Schult.) DC., Prodr. 4: 564. 1830.

= *Diodia radicans* Cham. & Schltr. in Linnaea 3: 350. 1828.

Like Stahl (1887), Urban (1911) did not study any plant material or illustrations that could be referred to Bello’s species. However, Urban considered the species a synonym of *Diodia maritima*. Based on the species description, Stahl (1887) also indicated that *Diodia nitens* was morphologically similar to *Diodia sarmentosa* Sw. (accepted name *Diodella sarmentosa* (Sw.) Bacigalupo & Cabral ex Borhidi; Borhidi, 2006) suggesting that Bello’s species was not distinct. Britton & Wilson (1925) agreed with Urban’s placement for this species. Liogier (1997) and Acevedo-Rodríguez & Strong (2012) followed the nomenclatural treatment published by Exell (1944) and adopted *Diodia maritima* as a synonym of *Diodia serrulata*. The latest taxonomic treatment was made by Borhidi (2006) who considered *Diodia serrulata* to be a synonym of *Diodella serrulata*.


= *Spermacoce portoricensis* Balb. ex DC., Prodr. 4: 552. 1830.

Urban (1911) did not study any plant material or illustrations that could be referred to Bello’s species, and yet he considered the species to be a synonym of *Hemiodia ocympifolia*. Britton & Wilson (1925b) agreed with Urban’s placement while Stahl (1887) assigned Bello’s name to synonymy under *Spermacoce portoricensis*. Liogier (1997) assigned the name to synonymy under *Diodia ocympifolia*. More recently Acevedo-Rodríguez & Strong (2012) and C.M. Taylor (pers. comm.) followed the recommendations of Govaerts & al. (2013) and considered Bello’s species a synonym of *S. ocympifolia*.


= *Emilia fosbergii* Nicolson in Phytologia 32: 34. 1975.

Urban (1911) did not recognize this variety and assigned this species to synonymy under *Emilia sonchifolia*. Here we follow the latest published account for West Indian Asteraceae by Robinson & Funk (2012), who did not recognize Bello’s name and merged this variety within *Emilia fosbergii*.


Bello (1881) described two varieties within *Conradia pedunculosa* that were assigned to synonymy under *Gesneria albiflora* (Decne.) Kuntze (accepted name *G. pedunculosa*; Skog, 2012) by Urban (1911). None of Bello’s varieties are currently recognized as distinct taxa and they have all been merged within *G. pedunculosa* (Skog, 2012). This species is endemic to Puerto Rico.


See entry for *Conradia pedunculosa* DC. var. *pallida* Bello for a taxonomic discussion of this name.

*Atelandra laurina* Bello in Anales Soc. Esp. Hist. Nat. 10: 289, fig. 5. 1881 (placed by Bello in Myrsumaceae, accepted name Primulaceae; *Atelandra* Lindl. belongs to Lamiaceae) – *Neotype (designated here)*: PUERTO RICO. Prope Utuado, y sylva primae ad los Angeles, 8 Feb 1887, P.E.E. Sintenis 6177 (NY barcode 00843756).


Bello (1881) was not certain of the family of this taxon and provisionally placed it in *Atelandra* Lindl. (accepted name *Hemigenia* R.Br., Lamiaceae; Guerin, 2008) under Myrsinaceae even though Bello’s plant actually is a member of Sabiaceae (Beusekom, 1971). It is uncertain why Bello selected this genus for placing this species since *Atelandra* is restricted to Australia. It has been claimed that *“Atelandra Bello”* is a legitimate name (Beusekom, 1971). We do not concur, as Bello did not use two asterisks to indicate that this was a new genus. Furthermore, within *Atelandra*, Bello described two species...
(A. laurina and A. obtusifolia Bello—see below) without providing a full, independent description for a putative new genus. Therefore, we believe that a strict interpretation of the Code requires that these two species are placed in Atelandra. Still, based on Bello’s original descriptions (they include one plate for A. laurina) these species belong to Meliosma Blume (J. Zúñiga, pers. comm.). Urban (1910) examined one illustration made by Krug, as well as plant material from Stahl’s collections that originally were labeled with Bello’s name (Electr. Suppl.: Table S1). Stahl (1888) accepted A. laurina as a good species but Urban (1910) as well as all other taxonomists working in the region (e.g., Britton & Wilson, 1924c; Liogier, 1994; Acevedo-Rodríguez & Strong, 2012) have assigned Bello’s species to M. herbertii, admittedly a later name (1893) as the transfer of Bello’s species to Meliosma is blocked by an earlier M. laurina Blume (1849).


Urban (1910) examined one illustration made by Krug and plant material from Stahl’s collections that originally were labeled with Bello’s name (Electr. Suppl.: Table S1). Previously, Krug and Urban (1895b) accepted Bello’s specific epithet and made a new combination under Meliosma Blume. Stahl (1888) accepted Atelandra obtusifolia. All subsequent taxonomists working in the region (e.g., Britton & Wilson, 1924c; Liogier, 1994; Acevedo-Rodríguez & Strong, 2012) have followed Urban’s taxonomic placement. Zúñiga (J. Zúñiga, pers. comm.) also agreed with this interpretation. The species is endemic to Puerto Rico.


Bello (1881) was uncertain about the proper genus for this species. Urban (1911) did not examine any plant material or illustrations originally labeled with Bello’s name and listed this name as “B.? caryophyllea”. Stahl (1888) and Britton & Wilson (1925b) accepted Bignonia caryophyllea as a good species although with reservations on its generic placement. Acevedo-Rodríguez & Strong (2012) considered the species a synonym of Tynanthus polyanthus and we concur.


Urban (1911) examined one illustration made by Krug and plant material from Stahl’s and Krug’s collections that originally were labeled with Bello’s name (Electr. Suppl.: Table S1). He also received plant material from Stahl’s collections that was originally identified as Bignonia odorata (Electr. Suppl.: Table S1). However, Urban (1911) considered Bello’s species a synonym of Macrodiscus lactiflorus. Earlier, Stahl (1888) accepted B. odorata. Britton & Wilson (1925b) and Liogier (1995) assigned this species to synonymy under Distictis lactiflora. Acevedo-Rodríguez & Strong (2012) adopted Lohmann’s (Hokche et al., 2008) recent combination and considered Bello’s name a synonym of Amphilophium lactiflorum.
& Strong, 2012) have placed Bello’s name in synonymy under *Tabebuia haemantha*. In his monograph of *Tabebuia* Gomes ex DC., Gentry (1992) also placed *S. portoricensis* in synonymy under *Tabebuia haemantha*. *Tabebuia haemantha* is endemic to Puerto Rico.


Bello was uncertain about the placement of this species and indicated that it could be a variety of *Crescentia cujete* L. Urban (1911) examined plant material from Stahl’s collections that originally was labeled with Bello’s name (Electr. Suppl.: Table SI) and considered the name a synonym of *C. linearifolia*. Stahl (1888) indicated that Bello’s species resembled both *C. cuneifolia* Gardner and *C. acuminata* Kunth, now considered synonyms of *C. cujete* (Gentry, 1980). Other taxonomists working in the Antilles (e.g., Britton & Wilson, 1925b; Liogier, 1995; Acevedo-Rodríguez & Strong, 2012) have followed Urban’s taxonomic interpretation for this species. Here we follow Gentry (1980) who assigned *C. microcarpa* to synonymy under *C. linearifolia*.


= **Convolulus cuspidatus** Willd. ex Spreng., Syst. Veg. 1: 697. 1824.

Urban (1910) examined one illustration made by Krug that originally was labeled with Bello’s name (Electr. Suppl.: Table SI) and considered this species a synonym of *Ipomoea meyeri*. Stahl (1888) was not familiar with the species, and accepted Bello’s name (as “caerulea”) although he did indicate that the species was morphologically similar to *Jacquemontia tamnifolia* (L.) Griseb. (Convolvulaceae; as “tamifolia”). Britton & Wilson (1925a) and Acevedo-Rodríguez & Strong (2012) adopted Urban’s opinion. Austin (D. Austin, pers. comm.) and G. Staples (pers. comm.) agree that the protologue of *I. caerulea* fits better with *I. meyeri* than with *J. tamnifolia*.


= **Heliotropium parviflorum** L., Mant. Pl. 2: 201. 1771 = *Heliotphylum parviflorum* (L.) DC., Prodr. 9: 553. 1845.

Urban (1910) did not examine any plant material or illustration originally assigned to this species, and yet considered Bello’s species to be a synonym of *Heliotropium parviflorum*.

Stahl (1888) was not familiar with the species either, but assigned it to *Heliotphylum parviflorum*. Britton & Wilson (1925a) suggested that this species is a synonym of *Schobera angiosperma*. Most taxonomists (Liogier, 1995; Förther, 1998; Feuillet, 2012; F. Luebert, pers. comm.) assign Bello’s species to *Heliotropium angiospermum*.


= **Acnistus arborescens** (L.) Schltdl. in Linnaea 7: 67. 1832 = *Atropa arborescens* L., Cent. Pl. II: 10. 1756 (Solanaceae).

Urban (1911) examined one illustration from Krug’s collections that originally was labeled with Bello’s name (Electr. Suppl.: Table SI) and accepted this species; however, he also indicated that it might be a variety of *Acnistus arborescens*. Stahl (1888) accepted *A. frutescens* although he was not familiar with this taxon. Other taxonomists working in the region (e.g., Britton & Wilson, 1925b; Liogier, 1995; Knapp, 2012) have followed Urban. However, both Britton & Wilson (1925b) and Liogier (1995) were uncertain about the taxonomic status of *A. frutescens*. In his taxonomic revision of *Acnistus* Schott, Hunziker (1982) agreed with Urban’s statement, and here we follow this taxonomic assessment.


Bello (1881) was not certain of the taxonomic placement of this species and suggested that it might refer to *Beloperone nemorosa* (Sw.) Nees (Acanthaceae, accepted name *Justicia nemorosa* Sw.; Acevedo-Rodríguez & Strong, 2012). Urban (1911) examined one illustration made by Krug that originally was labeled with Bello’s name (Electr. Suppl.: Table SI). Accordingly, he placed this species in synonymy under *J. sessilis*. Stahl (1888) accepted Bello’s name but was not familiar with the species. Britton & Wilson (1925b) followed Urban’s taxonomic placement and more recently, Liogier (1997) and Acevedo-Rodríguez & Strong (2012) considered *Adhatoda tetramera* a synonym of *Siphonoglossa sessilis*. Daniel (T. Daniel, pers. comm.) indicated that the protologue description of *A. tetramera* fits well with *S. sessilis*. In addition, this is the only species of *Siphonoglossa* Oerst. occurring in Puerto Rico.
NAMES PUBLISHED BY DOMINGO BELLO Y ESPINOSA IN 1883


Urban (1905) did not study any plant material or illustration originally labeled with Bello’s name, and yet regarded this species as a synonym of Rivina humilis. This placement has been followed by subsequent taxonomists working in the region (e.g., Britton & Wilson, 1924a, Acevedo-Rodríguez & Strong, 2012).


Bello (1883) published this variety with a Latin description and without an authority; therefore, a strict interpretation of the Code made us understand that this was a new taxonomic entity published by Bello. No varieties are recognized within Rivina humilis (Acevedo-Rodríguez & Strong, 2012).


Urban (1905) examined one illustration made by Krug that referred to this taxon (Electr. Suppl.: Table SI), and concluded that Bello’s species was a synonym of Iresine paniculata (L.) Kuntze (as “panniculata”). Iresine paniculata has been considered a synonym of I. diffusa by some authors (e.g., Acevedo-Rodríguez & Strong, 2012). However, there are morphological differences between these two species (Sánchez del Pino & al., 1999; I. Sánchez del Pino, pers. comm.) and we follow this recommendation. There are two native species in Puerto Rico: I. diffusa and I. angustifolia. Alternanthera paniculata Bello is a synonym of the former; whereas A. linearis Bello (see below) is a synonym of the latter.

Acevedo-Rodríguez & Strong (2012) did not include Bello’s name in their checklist of seed plants of the West Indies.


Urban (1905) examined one illustration and plant material from Krug’s collections that originally was annotated with Bello’s name (Electr. Suppl.: Table SI). He regarded this species as a synonym of Iresine elatior. Britton & Wilson (1924a) also assigned Bello’s name to I. elatior. Other taxonomists working in the region and with this genus (e.g., Acevedo-Rodríguez & Strong, 2012; I. Sánchez del Pino, pers. comm.) placed Bello’s species in synonymy under I. angustifolia.


Bello (1883) was not certain about the generic position of this species. Urban (1910) examined plant material and one illustration from Krug’s collections that originally was labelled with Bello’s name (Electr. Suppl.: Table SI), and regarded this species as a synonym of Buchenavia capitata, an opinion accepted by Britton & Wilson (1925a). Subsequent taxonomists working in the region (e.g., Liogier, 1994; Acevedo-Rodríguez & Strong, 2012) have also accepted Urban’s determination. In his monograph of neotropical Combretaceae, Stace & Alwan (2010) considered P. bucidiifolia a synonym of B. tetrephylla.


This is an undetermined taxon.

Urban (1903) included the following statement for this species: “mihi omnino ignotum est. Vix hujus familiae? “ (it is entirely unknown to me. Certainly the family?). Acevedo-Rodríguez & Strong (2012) considered this to be a “doubtful name”.


Version of Record

Urban (1903) examined one illustration made by Krug that originally was annotated with Bello’s name (Electr. Suppl.: Table SI). He considered this species to be a synonym of *Caladium bicolor*. Britton & Wilson (1923) assigned the name to *Epidendrum papilionaceum* – referring to *C. bicolor*. Ackerman (1995, 2012) regarded Bello’s species as a synonym of *E. papilionaceum*.


Bello (1883) published one plate for this species (Fig. 3). Urban (1903) examined one additional illustration and plant material from Krug’s collections that originally were labeled with Bello’s name (Electr. Suppl.: Table SI). Urban (1903) considered this species a synonym of *Epidendrum papilionaceum* Vahl. (accepted name *Psychilis bifida* (Aubl.) Sauleda; Sauleda, 1888). Britton & Wilson (1924a) followed Urban’s treatment. Ackerman (1995, 2012) regarded Bello’s species as a synonym of *P. kraenzlinii*. This species is endemic to Puerto Rico.


Bello (1883) published one plate for this species (Fig. 3) that was examined by Urban (1905) who did not have access to any plant material or additional illustrations originally labeled with Bello’s name; he regarded this species as a synonym of *Epidendrum papilionaceum* (accepted name *Psychilis bifida*; Sauleda, 1888). Britton & Wilson (1924a) followed Urban’s treatment. Ackerman (1995, 2012) regarded Bello’s species as a synonym of *P. krugii*. This species is endemic to Puerto Rico.


= *Smilax coriacea* Spreng., Syst. Veg. 2: 1903. 1825.


Bello used one asterisk to refer to those names that he regarded as new taxa; *Smilax coriacea* Bello is marked as such and therefore, this name falls within this category. In addition, Bello included a Latin description and does not refer to any other name authority. *Smilax coriacea* Bello is an illegitimate name as it is preceded by *Smilax coriacea* Spreng. However, taxonomically *Smilax coriacea* Bello corresponds with *Smilax coriacea* Spreng. Urban (1903) did not examine any plant material or illustrations originally assigned to Bello’s name, but he still concluded that Bello’s name was a synonym of *Smilax coriacea*. Acevedo-Rodríguez (2005b) followed Urban’s conclusion.


= *Smilax coriacea* Spreng., Syst. Veg. 2: 1903. 1825.

Urban (1903) did not examine any plant material or illustrations originally assigned to Bello’s name, and was uncertain about the placement of this taxon, although he thought it was probably a synonym of *Smilax guianensis* var. *subarmata*. Britton & Wilson (1923) were doubtful that Bello was referring to *S. rotundifolia*. The latter does not occur in the West Indies. Acevedo-Rodríguez (2005b) and Acevedo-Rodríguez & Strong (2012) regarded Bello’s species as a synonym of *S. coriacea*.

Tillandsia ramosa Bello in Anales Soc. Esp. Hist. Nat. 12: 121. 1883 (Bromeliaceae) – *Neotype (designated here):*


= *Tillandsia flexuosa* Sw, var. *pallida* Lindl. in Bot. Reg. 9: ad t. 749. 1823.


As indicated by Ceddeo-Maldonado (2005), the name *Tillandsia ramosa* Sweet is a nomencl Research without a description. Urban (1903) studied an illustration made by Krug that was labeled with Bello’s name (Electr. Suppl.: Table SI), and regarded the name as a synonym of *Tillandsia utriculata*. Britton & Wilson (1923) and Acevedo-Rodríguez & Strong
(2012) followed Urban’s taxonomic interpretation for this species. Based on the description provided by Bello, J. Pinzón (pers. comm.) agreed with this taxonomic placement.

Caraguata macrostachya Bello in Anales Soc. Esp. Hist. Nat. 12: 122. 1883 (Bromeliaceae) = Vriesea macrostachya (Bello) Mez in Candolle & Candolle, Monogr. Phan. 9: 601. 1896 (Bromeliaceae) = Neovriesia macrostachya (Bello) Britton in Sci. Surv. Porto Rico Virgin Islands 5: 142 1923 (Bromeliaceae) = Vriesea macrostachya var. glabrata (Bello) Mez in Candolle, Fl. Trop. Amer. 1: 2012). However, Hunt (1994) also stated that it is not certain if this species should be assigned to Rajania hastata. Urban (1903) studied plant material and one illustration from Krug’s collections that originally were labeled using Bello’s name and considered this taxon a synonym of Dioscorea alata. Subsequent taxonomists have followed this placement (e.g., Britton & Wilson, 1924a; Acevedo-Rodríguez, 2005a; c; Acevedo-Rodríguez & Strong, 2012; Raz, pers. comm).


= Paspalum hemisphericum Poir. in Lamarck, Encycl. 5: 31. 1804.


Paspalum affine Steud. does not occur in the West Indies (Zuloaga & al., 2003; Peterson & al., 2012); therefore, Bello’s plant is not related to this species. Urban (1903) did not examine any plant material or illustration that referred to Bello’s species and he was uncertain as to its placement indicating that it was probably a synonym of P. hemisphericum. Chase (1929), Zuloaga & al. (2003), and Peterson & al. (2012) considered Bello’s name a synonym of P. paniculatum. Zuloaga (F. Zuloaga, pers. comm.) agreed with this taxonomic placement.

**DISCUSSION**

In his two works, Bello (1881, 1883) published 88 new taxa (71 in 1881, and 17 in 1883), comprising 3 new unspecific genera (Homonoma, Psidiastrum, Stabilia [Fig. 5A]), 63 species, and 22 varieties. Only one of the genera (Stabilia) is currently accepted. Eleven of the species names and one variety are illegitimate (Electr. Suppl.: Table SI). The 52 legitimate species names published by Bello included 4 new combinations (Bombrycella betulina, B. phoenicia, Heteropterys pubiflora, and Jussiaea plumeriana). Eugenia costata, Eugenia paniculata, Sida purpurea, Sponia stipellata, and Turpinia glandulosus are the only names that we could not assign to any species because of difficulties in interpreting their brief descriptions. Furthermore, two of these species, Eugenia costata and Eugenia paniculata are illegitimate. Three species are still in current use: Magnolia portoricensis (Fig. 5C), Metastelma lineare (Fig. 4B), and Opuntia repens (Fig. 5D). Five of Bello’s names (Atelandra obtusifolia [Fig. 4E], Caraguata macrostachya [Fig. 4A], Cereus quadricostatus [Fig. 5B], Epidendrum kraenzlinii [Fig. 4D], E. krugii [Fig. 4C]) are basonyms of names in current use. Six species (Bombrycella phoenicia, Borrearia alternans, Crescentia microcarpa, Diodia nitens, Gossypium janiphae folium) have Spanish descriptions, and the three new genera have Latin descriptions. Eight varietal descriptions are in Spanish (for the genera Coffea, Emilia, and Mangifera). None of the varieties are currently
Fig. 5. Species that are widely accepted by taxonomists, either as they were originally published by Bello or as basions of other taxa. The unspecific genus *Stahlia* Bello (Fabaceae) was originally assigned to *S. maritima* by Bello in 1881, not being aware that the name *Caesalpinia monosperma* Tul. was previously assigned to this taxon by Tulasne in 1844. **A**, *Stahlia monosperma* (Tul.) Urb.; **B**, *Leptocereus quadricostatus* (Bello) Britton & Rose; **C**, *Magnolia portoricensis* Bello; **D**, *Opuntia repens* Bello. — Photo credit: **A**, M. Gardner; **B & C**, E. Santiago-Valentín; **D**, E. Cuevas and E. Medina.
accepted; in this work we regarded them as mere morphological variants without taxonomic ranking.

Ten of the species described by Bello (1881, 1883) referred to taxa endemic to Puerto Rico (Electr. Suppl.: Table S1). In addition, Bello’s works provided new descriptions for nine species restricted to the Caribbean Islands, including Puerto Rico (Electr. Suppl.: Table S1). The rest of the names are of non-endemic taxa, including six cultivated ones (Anacardium occidentale, Bignonia caryophylllea, Cajanus luteus, Coffea arabica, Gossypium hirsutum, Mangifera indica). For the Caribbean island endemic Capparis breynia and for the Puerto Rico endemic Conrada pedunculosa Bello described two varieties each.

It is likely that five of the species published by Bello with descriptions but without authorities (Galactia filiformis (Jacq.) Benth., Fabaceae; Jacquemontia tanniifolia (L.) Griseb., Convolvulaceae; Miconia pyramidalis (Desr.) DC., Melastomataceae; Pimenta vulgaris Lind., Myrtaceae, accepted name P. dioica (L.) Merr.; Acevedo-Rodriguez & Strong, 2012; Rumex berlandieri Meism., Polygonaceae, accepted name R. chrysocarpus Moris; Mosyakin, 2005) were previously published by other taxonomists and that their authorships were mistakenly omitted in the Apuntes. Since these names were not marked with an asterisk by Bello (1881, 1883), we do not regard them as new taxonomic entities.

Landrum (1896) considered Pimenta vulgaris sensu Bello as P. racemosa (Mill.) J.W. Moore. It is worth mentioning that Galactia filiformis and Rumex chrysocarpus do not occur in Puerto Rico. Urban (1905) suggested that G. filiformis sensu Bello corresponds to G. striata var. tomentosa (accepted name G. striata (Jacq.) Urb.; Acevedo-Rodriguez & Strong, 2012). Acevedo-Rodriguez & Lewis (2012) also indicated that Bello’s description for G. filiformis referred to G. striata. The latter is morphologically similar to G. dubia (Acevedo-Rodriguez, 2005a). Bello’s account for this name clearly stated that it had short racemes; therefore, it is likely that this species refers to the West Indian endemic G. dubia and not to G. striata (L. Rico, pers. comm.). Rumex crispus is the only species of the genus found in Puerto Rico (Acevedo-Rodriguez & Strong, 2012) and both Urban (1905) and Acevedo-Rodriguez & Strong (2012) suggested that R. berlandieri sensu Bello refers to this species.

Bello (1881, 1883) also reported five species with neither authorities nor taxonomic descriptions. These names do not seem to represent new taxonomic entities, as they were not coded with asterisks; therefore, we believe that omissions of their actual authorities were typographical errors. These five species are: Leria nutans (L.) DC. (Asteraceae, accepted name Chaptalia nutans (L.) Pol., Asteraceae; Robinson & Funk, 2012), Dorstenia contrajerva (M. Moraceae; “contrayerba” by Bello, 1883), Passiflora foetida (L. Passifloraceae), Poinsettia pulcherrima (Willd. ex Klotzsch) Graham (Euphorbiaceae, accepted name Euphorbia pulcherrima Willd. ex Klotzsch, Euphorbiaceae; Acevedo-Rodriguez & Strong, 2012), and Volkameria aculeata (L. (Lamiaceae).

Bello published five infraspecific unranked names within the legumes Centrosema virginianum (L.) Benth. (α angustifolium, β ellipticum, γ ovatum) and Lablab vulgaris Savi (accepted name Lablab purpureus (L.) Sweet; Lewis & Acevedo-Rodriguez, 2012) (α albilflorus, β purpureus) without descriptions and authorities. We believe that these five taxa refer to infraspecific names that were originally published by Candolle (1825) with no formal taxonomic rank and with Greek symbols as: C. virginiana α angustifolia, C. virginiana β elliptica, C. virginiana γ ovata, L. vulgaris γ albilflorus, and L. vulgaris β purpureus. Interestingly, Lewis & Acevedo-Rodriguez (2012) assigned variety categories (as Centrosema virginianum (L.) Benth. var. angustifolium DC., C. virginianum var. ellipticum DC., and C. virginianum var. ovatum DC.) to three of the infraspecific names that were unranked by Candolle (1825).

In the Apuntes, there are names that we consider as nomina nuda. For instance, Bello (1881) assigned the name Piriqueta longifolia to Augustín de Candolle; however, this botanist did not publish the name. The Apuntes do not provide any description and there is no asterisk indicating this as a new species. Arbo (1995) considered this name a nomen nudum. Urban (1910) examined one illustration made by Krug originally labeled as P. longifolia and labeled this species as P. cistoides (L.) Griseb. Urban (1898, 1911) was aware that Bello had limited bibliographic resources; his main botanical references were the works of Grisebach, Augustín de Candolle’s Prodromus, and Achille Richard’s Essai d’une flore de l’île de Cuba. Therefore, it is not surprising that many of Bello’s names are either homonyms or synonyms of other species (Urban, 1898, 1911).

Howard (1996) reported that Krug was dismayed when he found that Bello published his two floristic studies without having him as one of the authors, and without making any mention of his drawings or contributions. We have been unable to find additional references to support these claims. Urban (1898, 1902, 1911) provided biographical details for Krug and Bello, and he also discussed Bello’s works in length. However, none of these accounts made any mention of Krug’s disappointment with Bello because these works were not joint publications. Among the many species legitimately published by Bello (1883) there was the orchid Epidendrum krugg (accepted name Psychilis krugii (Bello) Saulea, see above) that was named after Krug. The protologue of this species stated that it was dedicated to the “señor consúl D. Leopoldo Krug, a quien profesé una antigua y sincera amistad, y se ocupa activamente de la Historia natural de Puerto-Rico” (Mr. Consul Leopoldo Krug, for whom I have an old and sincere friendship, and who is actively working on the natural history of Puerto Rico). In addition, Bello (1883) referred to Krug as an “excelent amigo” (“excellent friend”) when he thanked him for his help with the classification of the peridophyte plants included in the second part of his Apuntes. A similar gesture of recognition was made by Bello to Agustín Stahl, to whom he dedicated the genus Stahlia. We know that after returning to the Canary Islands, Bello still maintained contact with some of the naturalists he had met in Puerto Rico. For instance, he facilitated the publication of a short paper on Canary Islands birds by J.C. Gundlach in one of the most influential journals of the archipelago (Gundlach, 1879).

Although the contributions of the Apuntes toward advancing knowledge on the flora of Puerto Rico could be regarded as limited quantitatively, this does not diminish its merit as
an early attempt to establish taxonomic order for plant diversity of that island. The nine still accepted taxa described by Bello belong to a wide assortment of unrelated genera and families including Apocynaceae, Bromeliaceae, Cactaceae, Fabaceae, Magnoliaceae, Orchidaceae, and Sabiaceae. This is a formidable taxonomic accomplishment, considering his lack of bibliographic references and the relative isolation from major botanical institutions. Bello’s relevance in the botanical history of this island has been recognized by the five species named after him: Cynanchum bellii (Bello) P.T.Li (accepted name Metastelma lineare Bello, see above), Cordia bellonis Urb. (Boraginaceae, accepted name Varronia bellonis (Urb.) Britton, Boraginaceae; Feuillet, 2012), Dipholis bellonis Urb. (Sapotaceae, accepted name Sideroxylon portoricense Urb. subsp. portoricense, Sapotaceae; Acevedo-Rodríguez & Strong, 2012), Eugenia bellonis Krug & Urb. (Myrtaceae, accepted name Mosiera longipes (O.Berg) Small, Myrtaceae; Axelrod, 2011), and Heteropterys bellonis Urb. (accepted name Heteropterys wydleriana Juss., see above).

ACKNOWLEDGMENTS

We dedicate this paper to Ezequiel Ballesteros and Clara Régulo for their support, friendship, and the enjoyable time we shared with them at La Laguna during our research in the Canary Islands. This project was funded by a CREST Grant (NSF-HRD 0734826) to the University of Puerto Rico (to E. Cuevas, E. Santiago-Valentín, and J. Rauscher). Part of this work was developed during a sabbatical leave granted to E. Santiago-Valentín by the University of Puerto Rico Botanical Garden and the Biology Department, UPR-Rio Piedras Campus. Javier Francisco-Ortega thanks Fairchild Tropical Botanic Garden and the Louis J. Skinner Foundation for their support of his summer research. Many specialists kindly helped us with the interpretation of the names published by Bello, and we wish to express our gratitude to the Montgomery Botanical Center and FTBG for providing lodging and work facilities during the four research visits of E. Santiago-Valentín to Miami. This is contribution number 9 from the Herbarium of the University of Puerto Rico Botanical Garden and 290 from the Tropical Biology Program of Florida International University.

LITERATURE CITED


Cifre de Loubriel, E. 1895. La formación del pueblo puertorriqueño: La contribución de los isleño-canarios. San Juan, Puerto Rico: Centro de Estudios Avanzados de Puerto Rico y el Caribe.
Cifre de Loubriel, E. 1895. La formación del pueblo puertorriqueño: La contribución de los isleño-canarios. San Juan, Puerto Rico: Centro de Estudios Avanzados de Puerto Rico y el Caribe.

Version of Record 347

canu, vol. 6, Alismataceae a Cyparizeae. Mexico City: Universi-
dad Nacional Autónoma de México.


Izquierdo, E. 2006. Santiago-Valentín & al. • Flora Mesoameri-


Pinto, F.M. 1884. Don Domingo Bello y Espinosa. La Ilustración Canaria 15 (Febrero 15 de 1884): 121–123.


Santiago-Valentín, E. & González López, R.M. 2002. Nuevos docu-


Electronic Supplement to

Domingo Bello y Espinosa (1817–1884)
and the new taxa published in his
Apuntes para la flora de Puerto-Rico

Eugenio Santiago-Valentín, Lázaro Sánchez-Pinto & Javier Francisco-Ortega

Taxon 64: 323–349
### Table S1. Taxonomic index.

<table>
<thead>
<tr>
<th>Accepted name</th>
<th>Name published by Belloa</th>
<th>Illustrationsb</th>
<th>Plant materialc</th>
<th>Original distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acnistus arborescens (L.) Schltdl.</td>
<td>A. frutescens Bello (1: 299) [A.H. Liogier 28820, UPR]</td>
<td>t. 157</td>
<td>In Furnias: ex Bello</td>
<td>Neotropical</td>
</tr>
<tr>
<td>Aeschynomene sensitiva Sw. var. sensitiva</td>
<td>A. fistulosa Bello (1: 259) [P.E.E. Sintenis 2116, NY]</td>
<td>t. 255, 256</td>
<td></td>
<td>Neotropical</td>
</tr>
<tr>
<td>Amphilophium lactiflorum (Vahl) L.G.Lohman</td>
<td>Bignonia odorata Bello (1: 293)</td>
<td>t. 197</td>
<td>Bello! Stahl!</td>
<td>Greater Antilles</td>
</tr>
<tr>
<td>Anacardium occidentale L.</td>
<td>A. occidentale var. luteum Bello (1: 252)</td>
<td>t. 167</td>
<td>Bello! Stahl!</td>
<td>Cultivated</td>
</tr>
<tr>
<td>A. occidentale</td>
<td>A. occidentale var. rubrum Bello (1: 252)</td>
<td>t. 167</td>
<td>Bello! Stahl!</td>
<td>Cultivated</td>
</tr>
<tr>
<td>Cajanus cajan (L.) Huth</td>
<td>C. luteus Bello (1: 260) [P.E.E. Sintenis 6015, US]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caladium bicolor (Aiton) Vent.</td>
<td>Xanthosoma sylvestre Bello (2: 114) [P.E.E. Sintenis 2515, US]</td>
<td>t. 154</td>
<td></td>
<td>Neotropical</td>
</tr>
<tr>
<td>Capparaceae sp.e</td>
<td>Capparis cynophallophora L. var. longifolia Bello (1: 237)</td>
<td>t. 274</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cayaponia americana (Lam.) Cogn.</td>
<td>Cionandra angustiloba Bello (1: 274) [R.O. Woodbury s.n., UPR]</td>
<td>t. 306</td>
<td></td>
<td>Neotropical</td>
</tr>
<tr>
<td>Coffea arabica L.</td>
<td>C. arabica var. stenophyllea Bello (1: 280)</td>
<td>t. 19</td>
<td>Bello!</td>
<td>Cultivated</td>
</tr>
<tr>
<td>Commelina rufipes Seub. var. glabrata (D.R.Hunt) Faden &amp; D.R.Hunt</td>
<td>Tradescantia portoricensis Bello (2: 122) [R.O. Woodbury s.n., UPR]</td>
<td>t. 81</td>
<td></td>
<td>Neotropical</td>
</tr>
<tr>
<td>Coursetia caribaea (Jacq.) Lavin var. caribaea</td>
<td>Tephrosia aniloides Bello (1: 258) [P.E.E. Sintenis 3265, NY]</td>
<td></td>
<td>Stahl!</td>
<td>Neotropical</td>
</tr>
<tr>
<td>Crescentia linearifolia Miers</td>
<td>C. microcarpa Bello (1: 294) [E.L. Little Jr. 13630, UPR]</td>
<td></td>
<td>Stahl!</td>
<td>Neotropical</td>
</tr>
<tr>
<td>Cynophalla amplissima (Lam.) Ilits &amp; Cornejo</td>
<td>Capparis cynophallophora L. var. acutifolia Bello (1: 237)</td>
<td>t. 271</td>
<td></td>
<td>West Indies, Central America, and South America</td>
</tr>
<tr>
<td>Cynophalla flexuosa (L) J.Presl</td>
<td>Capparis cynophallophora L. var. biflora Bello (1: 237)</td>
<td>t. 269</td>
<td>Bello!</td>
<td>Florida, Mexico, West Indies, Central America, and South America</td>
</tr>
<tr>
<td>C. flexuosa</td>
<td>C. cynophallophora var. elliptica Bello (1: 237)</td>
<td>t. 272</td>
<td>Bello!</td>
<td>Florida, Mexico, West Indies, Central America, and South America</td>
</tr>
<tr>
<td>C. flexuosa</td>
<td>C. cynophallophora var. triflora Bello (1: 237)</td>
<td>t. 270</td>
<td>Bello!</td>
<td>Florida, Mexico, West Indies, Central America, and South America</td>
</tr>
<tr>
<td>Diodella serrulata (P.Beauv.) Borhidi</td>
<td>Diodia nitens Bello (1: 283) [A.A. Heller 4508, NY]</td>
<td></td>
<td></td>
<td>Neotropical</td>
</tr>
<tr>
<td>Dioscorea alata L.</td>
<td>Rajania flexuosa Bello (2: 124)d</td>
<td>t. 97</td>
<td>Bello!</td>
<td>Tropical Asia</td>
</tr>
<tr>
<td>Accepted name</td>
<td>Name published by Bello(^b)</td>
<td>Illustrations(^b)</td>
<td>Plant material(^b)</td>
<td>Original distribution</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------------------------------------------------------</td>
<td>----------------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Emilia fosbergii Nicolson</td>
<td><em>E. sonchifolia</em> (L.) DC. var. <em>rosea</em> Bello (1: 286)</td>
<td>t. 276</td>
<td>Bello!</td>
<td>Tropical Asia</td>
</tr>
<tr>
<td>Eugenia L.</td>
<td><em>Psidiastrom</em> Bello (1: 272) [type <em>P. dubium</em> Bello]</td>
<td>t. 227</td>
<td>Widespread</td>
<td></td>
</tr>
<tr>
<td>Eugenia sp.</td>
<td><em>E. paniculata</em> Bello (1: 271)(^d)</td>
<td>t. 228</td>
<td>Porto Rico: ex Bello</td>
<td></td>
</tr>
<tr>
<td>Eugenia sp.</td>
<td><em>E. costata</em> Bello (1: 272)(^d)</td>
<td></td>
<td>Prope Anones: ex Bello</td>
<td></td>
</tr>
<tr>
<td>E. axillaris (Sw.) Willd.</td>
<td><em>Psidiastrom</em> Bello (1: 272) [L.E. Gregory 208, UPR]</td>
<td>t. 227</td>
<td>Neotropical</td>
<td></td>
</tr>
<tr>
<td>E. domingensis O.Berg</td>
<td><em>E. calyculata</em> Bello (1: 271) [E.L. Little Jr. 13596, UPR]</td>
<td>t. 225</td>
<td>Bello!</td>
<td>Neotropical</td>
</tr>
<tr>
<td>Geophila repens (L.) I.M.Johnst.</td>
<td><em>G. cordata</em> Bello (1: 282)(^d)</td>
<td>t. 6</td>
<td>Neotropical</td>
<td></td>
</tr>
<tr>
<td>Gesneria pedunculosa (DC.) Fritsch</td>
<td><em>Conradia pedunculosa</em> DC. var. <em>lutea</em> Bello (1: 288)</td>
<td>t. 204</td>
<td>Bello!</td>
<td>Puerto Rico</td>
</tr>
<tr>
<td>G. pedunculosa</td>
<td>*C. pedunculosa var. <em>pallida</em> Bello (1: 288)</td>
<td>t. 204</td>
<td>Bello!</td>
<td>Puerto Rico</td>
</tr>
<tr>
<td>Goetzea elegans Wydler</td>
<td><em>Ilex exandra</em> Bello (1: 251) [A.H. Liogier 35506, UPR]</td>
<td></td>
<td>Puerto Rico</td>
<td></td>
</tr>
<tr>
<td>Gossypium hirsutum L.</td>
<td><em>G. janipholium</em> Bello (1: 242) [A. Stahl 775b, US]</td>
<td></td>
<td>Cabo Rojo: ex Bello</td>
<td>Cultivated</td>
</tr>
<tr>
<td>Heliotropium angiospermum Murray</td>
<td><em>Heliophytm portoricense</em> Bello (1: 297) [P.E.E. Sintenis 585, NY]</td>
<td></td>
<td>Neotropical</td>
<td></td>
</tr>
<tr>
<td>Heteropterys laurifolia (L.) Juss.</td>
<td><em>H. pubiflora</em> (DC.) Bello (1: 245)</td>
<td>t. 97</td>
<td>Bello!; Stahl!</td>
<td>Neotropical</td>
</tr>
<tr>
<td>H. wydleriana Juss.</td>
<td><em>Banisteria chrysophylla</em> Bello (1: 245)(^d)</td>
<td></td>
<td>Prope Furnias: ex Bello</td>
<td>Puerto Rico</td>
</tr>
<tr>
<td>Hibiscus phoenicus Jacq.</td>
<td><em>Bombycella betulina</em> (DC.) Bello (1: 241)</td>
<td>t. 35 fig. 1; t. 40</td>
<td>Neotropical</td>
<td></td>
</tr>
<tr>
<td>H. phoeniceus</td>
<td><em>B. phoenicea</em> (Jacq.) Bello (1: 241)</td>
<td>t. 35 fig. 2 &amp; 3</td>
<td>Neotropical</td>
<td></td>
</tr>
<tr>
<td>Ipomoea meyeri (Spreng.) G.Don</td>
<td><em>I. caerulea</em> Bello (1: 296)(^d)</td>
<td>t. 130</td>
<td>Neotropical</td>
<td></td>
</tr>
<tr>
<td>Iresine angustifolia Euphrasén</td>
<td><em>Alternanthera linearis</em> Bello (2: 107) [A.H. Liogier &amp; al. 28204, UPR]</td>
<td>t. 199</td>
<td>Bello!</td>
<td>Neotropical</td>
</tr>
<tr>
<td>I. diffisa Humb. &amp; Bonpl. ex Wild.</td>
<td><em>A. paniculata</em> Bello (2: 106)(^d)</td>
<td>t. 203</td>
<td>Mexico, SE U.S.A., West Indies, Central America, and South America</td>
<td></td>
</tr>
<tr>
<td>Leptocereus quadricostatus (Bello) Britton &amp; Rose (Fig. 5B)</td>
<td><em>Cereus quadricostatus</em> Bello (1: 276) [P.E.E. Sintenis 4919, B and isoneotypes in BM, G, GH, K, W]</td>
<td>t. 6</td>
<td>Puerto Rico</td>
<td></td>
</tr>
<tr>
<td>Leptospron adenanthum (G.Mey.) A.Delgado</td>
<td><em>Phaseolus cochleatus</em> Bello (1: 262)(^d)</td>
<td>t. 277</td>
<td>Mexico, Central America, West Indies, and South America</td>
<td></td>
</tr>
<tr>
<td>Accepted name</td>
<td>Name published by Bello&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Illustrations&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Plant material&lt;sup&gt;c&lt;/sup&gt;</td>
<td>Original distribution</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------</td>
<td>--------------------------</td>
<td>--------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>L. adenanthum</td>
<td><em>P. cochleatus</em> var. <em>pallida</em> Bello (1: 262)</td>
<td></td>
<td></td>
<td>Mexico, Central America, West Indies, and South America</td>
</tr>
<tr>
<td>L. adenanthum</td>
<td><em>P. cochleatus</em> var. <em>violacea</em> Bello (1: 262)</td>
<td>t. 277</td>
<td>Bello!</td>
<td>Mexico, Central America, West Indies, and South America</td>
</tr>
<tr>
<td><em>Ludwigia</em> erecta (L.) H.Hara</td>
<td><em>Jussiaea plumeriana</em> (DC.) Bello (1: 267)</td>
<td></td>
<td></td>
<td>Neotropical</td>
</tr>
<tr>
<td><em>Magnolia</em> portoricensis Bello (Fig. 5C)</td>
<td><em>M. portoricensis</em> (1: 233) [P.E.E. Sintenis 4581, B and isoneotype in LD]</td>
<td>t. 254</td>
<td>Stahl!</td>
<td>Puerto Rico</td>
</tr>
<tr>
<td>Malvaceae sp.</td>
<td><em>Sida purpurea</em> Bello (1: 239) t. 49 fig. 1</td>
<td>In Aguadilla: ex Bello</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Mangifera</em> indica L.</td>
<td><em>M. indica</em> var. <em>armeniaca</em> Bello (1: 253)</td>
<td>t. 166</td>
<td>Bello! Stahl!</td>
<td>Cultivated</td>
</tr>
<tr>
<td><em>M. indica</em></td>
<td><em>M. indica</em> var. <em>intermedia</em> Bello (1: 253)</td>
<td>t. 166</td>
<td>Bello! Stahl!</td>
<td>Cultivated</td>
</tr>
<tr>
<td><em>M. indica</em></td>
<td><em>M. indica</em> var. <em>leiosperma</em> Bello (1: 253)</td>
<td>t. 166</td>
<td>Bello! Stahl!</td>
<td>Cultivated</td>
</tr>
<tr>
<td><em>M. indica</em></td>
<td><em>M. indica</em> var. <em>macrocarpa</em> Bello (1: 253)</td>
<td>t. 166</td>
<td>Bello! Stahl!</td>
<td>Cultivated</td>
</tr>
<tr>
<td><em>M. indica</em></td>
<td><em>M. indica</em> var. <em>viridis</em> Bello (1: 253) t. 166</td>
<td>Bello! Stahl!</td>
<td>Cultivated</td>
<td></td>
</tr>
<tr>
<td><em>Meliosma</em> herbertii Rolfe</td>
<td><em>Atelandra laurina</em> Bello (1: 289) [P.E.E. Sintenis 6177, NY]</td>
<td>t. 211</td>
<td>Stahl!</td>
<td>Greater and Lesser Antilles</td>
</tr>
<tr>
<td><em>M. obtusifolia</em> (Bello) Krug &amp; Urb. (Fig. 4E)</td>
<td><em>A. obtusifolia</em> Bello (1: 289) [P.E.E. Sintenis 4229, LD and isoneotypes in MO, P]</td>
<td>t. 212</td>
<td>Stahl!</td>
<td>Puerto Rico</td>
</tr>
<tr>
<td><em>Metastelma</em> lineare Bello (Fig. 4B)</td>
<td><em>M. lineare</em> (1: 292) [P.E.E. Sintenis 87, GH and isoneotypes in BM, LD, MO, W]</td>
<td>t. 58</td>
<td>Bello!</td>
<td>Greater Antilles</td>
</tr>
<tr>
<td><em>Mouriri</em> domingensis (Tussac) Spach.</td>
<td><em>Eugenia tetrasperma</em> Bello (1: 271) [J.L. Vivaldi 72-186, UPR]</td>
<td>t. 229</td>
<td>Bello!</td>
<td>Greater Antilles</td>
</tr>
<tr>
<td><em>Nepsera</em> Naudin</td>
<td><em>Hononoma</em> Bello (1: 269) [type <em>H. aridum</em> Bello]</td>
<td>t. 214</td>
<td></td>
<td>Central America, South America, and West Indies</td>
</tr>
<tr>
<td><em>N. aquatica</em> (Aubl.) Naudin</td>
<td><em>H. aridum</em> Bello (1: 269) [P.E.E. Sintenis 1487, NY]</td>
<td>t. 214</td>
<td>Bello!</td>
<td>Neotropical</td>
</tr>
<tr>
<td><em>Notopleura</em> uliginosa (Sw.) Bremek.</td>
<td><em>Cephalis triplocephala</em> Bello (1: 282) [A.A. Heller 1087, NY]</td>
<td>t. 8</td>
<td></td>
<td>Neotropical</td>
</tr>
<tr>
<td><em>Opuntia</em> repens Bello (Fig. 5D)</td>
<td><em>O. repens</em> (1: 277) [P.E.E. Sintenis 4019, G and isoneotypes in BM, GH, K, MO NY, W]</td>
<td>t. 10</td>
<td></td>
<td>Puerto Rico</td>
</tr>
<tr>
<td><em>Palicourea</em> domingensis (Jacq.) DC.</td>
<td><em>Psychotria pseudopavetta</em> Bello (1: 281) [P.E.E. Sintenis 2810, NY]</td>
<td>t. 13</td>
<td>Stahl!</td>
<td>Neotropical</td>
</tr>
<tr>
<td><em>Paspalum</em> paniculatum L.</td>
<td><em>Paspalum affine</em> Bello (2: 125)&lt;sup&gt;d&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>Neotropical</td>
</tr>
<tr>
<td>Accepted name</td>
<td>Name published by Bello</td>
<td>Illustrations</td>
<td>Plant material</td>
<td>Original distribution</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------</td>
<td>---------------</td>
<td>----------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Pilosocereus royenii (L.) Byles &amp; Rowley</td>
<td>Cereus leiocarpus Bello (1: 276) [A.H. Liogier &amp; al. 31238, UPR]</td>
<td>t. 5</td>
<td>Prope Guanica in litoralis; ex Bello</td>
<td>Neotropical</td>
</tr>
<tr>
<td>Pimenta racemosa (Mill.) J.W.Moore</td>
<td>P. acuminata Bello (1: 270) [P.E.E. Sintenis 5061, NY]</td>
<td>t. 235 fig. 2</td>
<td>Bello!</td>
<td>Neotropical</td>
</tr>
<tr>
<td>Piriqueta racemosa (Jacq.) Sweet</td>
<td>Turnera ovata Bello (1: 275) [A.H. Liogier &amp; al. 34929, UPR]</td>
<td>t. 298</td>
<td>Bello!</td>
<td>Neotropical</td>
</tr>
<tr>
<td>Psychilis kraenzlinii (Bello) Sauleda (Fig. 4D)</td>
<td>Epidendrum kraenzlinii Bello (2: 116) [lectotype: icon, Anales Soc. Esp. Hist. Nat. 12: t. 1, figs. 1–3, 1883]</td>
<td>t. 119</td>
<td>Bello!</td>
<td>Puerto Rico</td>
</tr>
<tr>
<td>P. krugii (Bello) Sauleda (Fig. 4C)</td>
<td>E. krugii Bello (2: 117) [lectotype: icon, Anales Soc. Esp. Hist. Nat. 12: t. 1, figs. 4–7, 1883]</td>
<td>Puerto Rico</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quadrella cynophallophora (L.) Hutch.</td>
<td>Capparis breynia L. var. atrapurpurea Bello (1:237)</td>
<td>t. 268</td>
<td>Bello!</td>
<td>West Indies</td>
</tr>
<tr>
<td>Q. cynophallophora</td>
<td>C. cynophallophora var. mollis Bello</td>
<td>t. 273</td>
<td>Bello!</td>
<td>West Indies</td>
</tr>
<tr>
<td>Q. cynophallophora</td>
<td>C. breynia var. rosea Bello (1:237)</td>
<td>t. 268</td>
<td>Bello!</td>
<td>West Indies</td>
</tr>
<tr>
<td>Rivina humilis L.</td>
<td>R. humilis var. canescens Bello (2: 105)</td>
<td>t. 21</td>
<td>Bello!</td>
<td>Neotropical</td>
</tr>
<tr>
<td>R. humilis</td>
<td>R. viridiflora Bello (2: 105) [P.E.E. Sintenis 5527, NY]</td>
<td></td>
<td>Neotropical</td>
<td></td>
</tr>
<tr>
<td>Siphonoglossa sessilis (Jacq.) D.N.Gibson</td>
<td>Adhatoda tetramera Bello (1: 301) [G.R. Proctor 49813, SJ]</td>
<td>t. 186</td>
<td>Neotropical</td>
<td></td>
</tr>
<tr>
<td>Smilax coriacea Spreng.</td>
<td>S. coriacea Bello (2: 120)</td>
<td>Greater and Lesser Antilles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S. coriacea</td>
<td>S. rotundifolia Bello (2: 120)</td>
<td>Greater and Lesser Antilles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spermacoce ocymifolia Wild.</td>
<td>Borreria alternans Bello (1: 283) [P.E.E. Sintenis 1647, BM]</td>
<td>Neotropical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stahlia Bello</td>
<td>Stahlia Bello (1: 255) [type S. maritima Bello]</td>
<td>t. 340</td>
<td>Greater Antilles</td>
<td></td>
</tr>
<tr>
<td>S. monosperma (Tul.) Urban (Fig. 5A)</td>
<td>S. maritima Bello (1: 255) [P.E.E. Sintenis 3876, NY and neotypes in BM, G, GH, NY, P, W]</td>
<td>t. 340</td>
<td>Greater Antilles</td>
<td></td>
</tr>
<tr>
<td>Tabebuia haemantha (Bertero ex Spreng.) DC.</td>
<td>Spathodea portoricensis Bello (1: 293) [G.R. Proctor 40465, SJ]</td>
<td>t. 200</td>
<td>Bello! Stahl!</td>
<td>Puerto Rico</td>
</tr>
<tr>
<td>Tillandsia utriculata L.</td>
<td>T. ramosa Bello (2: 121) [P.E.E. Sintenis 5777, P]</td>
<td>t. 116</td>
<td>Neotropical</td>
<td></td>
</tr>
<tr>
<td>Tynanthus polyanthus (Bureau ex Baill.) Sandwith</td>
<td>Bignonia caryophyllea Bello (1: 293) [N.L. Britton 8614, NY]</td>
<td>Cultivated</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---
Table S1. Continued.

<table>
<thead>
<tr>
<th>Accepted name</th>
<th>Name published by Bello</th>
<th>Illustrations</th>
<th>Plant material</th>
<th>Original distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undetermined taxon</td>
<td><em>Sponia stipellata</em> Bello (2: 109)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undetermined taxon</td>
<td><em>Turpinia glandulosa</em> Bello (1: 250)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Vigna trichocarpa</em> (C.Wright) A.Delgado</td>
<td><em>Phaseolus lanceolatus</em> Bello (1: 262) [J.A. Stevenson 2097, NY]</td>
<td>t. 280</td>
<td>Bello!</td>
<td>Neotropical</td>
</tr>
<tr>
<td><em>Vriesea macrostachya</em> (Bello) Mez (Fig. 4A)</td>
<td><em>Caraguata macrostachya</em> Bello (2: 122) [F.S. Axelrod 6935, US and isoneotypes in B, MARY, NY, SEL, UPRRP]</td>
<td></td>
<td></td>
<td>Greater Antilles</td>
</tr>
</tbody>
</table>

a Information inside parentheses is coded as follow: (Volume number of Bello’s work: page number). Types are indicated inside brackets. Notice that they refer to neotypes except when specified.
b Illustrations made by Krug that were examined by Urban.
c Plant material belonging to Krug’s (including his illustrations) or Stahl’s collections that was examined by Urban. Locality of taxa reported by Urban that was based on information from the *Apuntes*.
d Nomen illegitimum.
e Based on the short description provided by Bello it is not certain if this variety can be assigned to *Cynophalla flexuosa* or to *Quadrella cynophallophora* (X. Cornejo, pers. comm.).