

AN ANNOTATED CATALOGUE OF THE GENERIC NAMES OF THE BROMELIACEAE

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ABSTRACT. An annotated catalogue of the generic names of the Bromeliaceae is presented. It accounts for 187 names in six lists: I. Generic names (133), II. Invalid names (7), III. A synonymized checklist of the genera of the Bromeliaceae (56 accepted genera, and 77 synonyms), IV. Nothogenera (bigeneric hybrids) (41), V. Invalid nothogenus (1), and VI. Putative fossil genera (5). Comments on nomenclature or taxonomy are given when necessary to explain problematic issues, and notes on important researchers of the family are intercalated throughout. The etymological derivation of each name is given, including if named after a person, a brief remark on their identity. Appended is a chronological list of monographs of the Bromeliaceae and other works significant to the taxonomy of the family.

INTRODUCTION

This paper catalogues all the known generic names of the Bromeliaceae. These names have appeared in the literature since the starting-point of binomial nomenclature in Linnaeus' 'Species plantarum' (1753). The catalogue accounts for 187 names in six lists: I. Generic names (133), II. Invalid names, i.e. names without description or status, listed here merely for historical documentation (7), III. A synonymized checklist of the genera of the Bromeliaceae (56 accepted genera, and 77 synonyms), IV. Nothogenera (bigeneric hybrids) (41), V. Invalid nothogenus (1), and VI. Putative fossil genera, likely other monocots or cycads (5).

Journal and book citations follow 'Botanico-Periodicum-Huntianum' [B-P-H] (Lawrence *et al.* 1968), 'Botanico-Periodicum-Huntianum/Supplementum' [B-P-H/S] (Bridson & Smith 1991), and 'Taxonomic literature' [TL-II] (Stafleu & Cowan 1976–1988) respectively. Author abbreviations follow 'Authors of plant names' (Brummitt & Powell 1992). Rules of nomenclature follow the 'International code of botanical nomenclature (Tokyo Code)' (Greuter *et al.* 1994), and the 'International code of nomenclature for cultivated plants—(ICNCP or Cultivated plant code)' (Trehane *et al.* 1995).

A number of the entries in this catalogue are substantially amended from the citation published in either 'Index nominum genericorum (Plantarum)' [ING] (Farr, Leussink & Stafleu 1979), or 'Index nominum genericorum (Plantarum) Supplementum I' [ING/S] (Farr, Leussink & Zijlstra 1986). For the accurate verifica-

tion of names, the protologue of each was studied and photocopied for future reference. Examination and understanding of that original text typically written in German, French, or Latin, were critical to resolving some of the nomenclatural problems of the Bromeliaceae.

The Bromeliaceae are a fascinating family that continue to elude taxonomists in delineating a natural generic classification. Nevertheless, new approaches in plant systematics are likely to clarify many unresolved circumscriptions. The synthesis of traditional and newly-identified morphological characters with data from other fields is likely to change our understanding of its complex and reticulate evolutionary patterns; e.g., molecular systematics [e.g., the nucleotide sequences of the plastid gene *rbcL* (Chase *et al.* in Ann. Missouri Bot. Gard. 80: 528–580. 1993), and the nucleotide sequences of the plastid locus *ndhF* (Terry, Brown & Olmstead in Syst. Bot. 22: 333–345. 1997)], palynology (e.g., Ehler & Schill in Pollen & Spores 15: 13–45. 1973, and Halbritter in Die Bromelie 1990: 18–21. 1991), cytology (e.g., Brown & Gilmartin in Selbyana 9: 88–93. 1986, and Brown & Terry in J. Cryptanthus Soc. 6:14–15. 1991), chemistry, [including that of floral anthocyanins (e.g., Scogin & Freeman in Aliso 10: 617–619. 1984, and Scogin in Biochem. Syst. & Ecol. 13: 387–389. 1985), nectar constituents (e.g., Bernardello, Galletto & Juliani in Ann. Bot. (London) 67: 401–411. 1991), and leaf flavinoids (e.g., Williams in Phytochemistry 17: 729–734. 1978)], photosynthetic pathways, i.e., patterns of carbon fixation (e.g., Medina in Evolution 28: 677–686. 1974, and Loeschen, Martin, Smith, & Eder in Int. J. Pl. Sci. 154: 100–106. 1993), germination studies (e.g., Groß in Beitr. Biol. Pflanzen 63:

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101–113. 1988), anatomy (e.g., Robinson in Smithsonian Contr. Bot. 2. 1969), geography, ecology, and pollination biology. Such resolution will likely lead to the resurrection of genera from synonymy, the establishment of new genera, or the placement currently recognized genera into synonymy. Therefore, before any such revisionary action is taken, it is essential to have a complete and accurate catalogue of all the generic names of the family with all their nomenclatural problems clearly outlined. This reference was compiled to reduce confusion in the generic nomenclature, ease the determination of priority, and lessen errors in name selection.

Most bromeliad genera named for persons honor Europeans, e.g., Germans, *Dyckia*, *Hechtia*, and *Hohenbergia*, Frenchmen, *Chevaliera*, *Neoglaziovia*, and *Pepinia*, and Swedes, *Billbergia*, *Lindmania*, and *Wittrockia*. These genera were also named exclusively after men with only two recent exceptions, *Racinaea* and *Ursulaea*. While several important bromeliad monographers and researchers are commemorated with currently recognized genera, e.g., *Lymania*, *Mezobromelia*, *Neoregelia*, and *Werauhia*, some are not so honored. It would be desirable that generic names in the Bromeliaceae honoring Edouard Morren, Johann Georg Beer, and Karl Koch be established to recognize the significant contributions each has made to the taxonomy of the family. Although names honoring several other bromeliad researchers have been proposed, *Andrea* (after Édouard François André), *Bakeria* and *Bakerantha* (after John Gilbert Baker), and *Wittmackia* (after Max Carl Ludwig Wittmack) all are currently regarded as synonyms.

There is a substantial body of taxonomic, horticultural, and nomenclatural literature of the Bromeliaceae dating to the 18th century, but more importantly from the mid-19th century to the present time. Within this catalogue, there are references to these publications including an appendix that contains a chronological list of important works that identify the significant milestones in bromeliad taxonomy.

LIST I: GENERIC NAMES

Abromeitiella Mez, Bot. Arch. 19: 460. 1 Sep 1927.—T.: *Abromeitiella pulvinata* Mez, Bot. Arch. 19: 460. 1927 = *Abromeitiella brevifolia* (Griseb.) A. Cast., Anales Mus. Nac. Hist. Nat. Buenos Aires 36: 371. 1931. *Deuterocohnia brevifolia* (Griseb.) M.A. Spencer and L.B. Sm., Bradea 6: 144. 27 Nov 1992. Currently considered a synonym of *Deuterocohnia*. See Spencer and Smith (in Bradea 6: 141–146. 27 Nov 1992). Named in honor of Johannes Abromeit (1857–

1946), German botanist at Königsberg, East Prussia [today Kaliningrad, Russia].

Acanthospora Spreng., Anleit. Kenntn. Gew. Ed. 2, 2(1): 255. 20 Apr 1817, nom. illeg. ≡ *Bonapartea* Ruiz and Pav., Fl. peruv. 3: 38. Aug 1802.—T.: *Bonapartea juncea* Ruiz and Pav., Fl. peruv. 3: 38. Aug 1802. *Tillandsia juncea* (Ruiz & Pav.) Poir. in Lam., Encycl. suppl. 5(1): 309. 1 Nov 1817. *Acanthospora juncea* (Ruiz & Pav.) Spreng., Syst. veg. 2: 25. Jan–Mai 1825. *Acanthospora* is an obligate synonym of *Bonapartea*. From the Greek *akanthos*, a prickly plant, and *spora*, seed.

Acanthostachys Klotzsch in Link, Klotzsch and Otto, Ic. pl. rar. 1(2): 21. 15–21 Nov 1840 ('1841'). — T.: *Hohenbergia strobilacea* Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2): 1252. Oct–Dec. 1830. *Acanthostachys strobilacea* (Schult. & Schult.f.) Klotzsch in Link, Klotzsch and Otto, Ic. pl. rar. 1(2): 21. 15–21 Nov 1840 ('1841'). Currently recognized as a monospecific genus in the subfam. *Bromelioideae*. From the Greek *akanthos*, a prickly plant, and *stachys*, spike.

Aechmea Ruiz and Pav., Fl. peruv. prod.: 47. Oct 1794, nom. cons. (against *Hoiriri* Adans., Fam. pl. 2: 67, 584. Jul–Aug 1763).—T.: *Aechmea paniculata* Ruiz and Pav., Fl. peruv. 3: 37. Aug 1802. When Ruiz and Pavon originally established *Aechmea*, they did not attribute any species to the genus. In 1802, they described a single species, *Aechmea paniculata*, thereby establishing it as the obligate type. Currently recognized in the subfam. *Bromelioideae*. The genus *sensu* Smith and Downs (1979) is clearly artificial, polyphyletic, and in need of a careful revision. The attempts by Smith and Kress (in Phytologia 66: 70–79. 1989, and Phytologia 69: 272–274. 1990) to alleviate the problem by elevating the seven subgenera of *Aechmea* recognized by Smith and Downs (1979) to the generic rank only caused further confusion. Particularly problematic is the incorrectness in their choice of segregate generic names. From the Greek *aichme*, spear.

Agallostachys Beer, Fam. Bromel.: 16, 35. Sep–Oct 1856 ('1857').—LT.: *Bromelia sylvestris* Willd. ex Link, Enum. 1: 308. 1821, designated by Pfeiffer (in Nomencl. bot. 1: 73. 8 Dec 1871). *Agallostachys sylvestris* Beer, Fam. Bromel.: 35. Sep–Oct 1856 ('1857') ≡ *Bromelia alsodes* H. St. John, Taxon 14: 29. 1965, its avowed substitute, not *Bromelia sylvestris* Burm.f., Fl. indica: 79. 1 Mar–6 Apr 1768 (Pandanaceae). Currently considered a synonym of *Bromelia*. From the Greek *agallis*, a plant, and *stachys*, spike, as to the habit.

Austrian botanist at Vienna Johann Georg Beer (1803–1873) wrote ‘Die Familie der Bromeliaceen, nach ihrem habituellen Charakter bearbeitet mit besonderer Berücksichtigung der Ananassa’ [The Family of the Bromeliads, compiled according to their usual characters with particular regard to the pineapple.] In this work published in 1856 (though dated 1857), Beer described seven new genera: *Agalostachys*, *Chevaliera*, *Lamprococcus*, *Orthopetalum*, *Phlomostachys*, *Pityrophyllum*, and *Platystachys*. This is the single-most important treatment of the Bromeliaceae before the monographs of Baker and Mez.

Alcantarea (E. Morren ex Mez) Harms, Notizbl. Bot. Gart. Berlin-Dahlem 10: 802. 30 Dec 1929, based on *Vriesea* subg. *Alcantarea* E. Morren ex Mez in Mart., Fl. bras. 3(3): 516. 1 Feb 1894.—LT.: *Tillandsia regina* Vell., Fl. flumin. 136. 1829, designated here. *Vriesea regina* (Vell.) Beer, Fam. Bromel.: 97. Sep–Oct 1856 ('1857'). *Alcantarea regina* (Vell.) Harms in Engler and Prantl, Nat. Pflanzenfam. Ed. 2, 15a: 126. 1930. Since it is not clear how the two lectotypifications of *Alcantarea* by Smith should be interpreted, a new choice is made here. Smith (in ING Card No. 00035. 1 Oct 1955), mentioned the type of *Alcantarea* as “*Vriesia imperialis* E. Morren.” However, that name was never actually published by Morren himself. Smith and Downs (in Fl. Neotrop. 14: 1071. 1977), mentioned the type as “*Vriesea imperialis* E. Morren ex Mez in Martius, Fl. Bras 3(3): 516. 1894.” In this case, the problem is that this is a reference to the taxonomic key in Mez’ work, where *V. imperialis* is actually treated with full description on p. 568. Also, *V. imperialis* E. Morren ex Mez appears to be illegitimate because Mez placed into synonymy beneath it an already-existing, validly published species, *V. gigantea* Lem., Ill. Hort. 14: pl. 516. 1867 [= *Alcantarea geniculata* (Wawra)] J.R. Grant, Trop. Subtrop. Pflanzenwelt 91: 13. 1995 [not *V. gigantea* Gaudich. ex Beer, Fam. Bromel.: 94. Sep–Oct 1856 ('1857'); nor *V. gigantea* (Mart. ex Schult. & Schult.f.) Mez in Mart., Fl. Bras. 3(3): 566. 1894 = *Werauhia gigantea* (Mart. ex Schult. & Schult.f.) J.R. Grant, Trop. Subtrop. Pflanzenwelt 91: 31. 1995]. Compounding the problem of *Vriesea imperialis* E. Morren ex Mez is the existence of the previously published name *Vriesea imperialis* Carrière, Rev. Hort. 60: 58. 1888 (also cited by Smith & Downs in Fl. Neotrop. 14: 1268. 1977), of which Mez was apparently unaware.

The lectotypification here of *Alcantarea* is necessary because the previously accepted type of the genus, *V. imperialis*, is not an original

element of *Vriesea* subg. *Alcantarea*. There are four species of *Vriesea* listed by Mez (in Mart. in Fl. bras. 3(3): 516 1894) from which to choose a lectotype: *Vriesea geniculata*, *V. imperialis* E. Morren ex Mez, *V. regina*, and *V. vasta*. *Vriesea regina* is chosen as the lectotype not only to avoid the problems surrounding *Vriesea imperialis*, but also to return to Morren’s circumscription of *Alcantarea*. Baker (at Kew) examined Morren’s collection of paintings and manuscripts (that had been sold to Kew) before that of Mez. See text under *Canistrum*. Baker (in Handb. Bromel.: 22. 1889) states regarding *Vriesea regina*: “It is the type of Morren’s subgenus *Alcantarea*, named after the Emperor of Brazil . . .”

Édouard Morren prepared a manuscript in which he planned to describe either the genus ‘*Dalcantarea*’, or *Vriesea* subg. ‘*Dalcantarea*’. However, in a letter dated 23 Dec 1882 to Morren, Swiss botanist Alphonse de Candolle (1806–1893) wrote: “Par nommer un genre d’après l’Empereur du Brésil on doit certainnement supprimer le ‘d’.” [To name a genus after the Emperor of Brazil, one must certainly eliminate the ‘d’.] So, taking de Candolle’s advice, Morren removed the “d” from his manuscripts, and used the name ‘*Alcantarea*’. Unfortunately, with Morren’s untimely death in 1886, the name went unpublished. Later, Carl Mez who like Baker studied the manuscripts, and published some of Morren’s ‘*nomina inedita*’ [unpublished names], including *Alcantarea*.

Currently recognized in the subfam. *Tillandsioideae*. See Grant (in *Bromélia* 2: 24–26. 1996) and Luther (in *Selbyana* 18: 128. 1997). Named in honor of Dom Pedro II—Dom Pedro de Alcântara João Carlos Leopoldo Salvador Bibiano Francisco Xavier de Paulo Leocadio Miguel Gabriel Rafael Gonzaga (1825–1889), second Emperor of Brazil (1840–1889).

When the Committee for Spermatophyta determined that the name *Alcantara* is a homonym of *Alcantarea* (Brummitt in *Taxon* 43: 113–126. 1994) a new name for it was established as follows: *Xerxes* J.R. Grant, Nord. J. Bot. 14: 287. 1994, an avowed substitute for *Alcantara Glaziou* ex G.M. Barroso, Loefgrenia 36: 1. 15 Aug 1969 (Asteraceae), not *Alcantarea* (E. Morren ex Mez) Harms (1929) (Bromeliaceae).

Allardtia A. Dietr., Allg. Gartenzeitung 20: 241. 31 Jul 1852. *Platystachys* K. Koch, Ind. Sem. Berol. 1854, App.: 11. 1855 was published as an avowed substitute for *Allardtia*, treating it as a homonym of *Allardia* Decne. in Jacquem., Voy. Inde Bot. 87. ante 13 Jun 1836 (Asteraceae).—T.: *Allardtia cyanea* A. Dietr., Allg. Gartenzeitung 20: 241. 1852. *Tillandsia cyanea*

(A. Dietr.) E. Morren, Belgique Hort. 29: 297. 1879. *Tillandsia guatemalensis* L.B. Sm., Contr. U.S. Natl. Herb. 29: 281. 1949, is the avowed substitute for *Allardtia cyanea* A. Dietr. when recognized in *Tillandsia*, not *Tillandsia cyanea* K. Koch, Wochenschr. Vereines Beförd. Gartenbaues Königl. Preuss. Staaten 10: 140. 4 Mai 1867. Currently considered a synonym of *Tillandsia*. Named in honor of "handelsgärtner" [trade gardener] and orchid collector, "Herr [Mr.] Allardt".

Anacyclia Hoffmanns., Preiss.-Verzeichn. Pflanzen.: 10. 1833.—T.: *Anacyclia farinosa* Hoffmanns., Preiss.-Verzeichn. Pflanzen.: 10. 1833 = *Billbergia zebrina* (Herb.) Lindl., Bot. Reg. 13: ad t. 1068. 1827. Currently considered a synonym of *Billbergia*. From the Greek *ana*, up, back, or again, and *kyklos*, circle.

Ananas Mill., Gard. Dict. abr. Ed. 4: [unpaged]. 28 Jan 1754.—NT.: *Bromelia ananas* L., Sp. pl.: 285. 1 Mai 1753 = *Bromelia comosa* L., Herb. amb. 21. 11 Mai 1754, designated by L.B. Smith (in N. Amer. Fl. 19: 214. 27 Dec 1938). *Ananas comosus* (L.) Merrill, Interpr. Herb. amboin. 133. 1 Nov 1917. Miller used polynomials instead of the binomial nomenclature initiated only the year before by Linnaeus. Consequently, although the genus was validly published, no binomials were established. A polynomial is a descriptive sentence of perhaps four-ten words that describe a taxon in diagnosis format; e.g., "Ananas aculeatus fructu conico, carne aurea". To avoid the tautonym 'Ananas ananas', the next validly published name for this taxon is used, *Bromelia comosa*. This name is recognized as a neotype instead of lectotype since Miller was unaware of the name *Bromelia comosa*. Currently recognized in the subfam. *Bromelioideae*.

Ananas as interpreted by Gaertner (Fruct. sem. pl. 1: 30. Dec 1788), and the orthographic variant 'Ananassa' (cited from Lindl., Bot. Reg. 13: ad t. 1068. 1 Jun 1827) are not separate generic names as suggested by 'Index nominum genericorum' (1979). Accordingly, their recognition is not warranted, and each should be removed from any listing of generic names.

In 1493, the Carib American Indians of the Caribbean introduced the pineapple to the first European explorer of that part of the New World, Christóbal Colón (Christopher Columbus). The first documentation of the fruit in European literature is in the book 'La Historia de las Indias' (1535–1546) by Gonzalo Hernández Oviedo (Beer, Fam. Bromel.: 208. 1856). Oviedo described and figured the 'Piñas' or 'Pomme de pin' from Santo Domingo, Hispaniola [Dominican Republic]. André Thevet in his 'Les singularités de la France antarctique, autrement

nommée Amerique' (1559) described the 'Nan-as' from Brazil, while Jean de Lery in his 'Histoire d'un voyage fait en la terre du Brésil' (1580) is the first to attribute the name 'Ananas' to the plant we know today as the pineapple, *Ananas comosus*. Therefore, the generic name of the pineapple derives from a language of the indigenous peoples of Brazil. Since then, the pineapple has become a ubiquitous symbol of hospitality, and one of the most popular exotic fruits.

Andrea Mez in C. DC., Monogr. phan. 9: 114. Jan 1896.—T.: *Quesnelia selliana* Baker, Handb. Bromel.: 87. 17 Aug–15 Oct 1889. *Andrea selliana* (Baker) Mez in C. DC., Monogr. phan. 9: 114. Jan 1896. *Nidularium sellianum* (Baker) E. Pereira & Leme, Bradea 4: 235. 1986. Currently considered a synonym of *Nidularium*. See Pereira & Leme (in Bradea 4: 235. 1986). Named in honor of French horticulturist Édouard François André (1840–1911) at Paris, editor of the French horticultural journals 'Illustration Horticole' (1868–1880) and 'Revue Horticole' (1882–1911), and author of the important work 'Bromeliaceae Andreanae' (1889). "Dicatum cl. Éd. André, Parisiensi, bromeliographo sagacissimo." [Dedicated to the illustrious and most wise author of bromeliads, Édouard André of Paris.]

In his first monograph of the Bromeliaceae in 'Monographiae phanerogamarum' (1896), Carl Mez described three new genera: *Andrea*, *Deinacanthon*, and *Lindmania*. The Bromeliaceae encompasses the entire volume 9 of this 9-volume work. This is also the only volume of the work edited by Swiss botanist C. de Candolle alone [Alphonse de Candolle's son, Anne Casimir Pyramus de Candolle (1836–1918)].

Androlepis Brongn. ex Houllet, Rev. Hort. 42: 12. 1870.—T.: *Androlepis skinneri* Brongn. ex Houllet, Rev. Hort. 42: 12. 1870. Currently recognized as a monospecific genus in the subfam. *Bromelioideae*. From the Greek *andros*, man, and *lepis*, scale. The specific epithet honors British orchidologist George Ure Skinner (1804–1867), who sent living collections from Guatemala to Jean Jules Linden (1817–1898), Luxembourgish botanical explorer living in Brussels, Belgium.

Anoplophytum Beer, Flora 37: 346. 14 Jun 1854.—T.: *Tillandsia stricta* Sol. ex Sims, Bot. Mag. 37: ad t. 1529. 1813. *Anoplophytum strictum* (Sol. ex Sims) Beer, Fam. Bromel.: 39. Sep–Oct 1856 ('1857'). Currently considered a synonym of *Tillandsia*. Beer did not associate a species with the genus initially, but established the obligate type two years later. From the Greek

anoplos, unarmed, and *phyton*, plant, likely as to the entire leaves.

The text in which *Anoplophytum*, *Cochlioptatum*, *Cremobotrys*, *Diaphoranthema*, *Hoplophytum*, *Orthophytum*, and *Streptocalyx* were published (Flora 37: 346–349. 14 Jun 1854) was reprinted in Hamburger Garten- Blumenzeitung 10: 313–317. 1854. Since this issue of Hamburger Garten- Blumenzeitung was the ‘Seibentes Heft’ (7th issue), it was likely published in July (after the Flora version) as there were twelve issues a year.

Araeococcus Brongn., Ann. Sci. Nat. Bot., ser. 2, 15: 370. 1841.—T.: *Araeococcus micranthus* Brongn., Ann. Sci. Nat. Bot., ser. 2, 15: 370. 1841. Currently recognized in the subfam. *Bromelioideae*. From the Greek *araios*, thin, and the Latin *coccum*, berry.

Aregelia Kuntze, Rev. Gen. 2: 698. 5 Nov 1891. *Aregelia* was published as an avowed substitute, treating *Nidularium* as a homonym of *Nidularia*; *Nidularium* Lem., Jard. Fleur. 4: ad t. 411; Misc.: 60. 1854, non *Nidularia* Fr. in Fr. & Nordholm, Symb. gasteromyc. 1: 2. 1817 (nom. cons.) (Gasteromycetes), nec *Nidularia* Bull. ex J. St.-Hil., Expos. Fam. Nat. 1: 6. 1805 (nom. rej.) (Gasteromycetes).—T.: *Nidularium fulgens* Lem., Jard. Fleur. 4: ad t. 411; Misc.: 60. 1854. When Kuntze established *Aregelia* as a new name for *Nidularium* Lem., non *Nidularia* Bull. ex J. St.-Hil., he simultaneously reduced *Regelia* (Lem.) Lindm. (1890) into synonymy under *Aregelia* noting that it was a later homonym of *Regelia* Schauer, Linnaea 17: 243. 1843 (Myrtaceae). Mez (1896) incorrectly interpreted the nomenclature as he considered *Aregelia* to be a new name for *Regelia* (Lem.) Lindm., rather than a new name for *Nidularium*. Mez (1896) retained *Aregelia* as a distinct genus with *Regelia* (Lem.) Lindm. in synonymy. He also regarded the genus *Nidularium* as distinct. Nevertheless, no new combination was ever proposed for ‘*Aregelia fulgens*’ based on the type of *Nidularium*, *N. fulgens*. Mez’s interpretation of *Aregelia* is incorrect because he did not include the type species (*N. fulgens*) of the name it replaced, *Nidularium*. That group, *Aregelia sensu* Mez (but primarily *Regelia* (Lem.) Lindm. 1890) was re-circumscribed as *Neoregelia* by Smith (in Contr. Gray Herb. 104: 78. 1934). *Aregelia* is an obligate synonym of *Nidularium*.

The taxonomy of *Aregelia/Nidularium*, *Regelia/Neoregelia*, and *Karatas* is disturbingly confusing, and has been the subject of various interpretations. For a good historical perspective, see Lindman (in Övers. Förh. Kongl. Svenska Vetensk.-Akad. 47: 531–543. 1890). Named in honor of C. von Regel, but not Constantin An-

dreas von Regel (1890–1970) (since it was published 1891), nor Eduard Regel who is honored with *Regelia* and *Neoregelia*. “Dem kaiserl. russischen Geheimen Staatsrath C. von Regel zu Ehren sei dieses Genus benannt.” [This genus is named in honor of the Imperial Russian Privy State Councilor C. von Regel.]

Ayensua L.B. Sm., Mem. New York Bot. Gard. 18: 29. Jun 1969.—T.: *Barbacenia uaipanensis* Maguire, Mem. New York Bot. Gard. 9: 477. 1957. *Ayensua uaipanensis* (Maguire) L.B. Sm., Mem. New York Bot. Gard. 18: 29. Jun 1969. Before this species was transferred to *Ayensua*, it was assigned to *Barbacenia* (Velloziaceae). Currently recognized as a monospecific genus in the subfam. *Pitcairnioideae*. Named in honor of Edward Solomon Ayensu (1935–) of Ghana, collaborator with Smith on the Velloziaceae, and at the time on the staff at the Smithsonian Institution.

Bakerantha L.B. Sm., Contr. Gray Herb. 104: 72. 6 Aug 1934, an avowed substitute for *Bakeria* André, Rev. Hort. 61: 84. 1889, not *Bakeria* Seem., J. Bot. 2: 239, 248. 1 Aug 1864 (Araliaceae).—T.: *Bakeria tillandsioides* André, Rev. Hort. 61: 84. 1889. *Bakerantha tillandsioides* (André) L.B. Sm., Contr. Gray Herb. 104: 72. 6 Aug 1934. *Hechtia tillandsioides* (André) L.B. Sm., Contr. U.S. Natl. Herb. 29: 431. 1951. Currently considered a synonym of *Hechtia*. Named in honor of John Gilbert Baker (1834–1920).

Bakeria André, Rev. Hort. 61: 84. 1889, nom. illeg. [non *Bakeria* Seem., J. Bot. 2: 239, 248. 1 Aug 1864 (Araliaceae)] = *Bakerantha* L.B. Sm., Contr. Gray Herb. 104: 72. 6 Aug 1934.—T.: *Bakeria tillandsioides* André, Rev. Hort. 61: 84. 1889. *Bakerantha tillandsioides* (André) L.B. Sm., Contr. Gray Herb. 104: 72. 6 Aug 1934. *Hechtia tillandsioides* (André) L.B. Sm., Contr. U.S. Natl. Herb. 29: 431. 1951. *Bakeria* is an obligate synonym of *Bakerantha*. André was well aware of the presence of the name *Bakeria* Seem. when he established his *Bakeria*. However, as he notes that that name had been placed into synonymy under *Pterandra* (Malpighiaceae) by the authors of ‘Genera Plantarum’, he established a new *Bakeria* as was often done at the time. Named in honor of Englishman John Gilbert Baker (1834–1920), botanist at the Royal Botanic Gardens, Kew, England, and author of the landmark ‘Handbook of the Bromeliaceae’ (1889). “. . . le savant botaniste de Kew, qui a tant décrit de Broméliacées nouvelles et connaît si bien cette famille. C’est d’ailleurs avec satisfaction qu’il a accueilli la proposition de voir son nom attaché à un ordre de plantes qu’il affectionne particulièrement.” [. . . the

learned botanist of Kew, who described new bromeliads so much and who knows that family so well. It is, moreover, with satisfaction that he welcomed the proposal to see his name attached to a group of plants that he particularly likes.]

Billbergia Thunb., Pl. bras. 3: 30. 23 Mai 1821.—T.: *Billbergia speciosa* Thunb., Pl. bras. 3: 30. 23 Mai 1821. Currently recognized in the subfam. *Bromelioideae*. Named in honor of Swedish ‘Kammarrättssråd’ [judge], botanist, and zoologist Gustaf Johann Billberg (1772–1844). “Nomen dare voluit, deditque illustr. Praefes in honorem Botanici longe Celeberrimi, Flora Svecicae elegantissimae jam Auctoris mentissimi, Domini Gust. Johan. Billberg, Confiliarii Camerae Rationalis dig nissimi et Equitis de Stella polari splendidissimi.” [Wished to give the name in honor of the most well known botanist, the most wise author of the elegant Flora of Sweden, Master Gust. Johan Billberg. Brothers (Thunberg and Billberg) of the Chamber of Reason, and Knight of the most splendid Polar Star.]

Bonapartea Ruiz and Pav., Fl. peruv. 3: 38. Aug 1802.—LT.: *Bonapartea juncea* Ruiz and Pav., Fl. peruv. 3: 38. Aug 1802, designated by L.B. Smith (in ING Card No. 00135. 1 Oct 1955). *Tillandsia juncea* (Ruiz & Pav.) Poir. in Lam., Encycl. suppl. 5(1): 309. 1 Nov 1817. Currently considered a synonym of *Tillandsia*. It is noteworthy that three genera have *Bonapartea juncea* as type: *Acanthospora* (1817), *Bonapartea* (1802), and *Misandra* (1819). Named in honor of Napoleon Bonaparte (1769–1821), i.e., Napoleon I, First Consul of France 1799–1804, Emperor of the French (1804–1815). “Genus dicatum Napoleoni Bonaparte, Gallicae Reipublicae denuo constitutae Conditori, Primo Consuli, Parenti, Imperatori semper invicto, Botanices omniumque fructuosarum Scientiarum et Artium Patrono, Religionis Assertori, de utroque orbe tandem pacato optime merito, Viro immortali, et post hominum memoriam rebus gestis clarissimo.” [Genus dedicated to Napoleon Bonaparte, Founder who established anew the Gallic Republic [France], First Council, Father [of the Republic], always invincible Emperor, patron of all the producing sciences and arts, defender of religion, from the globe pacified by his great merit, immortal man, and the most famous achievements in the memory of humanity.]

Brewcaria L.B. Sm., Steyermark and H. Rob., Acta Bot. Venez. 14(3): 10. Jun–Dec 1984.—T.: *Brewcaria duidensis* L.B. Sm., Steyermark and H. Rob., Acta Bot. Venez. 14(3): 10. Jun–Dec 1984. Currently recognized in the subfam. *Pitcairnioideae*. See Smith (in Ann. Missouri Bot.

Gard. 73: 714. 1987. [‘1986’]). Named in honor of prominent Venezuelan explorer and naturalist Charles Brewer-Carías, organizer of the expedition to Cerro de la Neblina, in the Guayana Highlands of Venezuela, where the genus was discovered.

Brocchinia Schult. & Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxx, 1250. Oct–Dec 1830.—T.: *Brocchinia paniculata* Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxx, 1250. Oct–Dec 1830. Currently recognized in the subfam. *Pitcairnioideae*. See Holst (in BioLlania Ed. spec. 6: 475–380. 1997). Named in honor of Italian naturalist Giovanni Battista Brocchi (1772–1826). “Diximus in honorem divi G.B. Brocchi, Italiae splendidi decoris, qui amore scientiae naturalius deperiit in Nubia.” [Dedicated in honor of G.B. Brocchi, the most splendid fame of Italy, who loved natural sciences, and died in Nubia (Egypt).]

Julius Hermann Schultes (Schult.f.; 1804–1840) co-authored with his father Josef August Schultes (Schult.; 1773–1831), volume 7 of the Roemer and Schultes edition of the ‘Systema Vegetabilium’. In vol. 7(2) the Bromeliaceae are treated with six new genera from Guayana Highland and eastern Brazilian collections: *Brocchinia*, *Cottendorfia*, *Dyckia*, *Encholirium*, *Hohenbergia*, and *Navia*.

Bromelia L., Sp. pl.: 285. 1 Mai 1753.—LT.: *Bromelia karatas* L., Sp. pl.: 285. 1 Mai 1753, designated by Regel (in Gartenflora 17: 67. 1868). This lectotypification precedes the generally accepted lectotypification in Britton & P. Wilson (in Bot. Porto Rico 5: 133. 10 Aug 1923). This is critical because the effective type of the genus changes from *Bromelia pinguin* to *B. karatas* [previously *B. plumieri* (E. Morren) L.B. Sm. nom. illeg.]. See *Karatas*. Currently recognized in the subfam. *Bromelioideae*. Named in honor of prominent Swedish medical doctor and botanist, Olof Ole Bromell (1639–1705), Latinized as Olaus Olai Bromelius. See Grant (in J. Bromeliad Soc. 43: 261–262. 1993).

French botanist Charles Plumier (1646–1704) described some of the first bromeliads known to European science (in Nova plantarum americanarum genera. 1703): “*Bromelia*” (2 sp.), “*Caraguata*” (4 sp.), “*Karatas*” (1 sp.), and “*Renealmia*” (5 sp.). When Swedish naturalist and botanist Linnaeus [Carol von Linné (1707–1778)] established binomial nomenclature in ‘Species plantarum’ (1753), he presented a conservative generic treatment. Linnaeus only adopted the names *Bromelia* and *Renealmia* from Plumier, while describing the new genus *Tillandsia*. This is unfortunate because it effectively relegated to synonymy two bromeliad

names derived from the languages of the indigenous peoples of the Americas, *Caraguata* and *Karatas*. Linnaeus (1753) named five species of *Bromelia*: *B. ananas* (= *Ananas comosus*), *B. karatas*, *B. lingulata* (= *Aechmea lingulata*), *B. nudicaulis* (= *Aechmea nudicaulis*), and *B. pinguin*.

Bromelia Adans., Fam. pl. 2: 67, 527. Jul-Aug 1763, nom. illeg. non *Bromelia* L., Sp. pl.: 285. 1 Mai 1753.—T.: *Bromelia spicata* Lam., Encycl. 1: 146. 2 Dec 1783. *Pitcairnia spicata* (Lam.) Mez in C. DC., Monogr. phan. 9: 392. Jan 1896. The genus *Bromelia* Adanson does not have the same circumscription as that of *Bromelia* Linnaeus. Currently considered a synonym of *Pitcairnia*.

Canistrum E. Morren, Belgique Hort. 23: 257. 1873.—T.: *Canistrum aurantiacum* E. Morren, Belgique Hort. 23: 257. 1873. Currently recognized in the subfam. *Bromelioideae*. From the Greek *kanistron*, a kind of basket carried on the head. Morren described the inflorescence as a flat basket of flowers similar to those carried by young girls in Athens during events such as the festival of Bacchus, as well as those carried by green vegetable growers in Morren's home town of Liège, Belgium.

Édouard Morren (1833–1886), was a professor of botany and director of the botanical garden at the Université de Liège, Belgium from 1857–1886. Morren was the undisputed authority of the Bromeliaceae in this period, and described numerous new species in the journal he edited, 'La Belgique Horticole'. He was preparing a much-anticipated monograph of the family when he died in 1886 at the young age of 53. These lengthy manuscripts, as well as the majority of his large collection of watercolors prepared for him at his direction were sold by his widow soon after his death to the Royal Botanic Gardens, Kew, England. These manuscripts were studied by both Baker and Mez, who described many of Morren's unpublished new species.

Contrary to nearly every reference to the "Morren collection of watercolors", only a few sketches were *actually* drawn by Morren himself. Four principal artists, Cambresier, Sartorius, Stroobant, and De Tollenaere prepared the large exquisite watercolors whose style is later seen in Margaret Mee's paintings. Baker depended heavily on these paintings when preparing his 'Handbook of the Bromeliaceae' (1889). In fact, he uses the abbreviation "M.D." for 'Morren Drawing' if there was an illustration in the collection that he examined. It is unfortunate that Morren died so prematurely because his monograph certainly would have been the most

comprehensive to that date, and illustrated by numerous watercolors of the finest caliber. The manuscripts and watercolors may still today be examined in the archives at Kew.

In a short period from 1886–1887, the botanical community was shaken by the deaths of three botanists who wrote extensively on the Bromeliaceae: Édouard Morren, Franz Antoine, and Heinrich Wawra von Fernsee. With the sudden loss of these important workers, Édouard François André, John Gilbert Baker, and Carl Mez took up further research on the family.

Caraguata Adans., Fam. pl. 2: 67, 532. Jul-Aug 1763, nom. illeg. = *Tillandsia* L., Sp. pl.: 286. 1 Mai 1753.—T.: *Tillandsia utriculata* L., Sp. pl.: 286. 1 Mai 1753. Adanson (1727–1806) in his renowned 'Familles des Plantes' (1763) attributed six genera of the modern (though then yet to be described) Bromeliaceae to the Zingiberaceae (*Ananas*, *Bromelia*, *Caraguata*, *Hoiriri*, *Karatas*, and *Pinguin*) among other varied genera such as *Costus*, *Maranta*, and *Musa*. Under *Caraguata*, Adanson placed Linnaeus' *Tillandsia* in synonymy. Therefore, since *Tillandsia* was placed in its entirety in synonymy under *Caraguata*, *Caraguata* is an obligate synonym of *Tillandsia*. The orthographic variant 'Caraguata' has often been cited, even by Adanson, but it is not a separate generic name. The genus *Caraguata* as interpreted by Lindley (in Bot. Reg. 13: ad t. 1068. 1827) is also not that of a different genus as suggested by Smith and Downs (in Fl. Neotrop. 14: 1275. 1979). Rather, Lindley was simply the first to adopt the name since Adanson, who in turn had adopted the name from Plumier. Plumier (in Nova plantarum americanarum genera: 10. 1703) states: "*Caraguata* nomen est Americanarum." [*Caraguata* is an American name.] The 'cara' of *Caraguata* is likely derived from the same language root as the 'kara' of *Karatas*.

Catopsis Griseb., Nachr. Königl. Ges. Wiss. Georg-Augusts-Univ. 1864: 10, 12. 13 Jan 1864, an avowed substitute for *Tussacia* Willd. ex Beer, Fam. Bromel.: 21, 99. Sep-Oct 1856 ('1857'), not *Tussacia* Willd. ex Schult. & Schult.f. in Roem. & Schult., Syst. veg. 7(1): x, 57. 1829 (phan.-incertae sedis), nor *Tussacia* Benth., London J. Bot. 5: 364. 1846 (Gesneriaceae).—LT.: *Tillandsia nitida* Hook., Exot. Fl. 3: ad t. 218. 1827, designated here. *Tussacia nitida* (Hook.) Beer, Fam. Bromel.: 100. Sep-Oct 1856 ('1857'). *Catopsis nitida* (Hook.) Griseb., Nachr. Königl. Ges. Wiss. Georg-Augusts-Univ. 1864: 21. 13 Jan 1864. Most sources erroneously cite the publication of *Catopsis* as from Fl. Brit. W. Ind.: 599. Oct 1864, and its type as *Tillandsia nutans* Sw., Prod. Veg. Ind. Occ. 56.

1788; *Catopsis nutans* (Sw.) Griseb., Fl. Brit. W. Ind.: 599. 1864. Nevertheless, the type can not be *T. nutans* as it was not an originally attributed species of *Tussacia*. Currently recognized in the subfam. *Tillandsioideae*. From the Greek *kata*, hanging down, and *opsis*, sight or appearance, which refers to the position of its seeds, where the funiculi are curved and the seeds hang down from them.

Chevaliera Gaudich. ex Beer, Fam. Bromel.: 22, 150. Sep–Oct 1856 ('1857').—LT.: *Chevaliera sphaerocephala* Gaudich. ex Beer, Fam. Bromel.: 22, 150. Sep–Oct 1856 ('1857'), designated by L.B. Smith (sub *Chevaliera* in ING Card No. 00208. 1 Oct 1955). *Aechmea sphaerocephala* (Gaudich. ex Beer) Baker, J. Bot. 17: 162. 1879. Currently recognized in the subfam. *Bromelioideae*. See Smith and Kress (in Phytologia 66: 70–79. 27 Apr 1989). Named in honor of François Fulgis Chevallier (1796–1840), French botanist in Paris.

Charles Gaudichaud-Beaupré (1789–1854) was a French naturalist who collected plants while circumnavigating the globe with other naturalists from 1836–1837. When he returned, he edited the botanical portion of the account of the trip in 'Voyage autour du monde exécuté pendant les années 1836 et 1837 sur la corvette la Bonite, commandée par M. Vaillant'. Although engravings of numerous new species of plants were published, he never completed the anticipated accompanying descriptions. Of the five new bromeliad genera among these plates, *Chevaliera*, *Garrelia*, *Pironneava*, *Pothuava*, and *Quesnelia*, only *Garrelia* and *Quesnelia* were validly published in the original text since they are monospecific. The other three names were invalid because they included more than one species. They remained as such until they were validated later either by Beer or Koch.

Chirripoa Suess., Bot. Jahrb. Syst. 72: 293. 30 Jan 1942.—T.: *Chirripoa solitaria* Suess., Bot. Jahrb. Syst. 72: 293. 30 Jan 1942. *Guzmania polycyphala* Mez and Wercklé, Repert Spec. Nov. Regni Veg. 14: 254. 1916. Currently considered a synonym of *Guzmania*. See Smith & Pittendrigh (in J. Wash. Acad. Sci. 43: 404. 1953). Named after Cerro Chirripó in the Cordillera de Talamanca, Costa Rica.

Cipuopsis Ule, Verh. Bot. Vereins Prov. Brandenburg 48: 148. 1907.—T.: *Cipuopsis subandina* Ule, Verh. Bot. Vereins Prov. Brandenburg 48: 148. 1907. *Tillandsia subandina* (Ule) Mez ex L.B. Sm., Contr. Gray Herb. 98: 16. 1932. *Vriesea subandina* (Ule) L.B. Sm. & Pittendr., J. Wash. Acad. Sci. 43: 404. 1953. Currently considered a synonym of *Tillandsia*. Named for

its resemblance (Greek *opsis*, sight or appearance) to members of the genus *Cipura* Aubl. (Iridaceae).

Cochliopetalum Beer, Flora 37: 347. 14 Jun 1854.—T.: *Pitcairnia staminea* Lodd., Bot. Cab. 8: ad t. 722. 1823. *Cochliopetalum stamineum* (Lodd.) Beer, Fam. Bromel.: 39. Sep–Oct 1856 ('1857'). Currently considered a synonym of *Pitcairnia*. From the Latin *cochlear*, spoon, and the Greek *petalon*, leaf or petal, likely as to shape of the petals.

Conanthes Raf., Fl. tellur. 4: 24. 1838 (med.) ('1836').—T.: *Pitcairnia albiflos* Herb., Bot. Mag. 53: ad t. 2642. 1826. *Conanthes albiflos* (Herb.) Raf., Fl. tellur. 4: 25. 1838 (med.) ('1836'). The orthographic variant 'Codonanthes' has been cited, but it is not a separate generic name. Currently considered a synonym of *Pitcairnia*. From the Greek *konos*, cone, and *anthos*, flower, as to the shape of the inflorescence. Rafinesque (in 'Flora Telluriana' 1838) described four new bromeliad genera: *Conanthes*, *Eriostax*, *Eucallias*, and *Hexalepis*.

Connellia N.E. Br., Trans. Linn. Soc. London, Bot., ser. 2, 6: 66. Jan 1901.—LT.: *Encholirion augustae* R.H. Schomb., Verh. Vereins Beförd. Gartenbaus Königl. Preuss. Staaten 18: 156. 1846, designated by L.B. Smith (in ING Card No. 00254. 1 Oct 1955). *Connellia augustae* (R.H. Schomb.) N.E. Br., Trans. Linn. Soc. London, Bot., ser. 2, 6: 66. Jan 1901. Currently recognized in the subfam. *Pitcairnioideae*. Named in honor of the Englishman V.V. McConnell, who with J.J. Quelch collected the type and *C. quelchii* N.E. Br. on Mt. Roraima in Guyana.

Cottendorfia Schult. & Schult.f. in Roem. & Schult., Syst. veg. 7(2): lxiv, 1193. Oct–Dec 1830.—T.: *Cottendorfia florida* Schult. & Schult.f. in Roem. & Schult., Syst. veg. 7(2): lxiv, 1193. Oct–Dec 1830. Currently recognized as a monospecific genus in the subfam. *Pitcairnioideae*. Named in honor of German patron of the sciences, Johann Georg Cotta von Cottendorf (1796–1863). "Diximus in honorem Lib. Bar. Cotta de Cottendorf, p[ro]ll. Ord. Commend. etc., Membri Soc. Bot. Ratisb., ob eximia, quae Agriculturae patriae sua[re] reddidit, beneficia prudenterissimum Botanophilus." [Named in honor of Lib. Bar. Cotta von Cottendorf, p[ro]ll. Ord. Commend. etc., member of the Botanical Society of Ratisbon [Regensburg, Germany], the most wise botanist, on account of the outstanding agricultural things he has given back to his country.]

Cremobotrys Beer, Flora 37: 348. 14 Jun 1854, nom. illeg. ≡ *Eucallias* Raf., Fl. tellur. 4: 25. 1838 (med.) ('1836').—T.: *Bromelia zebrina*

Herb., Bot. Mag. 53: ad t. 2686. 1826. *Billbergia zebrina* (Herb.) Lindl., Bot. Reg. 13: ad t. 1068. 1827. 'Cremobotrys zebrina' (Herb.) Hook.f. & B.D. Jacks., Index Kewensis 1: 638. 1893 (not validly published; it is in italics, meaning it was treated as a synonym). Initially Beer did not transfer any species into *Cremobotrys*, but later [in Fam. Bromel.: 114. Sep–Oct 1856 ('1857')] regarded the type among other species as belonging to *Billbergia* 'Unterabteilung' [subdivision] *Cremobotrys*. *Cremobotrys* is an obligate synonym of *Eucallias*. From the Greek *cremas-tos*, hanging, and *botrys*, bunch or cluster.

Cryptanthopsis Ule, Bot. Jahrb. Syst. 42: 193. 1908.—T.: *Cryptanthopsis saxicola* Ule, Bot. Jahrb. Syst. 42: 193. 1908. *Orthophytum saxi-cola* (Ule) L.B. Sm., Smithsonian Misc. Collect. 126: 34. 1955. Currently considered a synonym of *Orthophytum*. Named for its resemblance (Greek *opsis*, sight or appearance) to the genus *Cryptanthus*.

Cryptanthus Otto and A. Dietr., Allg. Gartenzeitung 4: 298. 17 Sep 1836, nom. cons., non *Cryptanthus* Osbeck, Dagb. Ostind. Resa: 215. 1757 (phan.-incertae sedis).—T.: *Cryptanthus bromelioides* Otto and A. Dietr., Allg. Gartenzeitung 4: 298. 17 Sep 1836. Currently recognized in the subfam. *Bromelioideae*. From the Greek *krypto*, hide, and *anthos*, flower, as to the sometimes inconspicuous inflorescence.

Deinacanthon Mez in C. DC., Monogr. phan. 9: 12. Jan 1896.—T.: *Rhodostachys urbaniana* Mez in Mart., Fl. bras. 3(3): 182. 1 Nov 1891. *Deinacanthon urbanianum* (Mez) Mez in C. DC., Monogr. phan. 9: 12. Jan 1896. *Bromelia urbaniana* (Mez) L.B. Sm., Phytologia 15: 174. 1967. Currently recognized in the subfam. *Bromelioideae*. From the Greek *deinos*, terrible, and *anthos*, flower, likely as to the heavily armed leaves.

Dendropogon Raf., Neogenyton: 3. 1825.—T.: *Renealmia usneoides* L., Sp. pl.: 287. 1 Mai 1753. *Tillandsia usneoides* (L.) L., Sp. pl.: Ed. 2. 411. Sep 1762. *Dendropogon usneoides* (L.) Raf., Fl. tellur. 4: 25. 1838 (med.) ('1836'). *Dendropogon* is currently considered a synonym of *Tillandsia*, but has priority (over *Diaphoranthema* and *Strepsia*). From the Greek, *dendron*, tree, and *pogon*, beard, as to its (Spanish moss) appearance like a beard on a tree.

Deuterocohnia Mez in Mart., Fl. bras. 3(3): 430, 506. 1 Feb 1894.—T.: *Dyckia longipetala* Baker, Handb. Bromel.: 135. 17 Aug–15 Oct 1889. *Deuterocohnia longipetala* (Baker) Mez in Mart., Fl. bras. 3(3): 507. 1 Feb 1894. Currently recognized in the subfam. *Pitcairnioideae*. See

Spencer & Smith (in Bradea 6: 141–146. 27 Nov 1992), Luther (in Selbyana 18: 105. 1997), and here under *Abromeitiella*. Named in honor of German botanist and bacteriologist Ferdinand Julius Cohn (1828–1898). Since there was already a genus *Cohnia*, the Greek prefix *deuterios*, second, was placed in front to form a new generic name. In Mez's treatment of the Bromeliaceae in 'Flora Brasiliensis', he described six new genera: *Deuterocohnia*, *Fascicularia*, *Gravisia*, *Neoglaziovia*, *Prantleia*, and *Wittmackia*.

Diaphoranthema Beer, Flora 37: 349. 14 Jun 1854.—T.: *Renealmia recurvata* L., Sp. pl.: 287. 1 Mai 1753. *Tillandsia recurvata* (L.) L., Sp. pl.: Ed. 2. 410. Sep 1762. *Diaphoranthema recurvata* (L.) Beer, Fam. Bromel.: 156. Sep–Oct 1856 ('1857'). Currently considered a synonym of *Tillandsia*. Nevertheless, the name *Dendropogon* has priority over *Diaphoranthema* if *Tillandsia* subg. *Diaphoranthema* is recognized as a genus. From the Greek *diaphoros*, different, and *anthemon*, flower.

Disteganthus Lem., Fl. Serres Jard. Eur. 3: ad t. 227. Mai 1847.—T.: *Disteganthus basi-lateralis* Lem., Fl. Serres Jard. Eur. 3: ad t. 227. Mai 1847. Currently recognized in the subfam. *Bromelioideae*. From the Greek *dis*, two, *stego*, cover or sheathed, and *anthos*, flower.

Distiacanthus Baker, Handb. Bromel.: 13. 17 Aug–15 Oct 1889.—LT.: *Bromelia scarlatina* E. Morren, Belgique Hort. 31: 164. 1881, designated by L.B. Smith (in ING Card No. 00351. 1 Oct 1955). *Distiacanthus scarlatinus* (E. Morren) Baker, Handb. Bromel.: 13. 17 Aug–15 Oct 1889. Currently considered a synonym of *Bromelia*. From the Latin *dissiti-*, remote, and the Greek *akanthos*, a prickly plant, likely alluding to the spines on the leaves.

Dyckia Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxv, 1194. Oct–Dec 1830.—LT.: *Dyckia densiflora* Schult. and Schult.f. in Roem. & Schult., Syst. veg. 7(2): lxv, 1194. Oct–Dec 1830, designated by L.B. Smith (in ING Card No. 00365. 1 Oct 1955). Currently recognized in the subfam. *Pitcairnioideae*. Named in honor of German (Prussian) botanist, botanical artist and horticulturist Josef Maria Franz Anton Hubert Ignatz, Fürst und Altgraf zu Salm-Reifferscheid-Dyck (1773–1861) [Prince and Earl of Salm Reifferscheid-Dyck]. "Nomen in honorem serenissimi Principis Jos. ad Salm-Reifferscheid-Dyck etc. etc., qui amabili scientiae templum splendidissimum in terris suis dicavit, atque innumeris nitidissimisque thesauris locupletavit." [Name given in honor of the most serene Prince Joseph Salm-Reiffer-

scheid-Dyck, who ordered the most splendid temple of loveable science in his lands, and adorned it with most glamorous treasures.]

Echinostachys "Brongn. ex Planch., Hort. donat.: 25. 1858 ('1854–1858')", as listed in 'Index nominum genericorum 1979: 595' is not a distinct genus. See *Echinostachys* (in List VI: Putative fossil genera).

Edmundoa Leme, Canistrum Bromel. Mata Atl.: 42. Aug 1997.—T.: *Nidularium ambiguum* Wanderley and Leme, Bradea 5: 168. 1989. *Edmundoa ambigua* (Wanderley & Leme) Leme, Canistrum Bromel. Mata Atl.: 42. Aug 1997. Currently recognized in the subfam. *Bromelioideae*. Named in honor of Brazilian botanist Edmundo Pereira (1914–1986). Pereira spent the majority of his career at the Rio de Janeiro Botanical Garden. In the last ten years of his life he worked at the Herbarium Bradeanum devoted to the study of the Bromeliaceae, publishing numerous papers in the journal 'Bradea'.

Encholirium Mart. ex Schult. and Schult.f. in Roem. & Schult., Syst. veg. 7(2): lxviii, 1233. Oct–Dec 1830.—T.: *Encholirium spectabile* Mart. ex Schult. & Schult.f. in Roem. & Schult., Syst. veg. 7(2): lxviii, 1233. Oct–Dec 1830. Currently recognized in the subfam. *Pitcairnioideae*. The orthographic variant 'Encholirion' has often been used in various treatments, but is not a separate generic name. From the Greek *en-*, spear, and *leiron*, lily.

Eriostax Raf., Fl. tellur. 4: 25. 1838 (med.) ('1836').—T.: *Eriostax glauca* Raf., Fl. tellur. 4: 25. 1838 (med.) ('1836'), nom. illeg. ≡ *Bromelia melanantha* Ker-Gawl., Bot. Reg. 9: ad t. 766. 1824 = *Aechmea bromeliifolia* (Rudge) Baker in Benth. and Hook.f., Gen. pl. 3: 664. 1883. *Tillandsia bromeliifolia* Rudge, Pl. Guian.: 32. 1807. Currently considered a synonym of *Aechmea*. If the generic separation of *Macrochordion* from *Aechmea* is recognized, *Eriostax* has nomenclatural priority over *Macrochordion* since it includes *A. bromeliifolia*. From the Greek *erion*, wool, and *staxis*, dropping.

Eucallias Raf., Fl. tellur. 4: 25. 1838 (med.) ('1836').—T.: *Eucallias versicolor* Raf., Fl. tellur. 4: 25. 1838 (med.) ('1836'), nom. illeg. ≡ *Bromelia zebra* Herb., Bot. Mag. 53: ad t. 2686. 1826. *Billbergia zebra* (Herb.) Lindl., Bot. Reg. 13: ad t. 1068. 1827. Currently considered a synonym of *Billbergia*. Two other genera also have *Bromelia zebra* as type: *Cremobotrys* (1854) and *Helicodea* (1864). From the Greek *eu*, true, and *kalos*, beautiful.

Fascicularia Mez in Mart., Fl. bras. 3(3): 627. 1 Feb 1894.—LT.: *Bromelia bicolor* Ruiz &

Pav., Fl. peruv. 3: 33. Aug 1802, designated by L.B. Smith (in ING Card No. 00413. 1 Oct 1955). *Fascicularia bicolor* (Ruiz & Pav.) Mez in C. DC., Monogr. phan. 9: 9. Jan 1896. Mez described *Fascicularia* merely as an afterthought in a text portion of the monograph on the geography of the Bromeliaceae: "*Fascicularia* nov. gen. in *Rhodostachya bicolor*, *littoralis*, *pitcairniifolia* conditum, petalis ligulatis pollineque insignis." [The new genus *Fascicularia* is based on *Rhodostachya bicolor*, *littoralis*, and *pitcairniifolia* by its conspicuous ligulate petals and pollen.] Currently recognized in the subfam. *Bromelioideae*. From the Latin, *fasciculus*, fascicle, referring to the disposition of the flowers.

Fernseea Baker, Handb. Bromel.: 19. 17 Aug–15 Oct 1889.—T.: *Bromelia itatiaiae* Wawra, österr. Bot. Z. 30: 114. 1880. *Fernseea itatiaiae* (Wawra) Baker, Handb. Bromel.: 19. 17 Aug–15 Oct 1889. Currently recognized in the subfam. *Bromelioideae*. See E. Pereira & Moutinho (in Bradea 3: 339–348. 1983). Named in honor of Moravian-Austrian botanist and physician at Vienna, Dr. Heinrich Ritter Wawra von Fernsee (1831–1887). Wawra collected on several around-the-world expeditions as well as in Brazil accompanying European royalty, and wrote 'Les Broméliacées brésiliennes' (1881), and 'Itineraria principum S. Coburgi' (1883–1888). "Named after Baron Wawra von Fernsee, who has collected and carefully described and figured this and many other of the most interesting Brazilian Bromeliaceae, and was engaged in writing a monograph of them at the time of his death." The specific epithet derives from Itatiaia, a mountain in Brazil.

Fosterella L.B. Sm., Phytologia 7: 171. 18 Apr 1960.—T.: *Pitcairnia micrantha* Lindl., Edward's Bot. Reg. 29: misc. 44. 1843. *Fosterella micrantha* (Lindl.) L.B. Sm., Phytologia 7: 171. 18 Apr 1960. Currently recognized in the subfam. *Pitcairnioideae*. Named in honor of American horticulturist Mulford Bateman Foster (1888–1978), who provided Lyman B. Smith with many specimens from which numerous new species were described. The relationship between horticulturist and botanist was mutually beneficial, and Smith named numerous new species after both Mulford and his wife Racine. She was later honored with the genus *Racinaea*.

Garrelia Gaudich., Voy. Bonite, Bot. Atlas: t. 115. 1852.—T.: *Garrelia encholirioides* Gaudich., Voy. Bonite, Bot. Atlas: t. 115. 1852. *Dyckia encholirioides* (Gaudich.) Mez in C. DC., Monogr. phan. 9: 507. Jan 1896. Currently considered a synonym of *Dyckia*. No name deriva-

tion is given, but perhaps for someone named Garrel, or from the Latin *garrulus*, talkative.

Glomeropitcairnia (Mez) Mez, Bull Herb. Boissier, ser. 2, 5: 232. 28 Feb 1905, based on *Pitcairnia* subg. *Glomeropitcairnia* Mez in C. DC., Monogr. phan. 9: 463. Jan 1896.—T.: *Tillandsia penduliflora* Griseb., Fl. Brit. W. Ind.: 597. 1864. *Pitcairnia penduliflora* (Griseb.) Mez in C. DC., Monogr. phan. 9: 463. Jan 1896. *Glomeropitcairnia penduliflora* (Griseb.) Mez, Bull Herb. Boissier, ser. 2, 5: 232. 28 Feb 1905. Currently recognized in the subfam. *Tillandsioideae*. See Gilman & Brown (in J. Bromeliad Soc. 36: 104–106. 1986). From the Latin *glomus*, ball, and the generic name *Pitcairnia*.

Gravisia Mez in Mart., Fl. bras. 3(3): 180. 1 Nov 1891.—LT.: *Bromelia exsudans* Lodd., Bot. Cab. 9: ad t. 801. 1824, designated by L.B. Smith (in ING Card No. 00464. 1 Oct 1955). *Gravisia exsudans* (Lodd.) Mez in Mart., Fl. bras. 3(3): 300. 15 Mai 1892 = *Aechmea aquilega* (Salisb.) Griseb., Fl. Brit. W. Ind.: 592. 1864. Currently considered a synonym of *Aechmea*. Named in honor of Belgian Jean-Joseph Auguste Gravis (1857–1937), Professor of Botany at the Université de Liège.

Greigia Regel, Gartenflora 14: 137. 1865.—T.: *Bromelia sphacelata* Ruiz and Pav., Fl. peruv. 3: 32. Aug 1802. *Greigia sphacelata* (Ruiz & Pav.) Regel, Gartenflora 14: 137. 1865. Currently recognized in the subfam. *Bromelioideae*. Named in honor of Russian Samuel Alexeivich Greig (1827–1887). “Herrn Generalmajor von Greig . . . dem Präsidenten des Gartenbauvereins und einem der eifrigen Freunde und Förderer des Russischen Gartenbaues.” [Mr. Major General von Greig...the President of the Horticulture Society and a zealous friend and patron of Russian horticulture.]

Guzmania Ruiz and Pav., Fl. peruv. 3: 37. Aug 1802.—T.: *Guzmania tricolor* Ruiz and Pav., Fl. peruv. 3: 37. Aug 1802. Currently recognized in the subfam. *Tillandsioideae*. The genus *sensu* Smith & Downs (1977) is polyphyletic, and in need of a careful revision. “Genus nuncupavimus D. Anastasio Guzman, Pharmacopeo industrio et sedulo plantarum, animalium, aliorumque corporum naturalium alaci per Americem peregrinationibus nostrâ memoriâ institutis, scrutatori.” [We name the genus for pharmacist Master Anastasio Guzman, who diligently and attentively scrutinized plants, animals, and other natural bodies, active traveler of America, and set in our memory.]

Hechtia Klotzsch, Allg. Gartenzeitung 3: 401. 19 Dec 1835.—T.: *Hechtia stenopetala*

Klotzsch, Allg. Gartenzeitung 3: 401. 19 Dec 1835. Currently recognized in the subfam. *Pitcairnioideae*. Named in honor of German Julius Gottfried Conrad Hecht (1771–1837). “Mag der Name das Andenken des Geheimen Regierungsrathes Herrn Julius Hecht, Ritter des rothen Adler-Ordens dritter Klasse, Mitglied mehrerer gelehrten Gesellschaften u. s. w. in Potsdam, dem zu Ehren sie genannt ist, erhalten.” [This name may receive the memory of Privy Government Councilor Mr. Julius Hecht, Knight of the Third Class of the Order of the Red Eagle, member of several learned societies, etc.]

Helicodea Lem., Ill. Hort. 11: ad t. 421. 1864, nom. illeg. ≡ *Eucallias* Raf., Fl. tellur. 4: 25. 1838 (med.) (‘1836’).—T.: *Bromelia zebrina* Herb., Bot. Mag. 53: ad t. 2686. 1826. *Billbergia zebrina* (Herb.) Lindl., Bot. Reg. 13: ad t. 1068. 1827. *Helicodea* is an obligate synonym of *Eucallias*. From the Greek *heliktos*, rolled in a helix, as to the disposition of the petals.

Hepetis Sw., Prodr.: 4, 56. Jul 1788, nom. rej. (against *Pitcairnia* L'Hér., Sert. Angl.: 7. Jan 1789, nom. cons.).—T.: *Hepetis angustifolia* Sw., Prodr.: 4, 56. Jul 1788 = *Pitcairnia bromeliifolia* L'Hér., Sert. Angl.: 7, pl. 11. 1788, not *Pitcairnia angustifolia* Aiton, Hort. Kew. 1: 401. Oct 1789. Currently considered a synonym of *Pitcairnia*. Possibly from the Greek *hepar*, liver.

Hesperogreigia Skottsb., Acta Horti Gothob. 11: 220. 1936.—T.: *Greigia berteroii* Skottsb., Nat. hist. Juan Fernandez 2, 2(7): 109. 1922. *Hesperogreigia berteroii* (Skottsb.) Skottsb., Acta Horti Gothob. 11: 220. 1936. Currently considered a synonym of *Greigia*. From the Greek *hesperos*, the evening star, and the generic name *Greigia*: “from the occurrence of the type species on an island west of the coast of Chile.”

Hexalepis Raf., Fl. tellur. 4: 24. 1838 (med.) (‘1836’), nom. rej. (against *Vriesea* Lindl., Edward's Bot. Reg. 29: ad t. 10. 7 Feb 1843, nom. cons.) ≡ *Vriesea* Lindl., Edward's Bot. Reg. 29: ad t. 10. 7 Feb 1843.—T.: *Tillandsia psittacina* Hook., Bot. Mag. 55: ad t. 2841. 1828. *Hexalepis psittacina* (Hook.) Raf., Fl. tellur. 4: 24. 1838. *Vriesea psittacina* (Hook.) Lindl., Edward's Bot. Reg. 29: ad t. 10. 7 Feb 1843. *Hexalepis* was rejected in favor of *Vriesea*, and is therefore an obligate synonym. From the Greek *hexas*, the number six, and *lepis*, scale, possibly as to the six petal appendages (two on three separate petals).

Hohenbergia Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxxi, 1251. Oct–Dec 1830.—LT.: *Hohenbergia stellata* Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2):

Ixxi, 1251. Oct-Dec 1830, designated by Britton & P. Wilson (in Bot. Porto Rico 5: 134. 10 Aug 1923). Currently recognized in the subfam. *Bromelioideae*. "Nomen in honorem reg. alt. Principis de Würtemburg, qui nomine Hohenberg amabilem scientiam altissimo cult excoluit." [Name given in honor of his Royal Highness, the Prince of Würtemburg [a former Kingdom, now part of Baden-Württemberg, Germany], whose gave the glorious name of Hohenberg to this lovely science.]

Hohenbergiopsis L.B. Sm. and Read, Phytologia 33: 440. 1976.—T.: *Hohenbergia guatemalensis* L.B. Sm., Lilloa 6: 382. 1941. *Hohenbergiopsis guatemalensis* (L.B. Sm.) L.B. Sm. and Read, Phytologia 33: 440. 1976. Currently recognized as a monospecific genus in the subfam. *Bromelioideae*. Named for its resemblance (Greek *opsis*, sight or appearance) to the genus *Hohenbergia*.

Hoiriri Adans., Fam. pl. 2: 67, 584. Jul-Aug 1763, nom. rej. (against *Aechmea* Ruiz & Pav., Fl. peruv. prodr.: 47. Oct 1794, nom. cons.).—T.: *Bromelia nudicaulis* L., Sp. pl.: 286. 1 Mai 1753. *Aechmea nudicaulis* (L.) Griseb., Fl. Brit. W. Ind.: 593. 1864. *Hoiriri* was rejected against *Aechmea* as a taxonomic synonym, so the name may be used when considered distinct. In addition, *Hoiriri* has priority over *Pothuava* if that group is recognized. Currently considered a synonym of *Aechmea*. See *Pothuava*. Beer (in Fam. Bromel.: 211. 1856) notes that the pineapple (*Ananas comosus*) was called 'Hoyriri' by Thevenot. This name, used by the indigenous peoples of America, is likely the same name adopted by Adanson for this genus.

Hoplophytum Beer, Flora 37: 348. 14 Jun 1854.—T.: *Billbergia rhodocyanea* Lem., Fl. Serres Jard. Eur. 3: ad t. 207. 1847 = *Billbergia fasciata* Lindl., Bot. Reg. 13: ad t. 1130. 1828. *Hoplophytum fasciatum* (Lindl.) Beer, Fam. Bromel.: 129. Sep-Oct 1856 ('1857'). Currently considered a synonym of *Aechmea*. If accepted at the generic rank, *Hoplophytum* has priority over *Platyaechmea*. See Grant (in Phytologia 77: 99–101. 1994). From the Greek *hoplon*, armor or shield, and *phyton*, plant.

Jonghea Lem., Jard. Fleur. 2: ad t. 181–182 ['180–181']. 1852.—T.: *Jonghea splendida* Lem., Jard. Fleur. 2: ad t. 181–182 ['180–181']. 1852 = *Billbergia pyramidalis* (Sims) Lindl., Bot. Reg. 13: ad t. 1068. 1827. Currently considered a synonym of *Billbergia*. Named in honor of distinguished Belgian horticulturist of Brussels, Jean De Jonghe (1804–1876).

Karatas Mill., Gard. Dict. abr. Ed. 4: [unpaged].

28 Jan 1754, nom. illeg. = *Bromelia* L., Sp. pl.: 285. 1 Mai 1753.—T.: *Bromelia karatas* L., Sp. pl.: 285. 1 Mai 1753. *Karatas plumieri* E. Morren, Belgique Hort. 22: 131. 1872 (an avowed substitute if the genus *Karatas* is recognized, but impossible since *Bromelia* predares *Karatas* with the same type). *Bromelia plumieri* (E. Morren) L.B. Sm., Phytologia 15: 173. 1967, nom. illeg. When Miller established *Karatas*, he only attributed a single taxon to the genus, "Karatas foliis altissimus, angustissimis & aculeatis" (Plumier in Nova plantarum americanarum genera. 1703). Linnaeus (1753) had previously placed this polynomial into synonymy under the binomial *Bromelia karatas*. Therefore, if tautonyms were allowed in botanical nomenclature, the correct name for the type of this genus would be 'Karatas karatas'. In order to avoid this, Morren proposed the new name *Karatas plumieri*. When Smith returned the species to *Bromelia*, he transferred Morren's new name to *Bromelia* as *Bromelia plumieri*. However, *B. karatas* has priority over this later-named illegitimate substitute. The orthographic variant 'Caratas' has been cited, but it is not a separate generic name. See Smith & Downs (in Fl. Neotrop. 14: 1681. 1979). *Karatas* is an obligate synonym of *Bromelia*. "Karatas est nomen Americanarum apud Insulas Vulgare." [*Karatas* is the common name used by the Americans in the islands (West Indies). (Plumier in Nova plantarum americanarum genera: 10. 1703.)]

There is still today a small Miskito Indian village on the Caribbean coast of Nicaragua named Karatá. In the 'Diccionário Miskito-Espagñol, Espagñol-Miskito', by Marx & Heath (1992), the word 'kara' is the name for "*Bromelia karatas plumiere*", and 'ta' for "cape" or "point". As was explained to JRG in Karatá in March 1994 by the local people, the name of their village came from the plant 'kara' that grew on the "point" of their peninsula.

Lamprococcus Beer, Fam. Bromel.: 21, 103. Sep-Oct 1856 ('1857').—LT.: *Aechmea fulgens* Brongn., Ann. Sci. Nat. Bot., ser. 2, 15: 371. 1841, designated by L.B. Smith (in ING Card No. 00615. 1 Oct 1955). *Lamprococcus fulgens* (Brongn.) Beer, Fam. Bromel.: 21, 103. Sep-Oct 1856 ('1857'). See Smith and Kress (in Phytologia 66: 70–79. 27 Apr 1989). Currently considered a synonym of *Aechmea*. From the Greek *lampros*, bright, and Latin *coccum*, berry.

Lamproconus Lem., Jard. Fleur. 2: ad t. 127. 1852.—LT.: *Pitcairnia undulata* Scheidw., Allg. Gartenzeitung 10: 275. 1842, designated by L.B. Smith (in ING Card No. 00616. 1 Oct 1955). *Lamproconus undulatus* (Scheidw.) Lem., Jard. Fleur. 2: ad t. 127. 1852. Currently

considered a synonym of *Pitcairnia*. From the Greek *lampros*, bright, and *konos*, cone.

Lievena Regel, Gartenflora 29: 289. 1880.—T.: *Lievena princeps* Regel, Gartenflora 29: 289. 1880 = *Quesnelia arvensis* (Vell.) Mez in Mart., Fl. bras. 3(3): 381. 15 Mai 1892. Currently considered a synonym of *Quesnelia*. Named in honor of: "hohen Chef des kaiserlichen botanischen Gartens, Sr. Durchlaucht dem Fürsten Lieven, Minister der Reichsdomänen." [head of the Imperial Botanical Garden (in St. Petersburg), his Highness the Prince of Livonia (a Baltic Province later divided between Latvia and Estonia), Minister of the State Domains (of Russia).]

Lindmania Mez in C. DC., Monogr. phan. 9: 535. Jan 1896.—LT.: *Anoplophytum guianense* Beer, Fam. Bromel.: 44. Sep–Oct 1856 ('1857'), designated by L.B. Smith (in Field Mus. Nat. Hist., Bot. Ser., 13(1): 510. 26 Aug 1936). *Lindmania guianensis* (Beer) Mez in C. DC., Monogr. phan. 9: 535. Jan 1896. Currently recognized in the subfam. *Pitcairnioideae*. Named in honor of Swedish botanist Carl Axel Magnus Lindman (1856–1928), author of 'Bromeliaceae Herbarii Regnelliani. I. Bromelieae' (in Kongl. Svenska Vetenskaps-Akademiens Handlingar 24: 1–50. 1891).

Lymania Read, J. Bromeliad Soc. 34: 201. Sep–Oct 1984.—T.: *Araeococcus alvimii* L.B. Sm. and Read, Phytologia 38: 139. 1977. *Lymania alvimii* (L.B. Sm. & Read) Read, J. Bromeliad Soc. 34: 213. Sep–Oct 1984. Currently recognized in the subfam. *Bromelioideae*. See Leme (in Bradea 4: 395–397. 1987). Named in honor of American botanist Lyman Bradford Smith (1904–1997), curator at the Smithsonian Institution and renowned monographer of the Bromeliaceae. Named that year in honor of his 80th birthday. Smith was the world authority on the taxonomy of the Bromeliaceae from roughly 1930–1986, and was a specialist of the Begoniaceae, Velloziaceae, and Xyridaceae. He was the author of Bromeliaceae treatments in Flora of Peru (1936), North American Flora (1938), Flora of Panama (1944), The Bromeliaceae of Brazil (1955), The Bromeliaceae of Colombia (1957), Flora of Guatemala (1958), The Bromeliaceae of Bolivia (1969), Flora de Venezuela (1971), and Flora of Uruguay (1971). Smith published most of his papers on the Bromeliaceae in two series. While at Harvard University he published the series 'Studies in the Bromeliaceae'. It was reprinted in its entirety (papers I–XVII, 1930–1954) from 'Contributions from the Gray Herbarium of Harvard University' and 'Contributions of the United States National Herbarium' in a single volume by Clyde Reed

in 1977. Once establishing himself at the Smithsonian, Smith changed the name of the series to 'Notes on Bromeliaceae' and the journal to 'Phytologia'. Clyde Reed reprinted papers (I–XXXIII, 1953–1971) in a single volume in 1971. With his collaborator R.J. Downs, Smith compiled the monumental three-volume monograph of the family for 'Flora Neotropica': *Pitcairnioideae* (1974); *Tillandsioideae* (1977); *Bromelioideae* (1979). It continues to be the best selling of the 'Flora Neotropica' series.

Macrochordion de Vriese, Jaarb. Kon. Ned. Maatsch. Tuinb. 1853: 14. 1853.—T.: *Bromelia tinctoria* Mart. in Spix and Mart., Reise Bras. 2: 554. 1828. *Macrochordion tinctorium* (Mart.) de Vriese, Jaarb. Kon. Ned. Maatsch. Tuinb. 1853: 14. 1853 = *Aechmea bromeliifolia* (Rudge) Baker in Benth. and Hook.f., Gen. pl. 3: 664. 1883. *Tillandsia bromeliifolia* Rudge, Pl. Guian. 32. 50. 1807. Currently considered a synonym of *Aechmea*. If *Macrochordion* is regarded as distinct from *Aechmea*, then the name *Eriostax* has priority. See Smith and Kress (in Phytologia 66: 70–79. 27 Apr 1989), and here under *Eriostax*. The orthographic variant 'Macrochordium' has often been used in various treatments, but is not a separate generic name. From the Greek *makros*, long, and *chorde*, rope.

Madvigia Liebm., Ann. Sci. Nat. Bot., ser. 4, 2: 373. 1854.—T.: *Madvigia densiflora* Liebm., Ann. Sci. Nat. Bot., ser. 4, 2: 373. 1854 = *Cryptanthus acaulis* (Lindl.) Beer, Fam. Bromel.: 75. Sep–Oct 1856 ('1857'). Currently considered a synonym of *Cryptanthus*. Named in honor of F.N. Madwig: "In honorem viri celeberrimi F.-N. Madwig, prof. Philologiae dicatum." [Dedicated in honor of the well-known man, Professor of Literature, F.-N. Madwig.]

Massangea E. Morren, Belgique Hort. 27: 59. 1877.—T.: *Tillandsia musaica* Linden and André, Ill. Hort. 20: 171. 1873. *Massangea musaica* (Linden & André) E. Morren, Belgique Hort. 27: 59. 1877. *Guzmania musaica* (Linden & André) Mez in C. DC., Monogr. phan. 9: 898. Jan 1896. Currently considered a synonym of *Guzmania*. Named in honor of Belgian Antoine Ferdinand Joseph Massange (1831–1901), in whose greenhouses at Saint-Gilles, near Liège, the type species flowered from January–February 1877.

Meiothamnus Harms, Notizbl. Bot. Gart. Berlin-Dahlem 10: 575. 30 Mar 1929.—T.: *Navia brevifolia* Griseb., Symb. fl. argent.: 332. 1879. *Meiothamnus brevifolius* (Griseb.) Harms, Notizbl. Bot. Gart. Berlin-Dahlem 10: 575. 30 Mar 1929. *Deuterocohnia brevifolia* (Griseb.) M.A. Spencer & L.B. Sm., Bradea 6: 144. 27 Nov 1992. Currently considered a synonym of *Deu-*

terocohnia. Named in honor of Carl Christian Mez (1866–1944), German botanist at Breslau, Halle, and later Königsberg, Ostpreußen (East Prussia) [today Kaliningrad, Russia]. “So widme ich sie dem hervorragendsten Kenner der Bromeliaceen, C. Mez, dessen Meisterwerk ich beim Bestimmen schätzen gelernt habe.” [Thus I (Harms) dedicate it (the genus) to the most distinguished authority of the Bromeliaceae, C. Mez, whose masterpiece (*Monographiae phanerogamarum*) I have learned to appreciate when identifying (plants).]

Mez was the author of Bromeliaceae family treatments in Carl Friedrich Philipp von Martius’ (1794–1868) ‘*Flora Brasiliensis*’ (1894); C. de Candolle’s ‘*Monographiae phanerogamarum*’ (1896); and Engler’s ‘*Das Pflanzenreich*’ (1934–1935). Mez’s final monograph was the standard family treatment until Smith & Down’s three-volume monograph was published in the 1970’s.

Mezobromelia L.B. Sm., Proc. Amer. Acad. Arts 70: 151. 1935.—T.: *Mezobromelia bicolor* L.B. Sm., Proc. Amer. Acad. Arts 70: 151. 1935. Currently recognized in the subfam. *Tillandsioideae*. See Luther (in *Bromélia* 2: 3–5. 1995). Named in honor of Carl Christian Mez (1866–1944): “who has done more than any other botanist to clarify the taxonomy of the Bromeliaceae.”

Misandra F. Dietr., Nachtr. Vollst. Lex. Gärtn. Bot. 5: 102. 1819, nom. illeg. [non *Misandra* Comm. ex Juss., Gen. pl.: 405. 1789 (Gunneraceae)] = *Bonaparteaa* Ruiz & Pav., Fl. peruv. 3: 38. Aug 1802.—T.: *Bonaparteaa juncea* Ruiz & Pav., Fl. peruv. 3: 38. Aug 1802. *Misandra juncea* (Ruiz & Pav.) F. Dietr., Nachtr. Vollst. Lex. Gärtn. Bot. 5: 102. 1819. *Tillandsia juncea* (Ruiz & Pav.) Poir. in Lam., Encycl. suppl. 5(1): 309. 1 Nov 1817. *Misandra* is an obligate synonym of *Bonaparteaa*. From the Greek *miso*, hate, and *andros*, man.

Mosenia Lindm., Kongl. Svenska Vetenskapsakad. Handl., ser. 2, 24: 27. 1891.—T.: *Mosenia sicarius* Lindm., Kongl. Svenska Vetenskapsakad. Handl., ser. 2, 24: 27. 1891 = *Canistrum cyathiforme* (Vell.) Mez in Mart., Fl. bras. 3(3): 252. 1 Nov 1891. Currently considered a synonym of *Canistrum*. Named in honor of its collector, Swedish botanist at Stockholm Carl Wilhelm Hjalmar Mosén (1841–1887).

Navia Mart. ex Schult. & Schult.f. in Roem. & Schult., Syst. veg. 7(2): lxv, 1195. Oct–Dec 1830.—LT.: *Navia caulescens* Mart. ex Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxv, 1195. Oct–Dec 1830, designated by L.B. Smith (in ING Card No. 00747. 1 Oct 1955). One species of the genus (i.e., *Navia lo-*

pezii L.B. Sm., Bot. Mus. Leafl. Harvard 15: 40. 1951) has often been cited as the single exception to the rule in the family that one of its species lacked typical bromeliad trichomes. However, closer examination revealed this enigmatic species to be a member of Velloziaceae, and a new genus *Ararattiyopea* was established to accommodate it by Steyermark and Berry (in Ann. Missouri Bot. Gard. 71: 297. 1984). With the removal of this extraneous species, the Bromeliaceae became even better defined. Currently recognized in the subfam. *Pitcairnioideae*. “Nomen in honorem ill. Equitis de Nau, Cons. int. etc., historiae naturalis et Physices cultoris praeclarri, dedit ill. De Martius.” [Name given in dedication by Martius in honor of the illustrious Knight of Nau, Cons. int. et., distinguished supporter of natural history and physics.]

Neoglaziovia Mez in Mart., Fl. bras. 3(3): 180. 1 Nov 1891.—T.: *Bromelia variegata* Arruda, Diss. pl. Brazil.: 7. 1810. *Neoglaziovia variegata* (Arruda) Mez in Mart., Fl. bras. 3(3): 427. 1 Feb 1894. Currently recognized in the subfam. *Bromelioideae*. Named in honor of August François Marie Glaziou (1828–1906), French architect, botanist, and superintendent of the Public Botanical Garden (Paseo Publico) of Rio de Janeiro, Brazil. Glaziou corresponded with Morren, Baker, and Mez sending each specimens from Brazil that they in turn described. *Neoglaziovia* is not a renaming of a bromeliad ‘Glaziava’. Rather, since both *Glaziava* Bureau, Adansonia 8: 30. 1868 (Bignoniacae) and its illegitimate homonym *Glaziava* Mart. ex Drude in Mart., Fl. bras 3(2): 395. 1881 (Arecaceae) were already in existence, placing the Greek word *neo*, new, in front of Glaziou’s name was a simple way to form a new generic name.

Neoregelia L.B. Sm., Contr. Gray Herb. 104: 78. 1934, an avowed substitute for *Regelia* (Lem.) Lindm., Öfvers. Förh. Kongl. Svenska Vetensk.-Akad. 47: 542. 1890, nom. illeg., non *Regelia* Schauer, Linnaea 17: 243. 1843 (Myrtaceae).—T.: *Billbergia meyendorffii* Regel, Bot. Zeit. 15: 713. 16 Oct 1857. *Regelia meyendorffii* (Regel) Lindm. in Öfvers. Förh. Kongl. Svenska Vetensk.-Akad. 47: 543. 1890 = *Neoregelia carolinae* (Beer) L.B. Sm., Contr. Gray Herb. 124: 9. 1939. Smith established the name *Neoregelia* to replace both the illegitimate name *Regelia*, and Mez’s 1896 incorrect interpretation of *Are-gelia*. See *Aregelia*. Currently recognized in the subfam. *Bromelioideae*. Since *Neoregelia* replaces *Regelia*, it also honors Eduard August von Regel (1815–1892).

Neovriesia Britton in Britton and P. Wilson, Bot. Porto Rico 5: 141. 10 Aug 1923, nom. illeg. =

Vriesea Lindl., Edward's Bot. Reg. 29: ad t. 10. 7 Feb 1843.—T.: *Tillandsia psittacina* Hook., Bot. Mag. 55: ad t. 2841. 1828. *Neovriesia* is an obligate synonym of *Vriesea*. Although *Neovriesia* was established as a new name for *Vriesea* Lindl. 1843 (nom. cons.) (not *Vriesea* Hassk. 1842 (nom. rej., Scrophulariaceae)), no new combination into *Neovriesia* was ever proposed for *Tillandsia psittacina*.

Neumannia Brongn., Ann. Sci. Nat. Bot., ser. 2, 15: 369. 1841.—T.: *Neumannia imbricata* Brongn., Ann. Sci. Nat. Bot., ser. 2, 15: 369. 1841. *Pitcairnia imbricata* (Brongn.) Regel, Gartenflora 17: 135. 1868. Currently considered a synonym of *Pitcairnia*. Named in honor of the Frenchman Neumann: “jardinier en chef des serres au Museum imperial d’histoire naturelle de Paris.” [Head gardener of the greenhouses of the Imperial Museum of Natural History, Paris. (Ill. Hort. 5: 90. 1858).]

Nidularium Lem., Jard. Fleur. 4: ad t. 411; Misc.: 60. 1854. *Aregelia* Kuntze, Rev. Gen. 2: 698. 5 Nov 1891 was published as an avowed substitute for *Nidularium*, treating it as a homonym of *Nidularia* Bull. ex J. St.-Hil., Expos. Fam. Nat. 1: 6. 1805 (nom. rej.) (Gasteromycetes). Two other homonyms for *Nidularia* also exist: *Nidularia* Fr. in Fr. & Nordholm, Symb. gasteromyc. 1: 2. 1817 (nom. cons.) (Gasteromycetes), and *Nidularia* Withering, Bot. arr. Brit. pl. Ed. 2, 2: 859. Aug-Nov 1787 (nom. rej.) (Myxomycetes).—T.: *Nidularium fulgens* Lem., Jard. Fleur. 4: ad t. 411; Misc.: 60. 1854. Currently recognized in the subfam. *Bromelioidae*. See *Aregelia*. From the Greek *nidulus*, nest, as to the appearance of the plant as a bird’s nest.

Niveophyllum Matuda, Cact. Suc. Mex. 10: 3. 1965.—T.: *Niveophyllum caeruleum* Matuda, Cact. Suc. Mex. 10: 3. 1965. *Hechtia caerulea* (Matuda) L.B. Sm., Phytologia 24: 446. 1972. Currently considered a synonym of *Hechtia*. From the Latin *niveus*, snowy, and the Greek *phyllon*, leaf, as to the densely appressed white scales on the leaves.

Ochagavia Philippi, Anales Univ. Chile 13: 168. Mai 1856.—T.: *Ochagavia elegans* Philippi, Anales Univ. Chile 13: 168. Mai 1856. Currently recognized in the subfam. *Bromelioidae*. “Dixi in memoriam cl. Sylvestris Ochagavia, Instructionis publicae in Republica Chilensis annis 1853 et 1854 ministri.” [Named in memory of the illustrious Sylvestris Ochagavia, who served as a public school teacher in Chile from 1853–1854.]

Ortgiesia Regel, Gartenflora 16: 193. 1867.—T.: *Ortgiesia tillandsioides* Regel, Gartenflora

16: 193. 1867 = *Aechmea recurvata* var. *ortgiesii* (Baker) Reitz, Anais Bot. Herb. “Barbosa Rodrigues” 4: 29. 1952. Currently considered a synonym of *Aechmea*. See Smith and Kress (in Phytologia 66: 70–79. 27 Apr 1989). Named in honor of Swiss Karl Eduard Ortgies (1829–1916). “Obergärtner am Bot. Garten im Zürich.” [Head gardener at the Botanical Garden in Zürich.]

Orthopetalum Beer, Fam. Bromel.: 17, 70. Sep–Oct 1856 (‘1857’).—LT.: *Pitcairnia lanuginosa* Ruiz and Pav., Fl. peruv. 3: 35. Aug 1802, designated by L.B. Smith (in ING Card No. 00800. 1 Oct 1955). *Orthopetalum lanuginosum* (Ruiz & Pav.) Beer, Fam. Bromel.: 17, 70. Sep–Oct 1856 (‘1857’). Currently considered a synonym of *Pitcairnia*. From the Greek *orthos*, straight, and *petalon*, leaf or petal.

Orthophytum Beer, Flora 37: 347. 14 Jun 1854.—T.: *Prantleia glabra* Mez in Mart., Fl. bras. 3(3): 258. 1 Nov 1891. *Orthophytum glabrum* (Mez) Mez in C. DC., Monogr. phan. 9: 117. Jan 1896. *Currently recognized in the subfam. Bromelioidae*. See *Prantleia*. When Beer described the genus *Orthophytum*, he neither described any new species within the genus nor transferred any taxa into it. Rather, he merely cited a specimen on which he based the generic description (Nr. 3436 Bras. *Inhumae* Pohl aus dem Herbarium des Wiener Museum) [Number 3436, Bras. *Inhumae* (Inhumas, Goiás, Brazil), Pohl, from the herbarium of the Vienna Museum.] Curiously, Beer did not recognize this genus in his Fam. Bromel.: 1856 (‘1857’). Mez later in Fl. bras. 3(3): 180, 257. 1 Nov 1891 described the genus *Prantleia* and based this name on this same collection, citing in addition a duplicate specimen seen in Brussels. Mez (in Monogr. phan. 9: 116–117. Jan 1896), realized that his *Prantleia* was the same as that of Beer’s *Orthophytum*: “Generis et a Beerio in opere de Bromeliaceis et a sequentibus neglecte nomen hic reconstituo.” [I resurrect the following neglected name (*Orthophytum*) from Beer’s opus on the Bromeliaceae (Die Familie der Bromeliaceen).] From the Greek *orthos*, straight, and *phyton*, plant.

Pepinia Brongn. in André, Ill. Hort. 17: 32. 1870.—T.: *Pitcairnia punicea* Lindl. ex Hassk., Retzia Pugillus 2: 12. 1856 (non *Pitcairnia punicea* Scheidw., Bull. Acad. Roy. Sci. Bruxelles 9: 25. 1842). *Pepinia punicea* Brongn. in André, Ill. Hort. 17: 32. 1870. Previous reports of the type of *Pepinia* being *Pitcairnia aphelandriflora* Lem. in Ill. Hort. 16, Misc.: 90. 1869 or *Pepinia aphelandriflora* (Lem.) André in Ill. Hort. 17: 32. 1870, are incorrect. This is significant be-

cause all previous treatments of the genus have regarded *P. aphelandriflora* as the type, e.g., Smith and Downs (in Fl. Neotrop. 14: 244. 1974), and Varadarajan and Gilman (in Syst. Bot. 13: 296. 1988). Currently recognized in the subfam. *Pitcairnioideae*. See Luther (in Bromélia 2: 22–23. 1995). Dedicated by Brongniart in honor of Frenchman Pierre Denis Pépin (c.1802–1876): “membre de la Société impériale et centrale d’Agriculture, jardinier-en-chef du Muséum d’Histoire naturelle de Paris.” [member of the Imperial and Central Society of Agriculture, head gardener of the Natural History Museum, Paris.]

Phlomostachys Beer, Fam. Bromel.: 16, 45. Sep–Oct 1856 ('1857').—LT.: *Puya altensteinii* Link, Klotzsch, and Otto, Ic. pl. rar. 1(2): 1. 15–21 Nov 1840 ('1841'), designated by Pfeiffer (in Nomencl. bot. 2: 680. 1873). *Pitcairnia altensteinii* (Link, Klotzsch, & Otto) Lem., Fl. Serres Jard. Eur. 2: ad t. 162. 1846. *Phlomostachys altensteinii* (Link, Klotzsch, & Otto) Beer, Fam. Bromel.: 16, 45. Sep–Oct 1856 ('1857'). Currently considered a synonym of *Pitcairnia*. From the Greek *phlomos* (mullein, i.e. *Phlomis fruticosa*, Jerusalem sage), and *stachys*, spike.

Pholidophyllum Vis. ex Otto, Allg. Gartenzeitung 16: 30. 22 Jan 1848.—T.: *Pholidophyllum zonatum* Vis. ex Otto, Allg. Gartenzeitung 16: 30. 22 Jan 1848 = *Cryptanthus zonatus* (Vis. ex Otto) Beer, Fam. Bromel.: 76. Sep–Oct 1856 ('1857'). Currently considered a synonym of *Cryptanthus*. From the Greek *pholidos*, scale, and *phyllon*, leaf.

Phytarrhiza Vis., Due Piante Nuove Bromel.: 6. 1854.—T.: *Tillandsia duratii* Vis., Nuovi Saggi Imp. Regia Accad. Sci. Padova 5: 271. 1840. *Phytarrhiza duratii* (Vis.) Vis., Due Piante Nuove Bromel.: 6. 1854. Publication here is a preprint of its later appearance (in Mem. Reale Ist. Veneto Sci. 5: 340. 1855). Currently considered a synonym of *Tillandsia*. If this group (*Tillandsia* subg. *Phytarrhiza*) is recognized as a genus, *Phytarrhiza* has priority over *Wallisia*. From the Greek *phyton*, plant, *a*, without, and *rhiza*, root, meaning ‘plant without roots’.

Pinguin Adans., Fam. pl. 2: 67, 591. Jul–Aug 1763.—T.: *Bromelia pinguin* L., Sp. pl.: 285. 1 Mai 1753. The genus *Pinguin* has never been adopted, and no species have ever been transferred into it. Currently considered a synonym of *Bromelia*. The name *Pinguin* derives from a language of the indigenous peoples of the Americas.

Pironneava Gaudich. ex K. Koch, Wochenschr. Vereines Beförd. Gartenbaues Königl. Preuss.

Staaten 3: 86. 15 Mar 1860.—LT.: *Pironneava glomerata* Gaudich. ex K. Koch, Wochenschr. Vereines Beförd. Gartenbaues Königl. Preuss. Staaten 3: 338. 25 Oct 1860, designated by L.B. Smith (in ING Card No. 00861. 1 Oct 1955) = *Hohenbergia augusta* (Vell.) E. Morren, Catal.: 9. 1873. Currently considered a synonym of *Hohenbergia*. No name derivation is given, but the genus likely honors someone with the surname Pironneau.

German botanist Karl Koch (1809–1879) worked at the Botanischer Garten Berlin-Dahlem. Koch described numerous new species and genera in the journal ‘Wochenschrift des Vereines zur Beförderung des Gartenbaues in den Königlich Preussischen Staaten’ [Weekly of the Society for the Advancement of Horticulture in the Imperial Prussian States], and wrote the important work ‘Conspectus generum et subgenerum Bromeliacearum’ [Summary of the genera and subgenera of the Bromeliaceae] (1874).

Pitcairnia L'Hér., Sert. Angl.: 7. Jan 1789, nom. cons.(against *Hepepis* Sw., Prodr: 4, 56. Jul 1788).—T.: *Pitcairnia bromeliifolia* L'Hér., Sert. Angl.: 7. Jan 1789. Currently recognized in the subfam. *Pitcairnioideae*. Named in honor of William Pitcairn (1711–1791), an English physician who kept a botanical garden at Islington near London during the time L'Héritier visited England (see Stafleu's introduction to L'Héritier, Sert. Angl. reprint 2, 1963).

Pityrophyllum Beer, Fam. Bromel.: 17, 79. Sep–Oct 1856 ('1857').—LT.: *Tillandsia ionantha* Planch., Fl. Serres Jard. Eur. 10: 101. 1855, designated by Pfeiffer (in Nomencl. bot. 2: 735. 1873). The type of the genus is not *Tillandsia erubescens* Schlechtendal, Linnaea 18: 427. 1844 as indicated by Smith and Downs (in Fl. Neotrop. 14: 670. 1979). Currently considered a synonym of *Tillandsia*. From the Greek *pityron*, scale, and *phyllon*, leaf.

Placseptalia Espinosa, Bol. Mus. Nac. Hist. Nat. 23: 5. 1947.—T.: *Placseptalia rebeiae* Espinosa, Bol. Mus. Nac. Hist. Nat. 23: 5. 1947 = *Ochagavia carnea* (Beer) L.B. Sm. and Looser, Revista Univ. (Santiago) 18: 1078. 1934. Currently considered a synonym of *Ochagavia*. From the Greek *plakos*, something flat and wide, and the Latin *septum*, fence or wall. The specific epithet honors Espinosa's colleague, Rebeca Acevedo de Vargas. “Species in honorem collegae dominae Rebeca Acevedo de Vargas, Professor Scientiarum Biologicarum et botanista Musei Nationalis Chilensis Historiae Naturalis nominata.” [The species is named in honor of my colleague Ms. Rebeca Acevedo de Vargas, Professor of Bi-

ological Sciences and botanist at the Chilean National Natural History Museum.]

Platyaechmea (Baker) L.B. Sm. and Kress, Phytologia 69: 272. 14 Nov ('Oct') 1990, based on *Aechmea* subg. *Platyaechmea* Baker, J. Bot. 17: 130. 1879.—T.: *Aechmea distichantha* Lem., Jard. Fleur. 3: ad t. 269. 1853. *Platyaechmea distichantha* (Lem.) L.B. Sm. and Kress, Phytologia 69: 272. 14 Nov ('Oct') 1990. Currently considered a synonym of *Aechmea*. If recognized at the generic rank, *Hoplophytum* has priority over *Platyaechmea*. See Smith & Kress (in Phytologia 66: 70–79. 27 Apr 1989) and Grant (in Phytologia 77: 99–101. 1994). From the Greek *platys*, broad, and the generic name *Aechmea*.

Platystachys K. Koch, Ind. Sem. Berol. 1854, App.: 11. 1855, published as an avowed substitute for *Allardtia* A. Dietr., Allg. Gartenzeitung 20: 241. 31 Jul 1852, treating *Allardtia* as a homonym of *Allardia* Decne. in Jacquemont, Voyage Inde Bot.: 87. ante 13 Jun 1836 (Asteraceae).—T.: *Allardtia cyanea* A. Dietr., Allg. Gartenzeitung 20: 241. 1852. *Platystachys cyanea* (A. Dietr.) K. Koch & Sello in K. Koch, Ind. Sem. Berol. 1854, App.: 11. 1855. *Tillandsia cyanea* (A. Dietr.) E. Morren, Belgique Hort. 29: 297. 1879. Currently considered a synonym of *Tillandsia*. From the Greek *platys*, broad, and *stachys*, spike.

Podaechmea (Mez) L.B. Sm. and Kress, Phytologia 69: 271. 14 Nov ('Oct') 1990, based on *Aechmea* subg. *Podaechmea* Mez in C. DC., Monogr. phan. 9: 191. Jan 1896.—LT.: *Pironneava lueddemanniana* K. Koch, Wochenschr. Vereines Beförd. Gartenbaues Königl. Preuss. Staaten 9: 182. 1866, designated by Smith and Downs (in Fl. Neotrop. 14: 1768. 1979). *Aechmea lueddemanniana* (K. Koch) Mez, Pflanzenz. IV 32, 100(1): 120. 27 Nov 1934. *Podaechmea lueddemanniana* (K. Koch) L.B. Sm. and Kress, Phytologia 69: 271. 14 Nov ('Oct') 1990. *Pironneava lueddemanniana*, an earlier name for *Aechmea caerulescens* (Regel) Baker, J. Bot. 17: 227. 1879 (based on *Lamprococcus caerulescens* Regel, Trudy Imp. S.-Petersburgsk. Bot. Sada [Acta horti petropolitani] 1: 93. 1871), one of the species originally attributed to *Aechmea* subg. *Podaechmea*, provides the type (Art. 10.3, Greuter et al. 1994). Currently considered a synonym of *Aechmea*. See Smith and Kress (in Phytologia 66: 70–79. 27 Apr 1989). From the Greek *podos*, foot, and the generic name *Aechmea*.

Pogospermum Brongn., Ann. Sci. Nat. Bot., ser. 5, 1: 327. Jun 1864, nom. illeg. ≡ *Catopsis* Griseb., Nachr. Königl. Ges. Wiss. Georg-Augusts-Univ. 1864: 10, 12. 13 Jan 1864.—T.: *Tilland-*

sia nitida Hook., Exot. Fl. 3: ad t. 218. 1827. *Catopsis nitida* (Hook.) Griseb., Nachr. Königl. Ges. Wiss. Georg-Augusts-Univ. 1864: 21. 13 Jan 1864. *Pogospermum nitidum* (Hook.) Brongn., Ann. Sci. Nat. Bot., ser. 5, 1: 327. Jun 1864. Previous reports of *Pogospermum flavum* Brongn. as the type are incorrect. Brongniart states in the protologue: "Dans le *Tillandsia nitida* de Hook., type de mon genre *Pogospermum* . . ." [In the *Tillandsia nitida* of Hooker, type of my genus *Pogospermum* . . .] *Pogospermum* is an obligate synonym of *Catopsis*. See *Catopsis* and *Tussacia*. From the Greek *pogon*, beard, and *sperma*, seed, for the unique coma on the seeds of *Catopsis* species.

Portea K. Koch, Ann. Sci. Nat. Bot., ser. 4, 6: 368. 1856.—T.: *Portea kermesina* K. Koch, Ann. Sci. Nat. Bot., ser. 4, 6: 368. 1856. Currently recognized in the subfam. *Bromelioideae*. No name derivation is given, but possibly named for Italian botanist Pietro Port (1832–1923), or from the Latin *porta*, gate or door.

Pothuava Gaudich. ex K. Koch, Wochenschr. Vereines Beförd. Gartenbaues Königl. Preuss. Staaten 3: 85. 15 Mar 1860, nom. illeg. ≡ *Hoimiri* Adans., Fam. pl. 2: 67, 584. Jul–Aug 1763, nom. rej. (against *Aechmea* Ruiz & Pav., Fl. peruv. prodr.: 47. Oct 1794, nom. cons.).—T.: *Bromelia nudicaulis* L., Sp. pl.: 286. 1 Mai 1753. *Aechmea nudicaulis* (L.) Griseb., Fl. Brit. W. Ind.: 593. 1864. *Pothuava nudicaulis* (L.) Regel, Gartenflora 31: 291. Oct 1882. Koch validated *Pothuava* with a full generic description, but did not transfer any species. Since he only mentioned *Hoplophytum nudicaulis*, it is the obligate type of the genus. *Pothuava* is an obligate synonym of *Hoimiri*. Nevertheless, if this *Aechmea* segregate is recognized, the name *Hoimiri* has priority. See Smith & Kress (in Phytologia 66: 70–79. 27 Apr 1989). No name derivation is given, but possibly from the Greek *pothos*, fond desire.

Pourretia Ruiz and Pav., Fl. peruv. prodr.: 46. Oct 1794.—LT.: *Pourretia lanuginosa* Ruiz & Pav., Fl. peruv.: 3: 33. Aug 1802, designated by L.B. Smith (in Phytologia 18: 140. 1969). *Puya lanuginosa* (Ruiz & Pav.) Schult. & Schult.f. in Roem. and Schult., Syst. veg. 7(2): 1234. Oct–Dec 1830. Currently considered a synonym of *Puya*. The text of Ruiz and Pavon's 1794 work was published simultaneously in Spanish and Latin, with the left-hand column in Spanish and the right-hand column in Latin. Named in honor of Abbé Pierre André Pourret (1754–1818) of Narbonne, France. "Género dedicado al Sr. Abate Pourret, gran Arcediano del campo Agiense (vulgo du mas d'Agen) y excelente Bo-

tánico, que en Narbona ha formado, adquiriendo Plantas de todas partes con sumo gasto y actividad, un Jardin muy rico y un copiosísimo Herbario para su recreo y el de sus amigos y beneficio público.” [Genus dedicated to Father Pourret, great Archdeacon of the Agen country-side [a historical region of southern France] (common masses of Agen) and excellent botanist who, acquiring plants from all over at the greatest of expense and effort, formed a very lush garden and most copious herbarium in Narbonne [France] for his leisure and that of his friends, and for public benefit.]

Prantleia Mez in Mart., Fl. bras. 3(3): 180, 257. 1 Nov 1891, nom. illeg. ≡ *Orthophytum* Beer, Flora 37: 347. 14 Jun 1854.—T.: *Prantleia glabra* Mez in Mart., Fl. bras. 3(3): 258. 1 Nov 1891. *Orthophytum glabrum* (Mez) Mez in C. DC., Monogr. phan. 9: 117. Jan 1896. *Prantleia* is an obligate synonym of *Orthophytum*. Named in honor of German (Bavarian) botanist Karl Anton Eugen Prantl (1849–1893), co-editor with Heinrich Gustav Adolf Engler (1844–1930) of such classical works as ‘Die natürlichen Pflanzenfamilien’ [The Natural plant families] (1887–1915) and ‘Das Pflanzenreich’ [The Plant kingdom] (1900–1953).

Prionophyllum K. Koch, Ind. Sem. Berol. 1873, App. 4: 3. 1874.—T.: *Prionophyllum selloum* K. Koch, Ind. Sem. Berol. 1873, App. 4: 7. 1874. *Dyckia selloa* (K. Koch) Baker, Handb. Bromel.: 136. 17 Aug–15 Oct 1889. Currently considered a synonym of *Dyckia*. From the Greek *prion*, saw, and *phyllon*, leaf, as to the serrated leaves.

Pseudaechmea L.B. Sm. and Read, Phytologia 52: 53. 1982.—T.: *Pseudaechmea ambigua* L.B. Sm. and Read, Phytologia 52: 53. 1982. Currently recognized as a monospecific genus in the subfam. *Bromelioideae*. From the Greek *pseudos*, false, and the generic name *Aechmea*.

Pseudananas (Hassl.) Harms in Engler and Prantl, Nat. Pflanzenfam. Ed. 2, 15a: 153. 1930, based on *Ananas* sect. *Pseudananas* Hassl., Annuaire Conserv. Jard. Bot. Genève 20: 280. 1919.—T.: *Ananas macrodontes* E. Morren, Belgique Hort. 28: 140. 1878. *Pseudananas macrodontes* (E. Morren) Harms in Engler & Prantl, Nat. Pflanzenfam. Ed. 2, 15a: 153. 1930 = *Pseudananas sagenarius* (Arruda) Camargo, Rev. Agric. Piracicaba 14(7, 8): reprint p. 4. 1939. Currently recognized as a monospecific genus in the subfam. *Bromelioideae*. From the Greek *pseudos*, false, and the generic name *Ananas*.

Puya Molina, Sag. stor. nat. Chili: 160, 351. Oct 1782.—T.: *Puya chilensis* Molina, Sag. stor. nat.

Chili: 160, 351. Oct 1782. Currently recognized in the subfam. *Pitcairnioideae*. The name is derived from the native language of the indigenous Chileans. Nevertheless, Molina gave no exact indication what the name ‘puya’ means, but it is possibly simply the common name of the plant used by the indigenous Chileans.

Quesnelia Gaudich., Voy. Bonite, Bot. Atlas: t. 54. 1842.—T.: *Quesnelia rufa* Gaudich., Voy. Bonite, Bot. Atlas: t. 54. 1842. Currently recognized in the subfam. *Bromelioideae*. No name derivation is given, but possibly named after French author François Alexandre Quesné (1742–1820).

Racinaea M.A. Spencer and L.B. Sm., Phytologia 74: 152. 1993.—T.: *Tillandsia cuspidata* L.B. Sm., Phytologia 9: 252. 1963. *Racinaea cuspidata* (L.B. Sm.) M.A. Spencer and L.B. Sm., Phytologia 74: 153. 1993. Currently recognized in the subfam. *Tillandsioideae*. A complete checklist of the species currently known to comprise the genus is provided by Luther (in Selbyana 18: 117–121. 1997). *Racinaea* can not be “based on” *Tillandsia* sect. *Pseudocatopsis* André, Bromel. Andr.: 62, 66. Sept–Dec 1889 because its type, *Tillandsia cuspidata* (published in 1963) is not an original component of *T.* sect. *Pseudocatopsis*. The type of this section is *Tillandsia ropolocarpa* André, Énum. Bromel. 6. 13 Dec 1888. Named in honor of Racine Foster (1910–1991), co-founder with her husband Mulford Bateman Foster of the Bromeliad Society and its journal, the ‘Bulletin of the Bromeliad Society’ (1951–1970), later the ‘Journal of the Bromeliad Society’ (1971+).

Regelia (Lem.) Lindm., Öfvers. Förh. Kongl. Svenska Vetensk.-Akad. 47: 542. 1890, nom. illeg., based on *Nidularium* sect. *Regelia* Lem., Ill. Hort. 7: ad t. 245. 1860 (non *Regelia* Schauer, Linnaea 17: 243. 1843) ≡ *Neoregelia* L.B. Sm., Contr. Gray Herb. 104: 78. 1934.—T.: *Billbergia meyendorffii* Regel, Bot. Zeit. 15: 713. 16 Oct 1857. *Regelia meyendorffii* (Regel) Lindm. in Öfvers. Förh. Kongl. Svenska Vetensk.-Akad. 47: 543. 1890 = *Neoregelia carolinae* (Beer) L.B. Sm., Contr. Gray Herb. 124: 9. 1939. *Regelia* is an obligate synonym of *Neoregelia*. Named in honor of German (Thuringian) botanist Eduard August von Regel (1815–1892), director of the Botanical Garden of St. Petersburg, Russia: “... en honneur d’un frère qui a su joindre à un dégré éminent l’art de l’horticulture à la science proprement dite. (Lem., Ill. Hort. 7: ad. t. 245. 1860)” [...] in honor of a colleague who to an eminent degree has joined the art of horticulture with that of science itself.] From 1852–1884 Regel was the

editor of 'Gartenflora' (Allgemeine Monatsschrift für deutsche, russische und schweizerische Garten-und Blumenkunde und Organ des Russischen Gartenbau-Vereins in St. Petersburg) [Garden Flora (General monthly for German, Russian and Swiss garden and flower knowledge, and Journal of the Russian Horticultural Society of St. Petersburg]. Regel published extensively on the Bromeliaceae, but did not compose any single major work on the family.

Renealmia L., Sp. pl.: 286. 1 Mai 1753, nom. rej. (against *Renealmia* L.f., Suppl. Pl.: 7, 79. Apr 1782, nom. cons., Zingiberaceae).—**LT.:** *Renealmia paniculata* L., Sp. pl.: 286. 1 Mai 1753, designated by L.B. Smith (in ING Card No. 06039. 22 Jul 1958). *Tillandsia paniculata* (L.) L., Sp. pl.: ed 2. 410. Sep 1762. In the first edition of 'Species plantarum' (1753), Linnaeus named five species of *Renealmia*: *R. monostachia* (≡*Guzmania monostachia*), *R. paniculata* (≡*Tillandsia paniculata*), *R. polystachia* (≡*T. polystachia*), *R. recurvata* (≡*T. recurvata*), and *R. usneoides* (≡*T. usneoides*). However, in the second edition (1762), Linnaeus reduced *Renealmia* synonymy under *Tillandsia*, and transferred all its species there. His son, Carl von Linné filius (1741–1783) employed the name *Renealmia* for a genus of gingers, and it is in this sense that the name *Renealmia* has been conserved. Named in honor of French botanist and physician Paul Renaulme (1560–1624), of Blois, France. "Clarissimus D. Paulus Renaulmus Blesensis, D. M. Medicinae theoricae, practicae & chymicae peritissimus, ac in Botanicis versatissimus." [The illustrious Mr. Paul Renaulme of Blois (France), Doctor of Theoretical Medicine, most knowledgeable in practical chemistry, and well versed in botany.]

Rhodostachys Philippi, Linnaea 29: 57. Feb–Mar 1858.—**T.:** *Rhodostachys andina* Philippi, Linnaea 29: 57. Feb–Mar 1858 = *Ochagavia carnea* (Beer) L.B. Sm. and Looser, Revista Univ. (Santiago) 18: 1078. 1934. Currently considered a synonym of *Ochagavia*. From the Greek *rhodon*, red, and *stachys*, spike.

Ronnbergia E. Morren and André, Ill. Hort. 21: 120. 1874.—**T.:** *Ronnbergia morreniana* Linden & André, Ill. Hort. 21: 120. 1874. Currently recognized in the subfam. *Bromelioideae*. Named in honor of Belgian Auguste Ronnberg: "Directeur de l'Agriculture et de l'Horticulture au ministère de l'Intérieur de Belgique." [Director of Agriculture and Horticulture at the Ministry of the Interior of Belgium.]

Ruckia Regel, Ind. Sem. Hort. Petrop. 1866: Suppl. 28. Feb–Dec 1868 ('1867'); Gartenflora 17: 65. Mar 1868.—**T.:** *Ruckia elmetii* Regel,

Ind. Sem. Hort. Petrop. 1866: Suppl. 28. Feb–Dec 1868 ('1867'); Gartenflora 17: 65. Mar 1868 = *Ochagavia carnea* (Beer) L.B. Sm. and Looser, Revista Univ. (Santiago) 18: 1078. 1934. Currently considered a synonym of *Ochagavia*. Named in honor of the Russian: "... Herrn Hofgärtner Ruck ... Garten Sr. kaiserlichen Hoheit des Grossfürsten Constantin-Nicolajewitsch zu Strelna." [...] head gardener Mr. Ruck ... (of the) garden of his Imperial Highness, Grand Duke Constantine Nikolaevich zu Strelna (son of Czar Nicholas I, brother of Czar Alexander II).]

Schlumbergeria E. Morren, Belgique Hort. 28: 311. 1878, nom. illeg. (non *Schlumbergera* Lem., Ill. Hort. 5:24. 1858, Cactaceae).—**T.:** *Schlumbergeria roezlii* E. Morren, Belgique Hort. 28: 311. 1878. *Guzmania roezlii* (E. Morren) Mez in C. DC., Monogr. phan. 9: 948. Jan 1896. The name *Schlumbergeria* E. Morren [non *Schlumbergera* Lem. = *Zygocactus*, the Christmas cactus] has been incorrectly cited as published in Belgique Hort. 33: 46. 1883, and its type incorrectly reported as *Massangea morreniana* by Smith and Downs (in Fl. Neotrop. 14: 1275. 1977). That paper is simply a paper on the transfer of *Massangea morreniana* to *Schlumbergeria*. This revelation is significant because *S. roezlii* is the actual type of the genus. If this group is resurrected to the generic rank, it requires a new name since its predating homonym *Schlumbergera* Lem. (Cactaceae) has priority. Currently considered a synonym of *Guzmania*. Named in honor of P. Schlumberger, of Anthieux castle near Rouen, France where the plants flowered from August–September 1873.

Sincoraea Ule, Bot. Jahrb. Syst. 42: 191. 1908.—**T.:** *Sincoraea amoena* Ule, Bot. Jahrb. Syst. 42: 191. 1908. *Orthophytum amoenum* (Ule) L.B. Sm., Smithsonian Misc. Collect. 126: 33. 1955. Currently considered a synonym of *Orthophytum*. Named after the mountain Serra do Sincorá, Bahia, Brazil, where the type was collected.

Sodiroa André, Bull. Soc. Bot. France 24: 167. 1877.—**T.:** *Sodiroa graminifolia* André ex Baker in J. Bot. 25: 54. 1887, designated by L.B. Smith (in ING Card No. 02895. 19 Feb 1957). *Guzmania graminifolia* (André ex Baker) L.B. Sm., Contr. Gray Herb. 104: 74. 1934. When André described the genus, he did not officially place any species in it, but noted two names for which he hoped to provide descriptions later: *S. graminifolia* and *S. caricifolia*. Unfortunately, he never published the names himself, though Baker later validated them. Currently considered a synonym of *Guzmania*. Named in honor of

Italian botanist and clergyman Luis (Aloysius, Luigi) Sodiro (1836–1909), who according to Baker (in J. Bot. 25: 53. 1887) worked in Ecuador. “Father Sodiro, whose name is familiar to the readers of the Journal [J. Bot.] through the numerous new ferns he has discovered in the Andes of Ecuador.”

Steyerbromelia L.B. Sm., Ann. Missouri Bot. Gard. 73: 699. 30 Mar 1987 ('1986').—T.: *Steyerbromelia discolor* L.B. Sm. and H. Rob., Ann. Missouri Bot. Gard. 73: 699. 30 Mar 1987 ('1986'). When *Steyerbromelia* was originally prepared for publication (in Acta Bot. Venez. 14(3): 8. 1984), it was intended to be monospecific with *S. discolor* as the type. However, a second species, *S. deflexa*, was added late in the manuscript process and the genus was published without specified designation of the type. Therefore, *Steyerbromelia* was invalid until the next publication appeared with specific mention of its type (Art. 37.1, Greuter *et al.* 1994). Currently recognized in the subfam. *Pitcairnioideae*. Named in honor of American botanist Julian A. Steyermark (1909–1988), one of the world's most prolific plant collectors, author of the 'Flora of Missouri' (1963), and editor of the 'Flora of the Venezuelan Guayana' (1995+).

Strepsia (Nutt.) Steud., Nomencl. bot. Ed. 2, 2: 645. 1841, nom. illeg., based on *Tillandsia* sect. *Strepsia* Nutt., Gen. N. Amer. pl. 1: 208. 1818 ≡ *Dendropogon* Raf., Neogenyton: 3. 1825.—T.: *Renealmia usneoides* L., Sp. pl.: 287. 1 Mai 1753. *Strepsia usneoides* (L.) Steud., Nomencl. bot. Ed. 2, 2: 645. 1841. *Tillandsia usneoides* (L.) L., Sp. pl.: Ed. 2. 411. Sep 1762. *Strepsia* is an obligate synonym of *Dendropogon*. From the Greek *strepsis*, turning, or twisting, as to the twisting nature of pendent Spanish moss.

Streptocalyx Beer, Flora 37: 348. 14 Jun 1854.—T.: *Streptocalyx poeppigii* Beer, Fam. Bromel.: 141. Sep–Oct 1856 ('1857'). When Beer established *Streptocalyx*, he did not include any species within the genus, but merely cited a Poeppig specimen from which the description was taken. Later (1856) he defined the genus to contain a single species, naming it *S. poeppigii* after its collector, Eduard Friedrich Poeppig (1798–1868). Currently considered a synonym of *Aechmea*. See Smith & Spencer (in Phytologia 72: 96–98. 1992). From the Greek *strepsis*, turning, or twisting, and *kalyx*, calyx.

Thecophyllum André, Bromel. Andr.: 107. 1889.—LT.: *Thecophyllum wittmackii* André, Bromel. Andr.: 107. 1889, designated by Britton & P. Wilson (in Bot. Porto Rico 5: 143. 10 Aug 1923). *Guzmania wittmackii* (André) Mez in C. DC., Monogr. phan. 9: 921. Jan 1896. The later

designation of *Thecophyllum poortmanii* as the lectotype of the genus by Smith and Downs (in Fl. Neotrop. 14: 1275. 1977) is incorrect. Currently considered a synonym of *Guzmania*. The genus *Thecophyllum sensu* Mez (1896) & (1935), with notable exception to its type, is largely equal to that of *Werauhia*. From the Greek *theke*, envelope or sheath and *phyllon*, leaf, as to the large bracts of the inflorescence. The change in type removes the stigma previously associated with the genus, making the name available if a segregate is removed from *Guzmania*.

Tillandsia L., Sp. pl.: 286. 1 Mai 1753.—LT.: *Tillandsia utriculata* L., Sp. pl.: 286. 1 Mai 1753, designated by Britton & Millspaugh (in Bahama fl. 64. 26 Jun 1920). Currently recognized in the subfam. *Tillandsioideae*. The genus *sensu* Smith & Downs (1977) comprises several distinct generic entities, and is in need of a careful revision. In 'Species plantarum' (1753), Linnaeus named four species of *Tillandsia*: *T. lingulata* (≡*Guzmania lingulata*), *T. serrata* (≡*Aechmea serrata*), *T. tenuifolia*, and *T. utricularia*. Named in honor of Swedish physician and botanist Elias Erici Tillandz (originally Tillerander) (1640–1693), a professor in Åbo (Turku) Finland and Uppsala, Sweden. His surname derives from the Swedish 'till-lands' [by land, or on land]. Fernald (in Gray's Manual of Botany, Ed. 8: 391. 1950) notes that Tillandz: "... as a student crossing directly from Stockholm [to Turku], was so seasick that he returned to Stockholm by walking more than 1,000 miles around the Gulf of Bothnia [the gulf between Finland and Sweden] and hence assumed his surname (by land)." Linnaeus named the genus after Tillandz, because he thought that it too did not like water.

Tussacia Willd. ex Beer, Fam. Bromel.: 21, 99, 174–175. Sep–Oct 1856 ('1857'), nom. illeg. [non *Tussacia* Willd. ex Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(1): x, 57. 1829 (phan.-incertae sedis), nec *Tussacia* Benth., London J. Bot. 5: 364. 1846 (Gesneriaceae)] ≡ *Catopsis* Griseb., Nachr. Königl. Ges. Wiss. Georg-Augusts-Univ. 1864: 10, 12. 13 Jan 1864. *Catopsis* was published as an avowed substitute for *Tussacia* Willd. ex Beer (1856) because it is considered a homonym of both *Tussacia* Willd. ex Schult. and Schult.f. (1829) and *Tussacia* Benth. (1846).—LT.: *Tillandsia nitida* Hook., Exot. Fl. 3: ad t. 218. 1827, designated here. *Tussacia nitida* (Hook.) Beer, Fam. Bromel.: 100. Sep–Oct 1856 ('1857'). *Catopsis nitida* (Hook.) Griseb., Nachr. Königl. Ges. Wiss. Georg-Augusts-Univ. 1864: 21. 13 Jan 1864. The lectotypification of *Tussacia* here is neces-

sary because the previously accepted type of the genus, *Tillandsia nutans* (i.e., *sensu* Smith & Downs in Fl. Neotrop. 14: 1366. 1977) is not an original element of *Tussacia*. There are four species of *Tussacia* listed by Beer [in Fam. Bromel.: 99–101. Sep–Oct 1856 ('1857')] from which to choose a lectotype: *Tussacia fulgens*, *T. nitida*, *T. sessiliflora*, and *T. vitellina*. Since *T. fulgens* and *T. vitellina* are in synonymy under *Catopsis nutans*, *T. nitida* is chosen as the lectotype not only because it is a well-established and currently recognized name, but since the type of *Pogospermum* is *T. nitida*, *Pogospermum* becomes an obligate synonym of *Tussacia/Catopsis*. Beer was also apparently unaware of the presence of the earlier validation of *Tussacia* by Schultes. In any case, Beer's circumscription of *Tussacia* is not the same as that of Schultes, and therefore the name is recognized as a later homonym. Accordingly, Grisebach proposed *Catopsis* as a new name to replace *Tussacia* Willd. ex Beer. *Tussacia* is an obligate synonym of *Catopsis*. Named in honor of François Richard chevalier de Tussac (1751–1837), French colonial botanist in the West Indies, especially Martinique, Haiti and Jamaica.

Ursulaea Read and H.U. Baensch, J. Bromeliad Soc. 44: 206. 1994.—T.: *Aechmea mcvaughii* L.B. Sm., Phytologia 10: 481. 1964. *Ursulaea mcvaughii* (L.B. Sm.) Read and H.U. Baensch, J. Bromeliad Soc. 44: 107. 1994. Currently recognized in the subfam. *Bromelioideae*. Named in honor of Ursula Baensch, co-author with her husband of the book 'Blühende Bromelien' (Sep 1994); 'Blooming Bromeliads' (Nov 1994).

Vriesea Lindl., Edward's Bot. Reg. 29: ad t. 10. 7 Feb 1843, ('*Vriesia*'), nom. cons. [against *Hexalepis* Raf., Fl. tellur. 4: 24. 1838 (med.) ('1836')], non *Vriesea* Hassk., Flora 25. Beibl.: 27. 1842, Scrophulariaceae).—T.: *Tillandsia psittacina* Hook., Bot. Mag. 55: ad t. 2841. 1828. *Vriesea psittacina* (Hook.) Lindl., Edward's Bot. Reg. 29: ad t. 10. 7 Feb 1843. Currently recognized in the subfam. *Tillandsioideae*. The conservation of *Vriesea* over *Hexalepis* effectively conserved not only the corrected orthography of Beer (1856) (over the original *Vriesia*), but protected the name from the earlier homonym *Vriesea* Hassk. (1842) (Scrophulariaceae), and from a later renaming to *Neovriesea* by Britton (1923). Named in honor of Dutch botanist and physician Willem Hendrik de Vriese (1806–1862), of Leiden, The Netherlands.

The orthographic variant 'Vrieseida' cited by Rojas Acosta (in Cat. Hist. Nat. Corrientes 85. 1897) is not a separate generic name, rather a nom. nud. Therefore, its recognition is not war-

ranted, and should be removed from any listing of generic names.

Wallisia (Regel) E. Morren, Belgique Hort. 20: 97. 1870, based on *Tillandsia* sect. *Wallisia* Regel, Gartenflora 18: 193. Jul–Aug 1869.—T.: *Tillandsia lindenii* Regel, Ind. Sem. Hort. Petrop. 1868: 92 [not seen]. Mar 1869; Ann. Sci. Nat. Bot., ser. 5, 10: 382. Aug 1869; *Tillandsia lindeniana* Regel, Gartenflora 18: 193. Jul–Aug 1869, nom. illeg., (non *Tillandsia lindenii* E. Morren, Belgique Hort. 19: 321. Nov–Dec 1869 = *Tillandsia cyanea* K. Koch, Wochenschr. Vereines Beförd. Gartenbaues Königl. Preuss. Staaten 10: 140. 4 Mai 1867.) No combination into *Wallisia* was ever proposed for *Tillandsia lindenii* Regel, (non *Wallisia lindenii* (E. Morren) E. Morren, Belgique Hort. 20: 102. 1870, based on *Tillandsia lindenii* E. Morren.) Currently considered a synonym of *Tillandsia*. Nevertheless, *Phytarrhiza* has priority over *Wallisia* if *Tillandsia* subg. *Phytarrhiza* is elevated to the rank of genus. Named in honor of Gustav Wallis (1830–1878), German gardener and botanical explorer in Central and South America who collected the plant in Brazil.

Werauhia J.R. Grant, Trop. Subtrop. Pflanzenwelt 91: 28. 1995.—T.: *Tillandsia gladioliflora* H. Wendl., Hamburger Garten- Blumenzeitung 19: 31. 1863. *Werauhia gladioliflora* (H. Wendl.) J.R. Grant, Trop. Subtrop. Pflanzenwelt 91: 31. 1995. Currently recognized in the subfam. *Tillandsioideae*. See Grant (in Bromélia 4: 28–39. 1997), and Luther (in Selbyana 18: 128–133. 1997.) Named in honor of German botanist Prof. Dr. Werner Rauh (1912–), Institut für Systematische Botanik und Pflanzengeographie, Universität Heidelberg, Germany.

Rauh has published many articles on bromeliads in his series 'Bromeliastudien, Neue und wenig bekannte Arten aus Peru und anderen Ländern' [Bromeliad studies, new and little known species from Peru and other countries] published in 'Trop. Subtrop. Pflanzenwelt' [Tropical and Subtropical Plant World]. Three of his important bromeliad books are: 'Bromelien für Zimmer und Gewächshaus. Band 1: Die Tillandsioideen' (1970) [Bromeliads for Room and Greenhouse. Vol. 1: The *Tillandsioideae*], 'Bromelien für Zimmer und Gewächshaus. Band 2: Vol. 2 Bromelioideen und Pitcairnioideen' (1973) [Bromeliads for Room and Greenhouse. Vol. 2 *Bromelioideae* and *Pitcairnioideae*], and 'Bromelien. Tillandsien und andere kulturwürdige Bromelien' (1990) [Bromeliads. Tillandsias and other bromeliads worthy of cultivation.]

Willrussellia A. Chev., Bull. Soc. Bot. France 84: 503. 1938 ('1937').—T.: *Willrussellia feli-*

ciana A. Chev., Bull. Soc. Bot. France 84: 503. 1938 ('1937'). *Pitcairnia feliciana* (A. Chev.) Harms and Mildbr., Notizbl. Bot. Gart. Berlin-Dahlem 14: 118. 30 Mar 1938. Currently considered a synonym of *Pitcairnia*. When this taxon was originally found in Guinée [Guinea, Guiné-Française, French Guinea] in West Africa, it was described as a new species in a new genus in a new subtribe of the Liliaceae. Careful reconsideration a few months later revealed it to be a continental range extension of the previously unknown family Bromeliaceae to Africa. This species of *Pitcairnia* is the only native bromeliad known to occur outside the Americas. The genus was named in honor of William Russell: "chef de travaux honoraire de Botanique de la Faculté des Sciences de Paris" [honorary head of botanical works of the Faculty of Sciences, Paris]. The specific epithet honors its collector, Henri Jacques-Félix, Nogent-sur-Marne, France, specialist of African Melastomataceae, affiliated with the Musée National d'Histoire Naturelle, Paris, France. According to Jacques-Félix (pers. comm. 10 Oct 1997) Russell worked with Chevalier, and prepared a cursory description of the foliar anatomy of the new species. Through their friendship, Chevalier dedicated the genus *Willrussellia* to Russell.

Wittmackia Mez in Mart., Fl. bras. 3(3): 180, 274. 1 Nov 1891.—**LT.**: *Bromelia lingulata* L., Sp. pl.: 285. 1 Mai 1753, designated by L.B. Smith (in ING Card No. 03491. 16 Jul 1957). *Aechmea lingulata* (L.) Baker, J. Bot. 17: 164. 1879. *Wittmackia lingulata* (L.) Mez in Mart., Fl. bras. 3(3): 275. 1 Nov 1891. Currently considered a synonym of *Aechmea*. Named in honor of German botanist Marx Carl Ludwig Wittmack (1839–1929), author of the bromeliad treatment in Engler's 'Die Natürlichen Pflanzenfamilien' Ed. 1, II. Teil, 4 Abteilung: 32–59. 1887–1888.

Wittrockia Lindm., Kongl. Svenska Vetenskapsakad. Handl., ser. 2, 24: 20. 1891.—**T.**: *Wittrockia superba* Lindm., Kongl. Svenska Vetenskapsakad. Handl., ser. 2, 24: 20. 1891. Currently recognized in the subfam. *Bromelioideae*. Named in honor of Swedish botanist Veit Brecher-Wittrock (1839–1914), of the Botanical Museum, Stockholm.

LIST II: INVALID NAMES

The names listed here are done merely for complete historical documentation, and their listing does not indicate validation or publication. Names that occur in synonymy are invalid under Art 34.1(c) (Greuter *et al.* 1994).

'Amalia' Endl., Gen. pl.: 183. Jun 1837, nom. nud. This name occurs in synonymy under *Tillandsia*. No name derivation is given.

'Devillea' Bertero ex Schult. & Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxvii. Oct-Dec 1830, nom. nud. This name occurs in synonymy under *Caraguata berteroniana* (*Guzmania berteroniana*). No name derivation is given.

'Disquamia' Lem., Jard. Fleur. 3: ad t. 269. 1853, nom. nud. This name occurs in synonymy under *Aechmea distichantha*. See Grant (in Phytologia 77: 99–101. 1994). From the Latin *dis*, two, and *squam*, scale, as to the two petal appendages on each petal.

'Gemellaria' Pinell ex Lem., Ill. Hort. 2: Misc. 13. 1855, nom. nud.; Antoine, Phyto-Iconogr. Bromel. 44–45. 1884, nom. nud. This name occurs in synonymy under *Nidularium meyendorffii*, and *Karatas innocentii* respectively. From the Latin *gemellus*, twin. "Gemellaria von *gemellus*, Zwilling, in Bezug auf die Doppelercheinung zweier Individuen, in einem." [Gemellaria from *gemellus*, twins, regarding the double appearance of two individuals in one. (Antoine, Phyto-Iconogr. Bromel. 44–45. 1884).]

Austrian horticulturist Franz Antoine, Jr. (1815–1886) was the director of the Schönbrunn Gardens near Vienna, Austria. He is the author of the important work 'Phyto-Iconographie der Bromeliaceen des kaiserlichen Hofburg-Gartens in Wien' [Plant illustrations of bromeliads from the Imperial Court Gardens in Vienna] (1884).

'Libonia' Lem., Ill. Hort. 2: ad t. 48. 1855, nom. nud. This name occurs in synonymy under *Billbergia marmorata*. It was often the style of Lemaire and others, to suggest a new generic name for a new or exotic species he was describing in case it might prove at some later point to be worthy of generic status. "Elle [Billbergia marmorata] est tellement distincte dans ce genre, que vraisemblablement elle pourra plus tard devenir le type d'un genre nouveau, que nous proposons ici sous le nom de *Libonia*." [She [Billbergia marmorata] is so distinct in this genus that she could probably later become the type of a new genus that we propose here under the name *Libonia*.] Nevertheless, in this case as in others, since he did not accept the name *at the time* of original publication, it was not validly published (Art 34.1, Greuter *et al.* 1994). Named in honor of Mathieu Libon, who collected live plants in Brazil from which this description was based, for his patron, De Jonghe of Brussels, Belgium.

'Melinonia' Brongn. ex E. Morren, Cat. Bro-mél. 11. Oct 1873, nom. nud. This name was

included in Morren's list of species cultivated at the botanical garden at the Université de Liège, Belgium, but included no description. No name derivation is given, but possibly from the Latin *melinus*, quince-yellow or honey.

'Spirastigma' L'Hér. ex Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxx. Oct-Dec, nom. nud. This name occurs in synonymy under *Pitcairnia*. From the Greek *speira*, coil or twist, and *stigma*, as to the structure the stigma.

LIST III: A SYNONYMIZED CHECKLIST OF THE GENERA OF THE BROMELIACEAE

This list summarizes the currently accepted taxonomy and its accompanying nomenclature of the genera (non-hybrid, non-fossil, and only validly published names) of the Bromeliaceae. Presently, 56 genera are accepted, and 77 names are recognized in synonymy.

Acanthostachys Klotzsch in Link, Klotzsch and Otto, Ic. pl. rar. 1(2): 21. 15–21 Nov 1840 ('1841').

Aechmea Ruiz & Pav., Fl. peruv. prodr.: 47. Oct 1794, nom. cons.

- =*Eriostax* Raf., Fl. tellur. 4: 25. 1838 (med.) ('1836').
- =*Macrochordion* de Vriese, Jaarb. Kon. Ned. Maatsch. Tuinb. 1853: 14. 1853.
- =*Gravisia* Mez in Mart., Fl. bras. 3(3): 180. 1 Nov 1891.
- =*Hoiriri* Adans., Fam. pl. 2: 67, 584. Jul-Aug 1763, nom. rej.
- =*Pothuava* Gaudich. ex K. Koch, Wochenschr. Vereines Beförd. Gartenbaues Königl. Preuss. Staaten 3: 85. 15 Mar 1860, nom. illeg.
- =*Hoplophytum* Beer, Flora 37: 348. 14 Jun 1854.
- =*Platyaechmea* (Baker) L.B. Sm. & Kress, Phytologia 69: 272. 14 Nov ('Oct') 1990.
- =*Lamprococcus* Beer, Fam. Bromel.: 21, 103. Sep–Oct 1856 ('1857').
- =*Ortgiesia* Regel, Gartenflora 16: 193. 1867.
- =*Podaechmea* (Mez) L.B. Sm. & Kress, Phytologia 69: 271. 14 Nov ('Oct') 1990.
- =*Streptocalyx* Beer, Flora 37: 348. 14 Jun 1854.
- =*Wittmackia* Mez in Mart., Fl. bras. 3(3): 180, 274. 1 Nov 1891.

Alcantarea (E. Morren ex Mez) Harms, Notizbl. Bot. Gart. Berlin-Dahlem 10: 802. 30 Dec 1929.

Ananas Mill., Gard. Dict. abr. Ed. 4: [unpaged]. 28 Jan 1754.

Androlepis Brongn. ex Houllet, Rev. Hort. 42: 12. 1870.

Araeococcus Brongn., Ann. Sci. Nat. Bot., ser. 2, 15: 370. 1841.

Avensua L.B. Sm., Mem. New York Bot. Gard. 18: 29. Jun 1969.

Billbergia Thunb., Pl. bras. 3: 30. 5 Jun 1821.

=*Anacyclia* Hoffmanns., Preiss-Verzeichn. Pflanzen.: 10. 1833.

=*Eucallias* Raf., Fl. tellur. 4: 25. 1838 (med.) ('1836').

=*Cremobotrys* Beer, Flora 37: 348. 14 Jun 1854, nom. illeg.

=*Helicodea* Lem., Ill. Hort. 11: ad t. 421. 1864, nom. illeg.

=*Jonghea* Lem., Jard. Fleur. 2: ad t. 181–182 ['180–181']. 1852.

Brewcaria L.B. Sm., Steyermark & H. Rob., Acta Bot. Venez. 14(3): 10. Jun–Dec 1984.

Broccinia Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxx, 1250. Oct–Dec 1830.

Bromelia L., Sp. pl.: 285. 1 Mai 1753.

=*Agalostachys* Beer, Fam. Bromel.: 16, 35. Sep–Oct 1856 ('1857').

=*Distiacanthus* Baker, Handb. Bromel.: 13. 17 Aug–15 Oct 1889.

=*Karatas* Mill., Gard. Dict. abr. Ed. 4: [unpaged]. 28 Jan 1754, nom. illeg.

=*Pinguin* Adans., Fam. pl. 2: 67, 591. Jul-Aug 1763.

Canistrum E. Morren, Belgique Hort. 23: 257. 1873.

=*Mosenia* Lindm., Kongl. Svenska Vetenskapsakad. Handl., ser. 2, 24: 27. 1891.

Catopsis Griseb., Nachr. Königl. Ges. Wiss. Georg-Augusts-Univ. 1864: 10, 12. 13 Jan 1864.

=*Pogospermum* Brongn., Ann. Sci. Nat. Bot., ser. 5, 1: 327. Jun 1864, nom. illeg.

=*Tussacia* Willd. ex Beer, Fam. Bromel.: 21, 99. Sep–Oct 1856 ('1857'), nom. illeg.

Chevaliera Gaudich. ex Beer, Fam. Bromel.: 22, 150. Sep–Oct 1856 ('1857').

Connellia N.E. Br., Trans. Linn. Soc. London, Bot., ser. 2, 6: 66. Jan 1901.

Cottendorfia Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxiv, 1193. Oct–Dec 1830.

Cryptanthus Otto and A. Dietr., Allg. Gartenzeitung 4: 298. 17 Sep 1836, nom. cons.

=*Madvigia* Liebm., Ann. Sci. Nat. Bot., ser. 4, 2: 373. 1854.

- =*Pholidophyllum* Vis. ex Otto, Allg. Gartenzeitung 16: 30. 22 Jan 1848.
- Deinacanthon** Mez in C. DC., Monogr. phan. 9: 12. Jan 1896.
- Deuterocohnia** Mez in Mart., Fl. bras. 3(3): 430, 506. 1 Feb 1894.
- =*Abromeitiella* Mez, Bot. Arch. 19: 460. 1 Sep 1927.
 - =*Meziothamnus* Harms, Notizbl. Bot. Gart. Berlin-Dahlem 10: 575. 30 Mar 1929.
- Disteganthus** Lem., Fl. Serres Jard. Eur. 3: ad t. 227. Mai 1847.
- Dyckia** Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxxv, 1194. Oct-Dec 1830.
- =*Garrelia* Gaudich., Voy. Bonite, Bot. Atlas: t. 115. 1852.
 - =*Prionophyllum* K. Koch, Ind. Sem. Berol. 1873, App. 4: 3. 1874.
- Edmundoa** Leme, Canistrum Bromel. Mata Atl.: 42. Aug 1997.
- Encholirium** Mart. ex Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxxviii, 1233. Oct-Dec 1830.
- Fascicularia** Mez in Mart., Fl. bras. 3(3): 627. 1 Feb 1894.
- Fernseea** Baker, Handb. Bromel.: 19. 17 Aug-15 Oct 1889.
- Fosterella** L.B. Sm., Phytologia 7: 171. 18 Apr 1960.
- Glomeropitcairnia** (Mez) Mez, Bull Herb. Boissier, ser. 2, 5: 232. 28 Feb 1905.
- Greigia** Regel, Gartenflora 14: 137. 1865.
- =*Hesperogreigia* Skottsb., Acta Horti Gothob. 11: 220. 1936.
- Guzmania** Ruiz & Pav., Fl. peruv. 3: 37. Aug 1802.
- =*Chirripoa* Suess., Bot. Jahrb. Syst. 72: 293. 30 Jan 1942.
 - =*Massangea* E. Morren, Belgique Hort. 27: 59. 1877.
 - =*Schlumbergeria* E. Morren, Belgique Hort. 28: 311. 1878, nom. illeg.
 - =*Sodiroa* André, Bull. Soc. Bot. France 24: 167. 1877.
 - =*Thecophyllum* André, Bromel. Andr.: 107. 1889.
- Hechtia** Klotzsch, Allg. Gartenzeitung 3: 401. 19 Dec 1835.
- =*Bakerantha* L.B. Sm., Contr. Gray Herb. 104: 72. 6 Aug 1934.
 - =*Bakeria* André, Rev. Hort. 61: 84. 1889, nom. illeg.
- =*Niveophyllum* Matuda, Cact. Suc. Mex. 10: 3. 1965.
- Hohenbergia** Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxxi, 1251. Oct-Dec 1830.
- =*Pironneava* Gaudich. ex K. Koch, Wochenschr. Vereines Beförd. Gartenbaues Königl. Preuss. Staaten 3: 86. 15 Mar 1860.
- Hohenbergiopsis** L.B. Sm. and Read, Phytologia 33: 440. 1976.
- Lindmania** Mez in C. DC., Monogr. phan. 9: 535. Jan 1896.
- Lymania** Read, J. Bromeliad Soc. 34: 201. Sep-Oct 1984.
- Mezobromelia** L.B. Sm., Proc. Amer. Acad. Arts 70: 151. 1935.
- Navia** Mart. ex Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxxv, 1195. Oct-Dec 1830.
- Neoglaziovia** Mez in Mart., Fl. bras. 3(3): 180. 1 Nov 1891.
- Neoregelia** L.B. Sm., Contr. Gray Herb. 104: 78. 1934.
- =*Regelia* (Lem.) Lindm., Öfvers. Förh. Kongl. Svenska Vetensk.-Akad. 47: 542. 1890, nom. illeg.
- Nidularium** Lem., Jard. Fleur. 4: ad t. 411; Misc.: 60. 1854.
- =*Aregelia* Kuntze, Rev. Gen. 2: 698. 5 Nov 1891, nom. illeg.
 - =*Andrea* Mez in C. DC., Monogr. phan. 9: 114. Jan 1896.
- Ochagavia** Philippi, Anales Univ. Chile 13: 168. Mai 1856.
- =*Placseptalia* Espinosa, Bol. Mus. Nac. Hist. Nat. 23: 5. 1947.
 - =*Rhodostachys* Philippi, Linnaea 29: 57. Feb-Mar 1858.
 - =*Ruckia* Regel, Ind. Sem. Hort. Petrop. 1866: Suppl. 28. Feb-Dec 1868 ('1867'); Gartenflora 17: 65. Mar 1868.
- Orthophytum** Beer, Flora 37: 347. 14 Jun 1854.
- =*Cryptanthopsis* Ule, Bot. Jahrb. Syst. 42: 193. 1908.
 - =*Prantleia* Mez in Mart., Fl. bras. 3(3): 180, 257. 1 Nov 1891, nom. illeg.
 - =*Sincoraea* Ule, Bot. Jahrb. Syst. 42: 191. 1908.
- Pepinia** Brongn. in André, Ill. Hort. 17: 32. 1870.
- Pitcairnia** L'Hér., Sert. Angl.: 7. Jan 1789, nom. cons.

- =*Bromelia* Adans., Fam. pl. 2: 67, 527. Jul–Aug 1763, nom. illeg.
- =*Cochliopetalum* Beer, Flora 37: 347. 14 Jun 1854.
- =*Conanthes* Raf., Fl. tellur. 4: 24. 1838 (med.) ('1836').
- =*Hepetis* Sw., Prodr.: 4, 56. Jul 1788, nom. rej.
- =*Lamproconus* Lem., Jard. Fleur. 2: ad t. 127. 1852.
- =*Neumannia* Brongn., Ann. Sci. Nat. Bot., ser. 2, 15: 369. 1841.
- =*Orthopetalum* Beer, Fam. Bromel.: 17, 70. Sep–Oct 1856 ('1857').
- =*Phlomostachys* Beer, Fam. Bromel.: 16, 45. Sep–Oct 1856 ('1857').
- =*Willrussellia* A. Chev., Bull. Soc. Bot. France 84: 503. 1938 ('1937').
- Portea** K. Koch, Ann. Sci. Nat. Bot., ser. 4, 6: 368. 1856.
- Pseudaechmea** L.B. Sm. and Read, Phytologia 52: 53. 1982.
- Pseudananas** (Hassl.) Harms in Engler and Prantl, Nat. Pflanzenfam. Ed. 2, 15a: 153. 1930.
- Puya** Molina, Sag. stor. nat. Chili: 160, 351. Oct 1782.
- =*Pourretia* Ruiz and Pav., Fl. peruv. prodr.: 46. Oct 1794.
- Quesnelia** Gaudich., Voy. Bonite, Bot. Atlas: t. 54. 1842.
- =*Lievena* Regel, Gartenflora 29: 289. 1880.
- Racinaea** M.A Spencer and L.B. Sm., Phytologia 74: 152. 1993.
- Ronnbergia** E. Morren and André, Ill. Hort. 21: 120. 1874.
- Steyerbromelia** L.B. Sm., Ann. Missouri Bot. Gard. 73: 699. 30 Mar 1987 ('1986').
- Tillandsia** L., Sp. pl.: 286. 1 Mai 1753.
- =*Allardtia* A. Dietr., Allg. Gartenzeitung 20: 241. 31 Jul 1852.
- =*Platystachys* K. Koch, Ind. Sem. Hort. Berol. 1854, App.: 11. 1855, nom. illeg.
- =*Anoplophytum* Beer, Flora 37: 346. 14 Jun 1854.
- =*Bonapartea* Ruiz and Pav., Fl. peruv. 3: 38. Aug 1802.
- =*Acanthospora* Spreng., Anleit. Kenntn. Gew. Ed. 2, 2(1): 255. 20 Apr 1817, nom. illeg.
- =*Misandra* F. Dietr., Nachtr. Vollst. Lex. Gärtn. Bot. 5: 102. 1819, nom. illeg.
- =*Caraguata* Adans., Fam. pl. 2: 67, 532. Jul–Aug 1763, nom. illeg.
- =*Cipuropsis* Ule, Verh. Bot. Vereins Prov. Brandenburg 48: 148. 1907.
- =*Dendropogon* Raf., Neogenyton: 3. 1825.
- =*Diaphoranthema* Beer, Flora 37: 349. 14 Jun 1854.
- =*Strepsia* (Nutt.) Steud., Nomencl. bot. Ed. 2, 2: 645. 1841, nom. illeg.
- =*Phytarrhiza* Vis., Due Piante Nuove Bromel.: 6. 1854.
- =*Wallisia* (Regel) E. Morren, Belgique Hort. 20: 97. 1870.
- =*Pityrophyllum* Beer, Fam. Bromel.: 17, 79. Sep–Oct 1856 ('1857').
- =*Renealmia* L., Sp. pl.: 286. 1 Mai 1753, nom. rej.
- Ursulaea** Read and H.U. Baensch, J. Bromeliad Soc. 44: 206. 1994.
- Vriesea** Lindl., Edward's Bot. Reg. 29: ad t. 10. 7 Feb 1843, nom. cons.
- =*Hexalepis* Raf., Fl. tellur. 4: 24. 1838 (med.) ('1836'), nom. rej.
- =*Neovriesea* Britton in Britton and P. Wilson, Bot. Porto Rico 5: 141. 10 Aug 1923, nom. illeg.
- Werauhia** J.R. Grant, Trop. Subtrop. Pflanzenwelt 91: 28. 1995.
- Witrockia** Lindm., Kongl. Svenska Vetenskapsakad. Handl., ser. 2, 24: 20. 1891.

LIST IV: NOTHOGENERA (BIGENERIC HYBRIDS)

A thorough catalogue and primary reference for bromeliad hybrids may be found in 'A preliminary listing of all known cultivar and grex names for the Bromeliaceae' (Beadle 1991). A significantly larger and revised edition will be published in 1998. The 1991 work replaced the first ever listing of bromeliad hybrids, the 'International checklist of bromeliad hybrids' (The Bromeliad Society, Inc. 1979). The field of bromeliad hybridization and resulting naming of cultivars is rapidly evolving, and appears somewhat disordered. Careful consideration must be taken when forming nothogenic names. Already, several recently-described names prove to be either invalid or illegitimate. Of importance are the three superfluous renamings: \times *Canularium* (of \times *Nidulistrum*), \times *Neoistrum* (of \times *Canelegia*), and \times *Neolarium* (of \times *Niduregelia*).

All generic names (including nothogenera) must fulfill the requirements of effective publication as defined in the Botanical Code (Art. 29–31, H.9.1, Greuter *et al.* 1994). The most important of these Articles is the first: "29.1. Publication is effected, under this *Code*, only by distribution of printed matter (through sale, exchange, or gift) to the general public or at least

to botanical institutions with libraries accessible to botanists generally. It is not effected by communication of new names at a public meeting, by the placing of names in collections or gardens open to the public, or by the issue of microfilm made from manuscripts, type-scripts or other unpublished material." Several frequently-cited works on bromeliad hybrids do not fulfill these requirements. Brian Smith's 'Manuscript of Bromeliad Hybrids and Cultivars' (1984) is just that, a type-written manuscript that has never been published. No nothogeneric names, hybrids or cultivars may be cited as having been published in this work. Beadle (1991), however, effectively validated most of the nothogenera proposed in Smith's manuscript. Likewise, Nat De Leon's ("1985?") 'Supplement to the International Checklist of Bromeliad Hybrids' has not been effectively published since it is only a type-written document that has not been widely distributed to botanical libraries.

It should be noted that to date only bigeneric hybrids have been made and named in the Bromeliaceae (that specifically follow Art. H.6.1–6.2, Greuter *et al.* 1994). Intergeneric hybrids of three or more genera have not been successfully produced.

×Anagelia E.L. Sm., J. Bromeliad Soc. 33: 72. Mar–Apr 1983. Parent genera: *Ananas* Mill., Gard. Dict. abr. Ed. 4: [unpaged]. 28 Jan 1754 and *Neoregelia* L.B. Sm., Contr. Gray Herb. 104: 78. 1934.

×Anamea Anon., Int. Checklist Bromel. Hybrids: 22. Mai–Dec 1979. Parent genera: *Ananas* Mill., Gard. Dict. abr. Ed. 4: [unpaged]. 28 Jan 1754 and *Aechmea* Ruiz and Pav., Fl. peruv. prodr.: 47. Oct 1794.

×Ananananas D.A. Beadle, Prelim. Listing Cultivar Grex Names Bromel.: 20. Jun 1991. Parent genera: *Ananas* Mill., Gard. Dict. abr. Ed. 4: [unpaged]. 28 Jan 1754 and *Pseudananas* (Hassl.) Harms in Engler and Prantl, Nat. Pflanzenfam. Ed. 2, 15a: 153. 1930.

×Androlaechmea Anon., Bull. Bromeliad Soc. 1: 24. Mai–Jun 1951. Parent genera: *Androlepis* Brongn. ex Houllet, Rev. Hort. 42: 12. 1870 and *Aechmea* Ruiz and Pav., Fl. peruv. prodr.: 47. Oct 1794.

×Billmea K. Williams, J. Bromeliad Soc. 24: 26. Jan–Feb 1974. Parent genera: *Billbergia* Thunb., Pl. bras. 3: 30. 5 Jun 1821 and *Aechmea* Ruiz & Pav., Fl. peruv. prodr.: 47. Oct 1794.

×Billnelia A.D. Hawkes, Bromel. Pap. 1(6): 52. Oct 1959 ("1959–1960"). Parent genera: *Billbergia* Thunb., Pl. bras. 3: 30. 5 Jun 1821 and *Quesnelia* Gaudich., Voy. Bonite, Bot. Atlas: t.

54. 1842. This is the proper name for **×Billque** (in List V).

×Canegelia D. Butcher, Hybridist's Handb., Ed. 3: 2. 1991. Parent genera: *Canistrum* E. Morren, Belgique Hort. 23: 257. 1873 and *Neoregelia* L.B. Sm., Contr. Gray Herb. 104: 78. 1934. Although both published in 1991, **×Canegelia** predates **×Neostrum** as Beadle in fact cites Butcher's cross.

×Canmea R. Foster & M.B. Foster, J. Bromeliad Soc. 23: 175. Sep–Oct 1973. Parent genera: *Canistrum* E. Morren, Belgique Hort. 23: 257. 1873 and *Aechmea* Ruiz and Pav., Fl. peruv. prodr.: 47. Oct 1794.

×Canularium D.A. Beadle, Prelim. Listing Cultivar Grex Names Bromel.: 36. Jun 1991, nom. illeg. ≡ **×Nidulistrum** A.D. Hawkes, Bromel. Pap. 3(9): 85. Mar 1963 ("1961–1963"). Parent genera: *Canistrum* E. Morren, Belgique Hort. 23: 257. 1873 and *Nidularium* Lem., Jard. Fleur. 4: ad t. 411; Misc.: 60. 1854. This is a superfluous renaming of **×Nidulistrum**.

×Cryptananas D.A. Beadle, Prelim. Listing Cultivar Grex Names Bromel.: 36. Jun 1991. Parent genera: *Cryptanthus* Otto & A. Dietr., Allg. Gartenzeitung 4: 298. 17 Sep 1836 and *Ananas* Mill., Gard. Dict. abr. Ed. 4: [unpaged]. 28 Jan 1754.

×Cryptbergia Anon., Bull. Bromeliad Soc. 2: 72. 1952. Parent genera: *Cryptanthus* Otto & A. Dietr., Allg. Gartenzeitung 4: 298. 17 Sep 1836 and *Billbergia* Thunb., Pl. bras. 3: 30. 5 Jun 1821.

×Cryptmea E.L. Sm., J. Bromeliad Soc. 33: 72. Mar–Apr 1983. Parent genera: *Cryptanthus* Otto and A. Dietr., Allg. Gartenzeitung 4: 298. 17 Sep 1836 and *Aechmea* Ruiz and Pav., Fl. peruv. prodr.: 47. Oct 1794.

×Dyckcohnia G.H. Anderson ex J.R. Grant, **nothogen. nov.**, for the cross reported with the informal name ('dyckcohnias') by G.H. Anderson, J. Bromeliad Soc. 36: 103. 1986. Parent genera: *Dyckia* Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxv, 1194. Oct–Dec 1830 and *Deuterocohnia* Mez in Mart., Fl. bras. 3(3): 430, 506. 1 Feb 1894.

×Dyckia D.A. Beadle, Prelim. Listing Cultivar Grex Names Bromel.: 82. Jun 1991. Parent genera: *Dyckia* Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxv, 1194. Oct–Dec 1830 and *Hechtia* Klotzsch, Allg. Gartenzeitung 3: 401. 19 Dec 1835.

×Guzlandsia Anon., Int. Checklist Bromel. Hybrids: 35. Mai–Dec 1979. Parent genera: *Guz-*

- mania* Ruiz and Pav., Fl. peruv. 3: 37. Aug 1802 and *Tillandsia* L., Sp. pl.: 286. 1 Mai 1753.
- ×*Guzvriesea* A.D. Hawkes, Bromel. Pap. 1(5): 45. 1 Sep 1959 ("1959–1960"). Parent genera: *Guzmania* Ruiz & Pav., Fl. peruv. 3: 37. Aug 1802 and *Vriesea* Lindl., Edward's Bot. Reg. 19: ad t. 10. 1843.
- ×*Hechcohnia* G.H. Anderson ex J.R. Grant, **nothogen. nov.**, for the cross reported with the informal name ('hechcohnia') by G.H. Anderson, J. Bromeliad Soc. 36: 103. 1986. Parent genera: *Hechtia* Klotzsch, Allg. Gartenzeitung 3: 401. 19 Dec 1835 and *Deuterocohnia* Mez in Mart., Fl. bras. 3(3): 430, 506. 1 Feb 1894.
- ×*Hohentea* D.A. Beadle, Prelim. Listing Cultivar Grex Names Bromel.: 89. Jun 1991. Parent genera: *Hohenbergia* Schult. and Schult.f. in Roem. and Schult., Syst. veg. 7(2): lxxi, 1251. Oct–Dec 1830 and *Portea* K. Koch, Ann. Sci. Nat. Bot., ser. 4, 6: 368. 1856.
- ×*Neobergia* E.L. Sm., J. Bromeliad Soc. 33: 73. Mar–Apr 1983. Parent genera: *Neoregelia* L.B. Sm., Contr. Gray Herb. 104: 78. 1934 and *Billbergia* Thunb., Pl. bras. 3: 30. 5 Jun 1821.
- ×*Neoistrum* D.A. Beadle, Prelim. Listing Cultivar Grex Names Bromel. 89. Jun 1991, nom. illeg. ≡ ×*Canegelia* D. Butcher, Hybridist's Handb., Ed. 3: 2. 1991. Parent genera: *Neoregelia* L.B. Sm., Contr. Gray Herb. 104: 78. 1934 and *Canistrum* E. Morren, Belgique Hort. 23: 257. 1873. This is a superfluous renaming of ×*Canegelia*.
- ×*Neolarium* R. Foster and M.B. Foster, J. Bromeliad Soc. 23: 175. Sep–Oct. 1973, nom. illeg. ≡ ×*Niduregelia* A.D. Hawkes, Bromel. Pap. 3(9): 85. Mar 1963 ("1961–1963"). Parent genera: *Neoregelia* L.B. Sm., Contr. Gray Herb. 104: 78. 1934 and *Billbergia* Thunb., Pl. bras. 3: 30. 5 Jun 1821.
- ×*Neomea* M.B. Foster, Bull. Bromeliad Soc. 8: 75. Sep–Oct 1958. Parent genera: *Neoregelia* L.B. Sm., Contr. Gray Herb. 104: 78. 1934 and *Aechmea* Ruiz & Pav., Fl. peruv. prodr.: 47. Oct 1794.
- ×*Neophytum* M.B. Foster, Bull. Bromeliad Soc. 8: 73. Sep–Oct 1958. Parent genera: *Neoregelia* L.B. Sm., Contr. Gray Herb. 104: 78. 1934 and *Orthophytum* Beer, Flora 37: 347. 14 Jun 1854.
- ×*Neotanthus* Anon., Int. Checklist Bromel. Hybrids: 47 Mai–Dec 1979. Parent genera: *Neoregelia* L.B. Sm., Contr. Gray Herb. 104: 78. 1934 and *Cryptanthus* Otto & A. Dietr., Allg. Gartenzeitung 4: 298. 17 Sep 1836.
- ×*Nidbergia* D. Butcher, Checklist Bromel. Hybrids Australia: 28. 1982. Parent genera: *Nidularium* Lem., Jard. Fleur. 4: ad t. 411; Misc.: 60. 1854 and *Billbergia* Thunb., Pl. bras. 3: 30. 5 Jun 1821.
- ×*Nidulistrum* A.D. Hawkes, Bromel. Pap. 3(9): 85. Mar 1963 ("1961–1963"). Parent genera: *Nidularium* Lem., Jard. Fleur. 4: ad t. 411; Misc.: 60. 1854 and *Canistrum* E. Morren, Belgique Hort. 23: 257. 1873. This name predates ×*Canularium*.
- ×*Nidumea* L.B. Sm., Bull. Bromeliad Soc. 18: 63. Mai-Jun 1968. Parent genera: *Nidularium* Lem., Jard. Fleur. 4: ad t. 411; Misc.: 60. 1854 and *Aechmea* Ruiz and Pav., Fl. peruv. prodr.: 47. Oct 1794.
- ×*Niduregelia* A.D. Hawkes, Bromel. Pap. 3(9): 85. Mar 1963 ("1961–1963"). Parent genera: *Nidularium* Lem., Jard. Fleur. 4: ad t. 411; Misc.: 60. 1854 and *Neoregelia* L.B. Sm., Contr. Gray Herb. 104: 78. 1934. This name predates ×*Neolarium*.
- ×*Ortholarium* R. Foster & M.B. Foster, J. Bromeliad Soc. 23: 175. Sep–Oct 1973. Parent genera: *Orthophytum* Beer, Flora 37: 347. 14 Jun 1854 and *Nidularium* Lem., Jard. Fleur. 4: ad t. 411; Misc.: 60. 1854.
- ×*Orthomea* E.L. Sm., J. Bromeliad Soc. 33: 75. Mar–Apr 1983. Parent genera: *Orthophytum* Beer, Flora 37: 347. 14 Jun 1854 and *Aechmea* Ruiz & Pav., Fl. peruv. prodr.: 47. Oct 1794.
- ×*Orthotanthus* Anon., J. Bromeliad Soc. 24: 26. Jan–Feb 1974. Parent genera: *Orthophytum* Beer, Flora 37: 347. 14 Jun 1854 and *Cryptanthus* Otto & A. Dietr., Allg. Gartenzeitung 4: 298. 17 Sep 1836.
- ×*Pitinia* J. Irvin ex Baskerville, J. Bromeliad Soc. 48(2): 64. Mar–Apr 1998, for the cultivar 'Coral Horizon' formed by the cross *Pitcairnia rubronigrifolia* Rauh × *Pepinia corallina* (Linden & André) Varadarajan and Gilmartin by Jim Irvin, registered by the Bromeliad Society International 01–20–94. Parent genera: *Pitcairnia* L'Hér., Sert. Angl.: 7. Jan 1789, nom. cons. and *Pepinia* Brongn. in André, Ill. Hort. 17: 32. 1870.
- ×*Portemea* Ariza-Julia, J. Bromeliad Soc. 28: 21. Jan–Feb 1978. Parent genera: *Portea* K. Koch, Ann. Sci. Nat. Bot., ser. 4, 6: 368. 1856 and *Aechmea* Ruiz and Pav., Fl. peruv. prodr.: 47. Oct 1794.
- ×*Pseudanamea* H.U. Baensch and U. Baensch, Blüh. Bromel.: 249. Sep 1994; Bloom. Bromel.: 249. Nov 1994. Parent genera: *Pseudananas*

(Hassl.) Harms in Engler & Prantl, Nat. Pflanzenfam. Ed. 2, 15a: 153. 1930 and *Aechmea* Ruiz and Pav., Fl. peruv. prodr.: 47. Oct 1794.

×Pucohnia G.H. Anderson ex D.A. Beadle, Prelim. Listing Cultivar Grex Names Bromel.: 200. Jun 1991. Parent genera: *Puya* Molina, Sag. stor. nat. Chili 160, 351. Oct 1782 and *Deuterocohnia* Mez in Mart., Fl. bras. 3(3): 430, 506. 1 Feb 1894.

×Quesmea Knobloch, J. Bromeliad Soc. 22: 58. Mai-Jun 1972. Parent genera: *Quesnelia* Gaudich., Voy. Bonite, Bot. Atlas: t. 54. 1842 and *Aechmea* Ruiz & Pav., Fl. peruv. prodr.: 47. Oct 1794.

×Quesregelia J. Carrone, J. Bromeliad Soc. 33: 207. Sep-Oct 1983. Parent genera: *Quesnelia* Gaudich., Voy. Bonite, Bot. Atlas: t. 54. 1842 and *Neoregelia* L.B. Sm., Contr. Gray Herb. 104: 78. 1934.

×Streptolarium D.A. Beadle, Prelim. Listing Cultivar Grex Names Bromel.: 201. Jun 1991. Parent genera: *Streptocalyx* Beer, Flora 37: 348. 14 Jun 1854 and *Nidularium* Lem., Jard. Fleur. 4: ad t. 411; Misc.: 60. 1854.

×Streptomea E.L. Sm., J. Bromeliad Soc. 33: 75. Mar-Apr 1983. Parent genera: *Streptocalyx* Beer, Flora 37: 348. 14 Jun 1854 and *Aechmea* Ruiz & Pav., Fl. peruv. prodr.: 47. Oct 1794.

×Vriecantarea J.R. Grant, Phytologia 79: 256. ('Sept 1995') 10 Jun 1996. Parent genera: *Vriesea* Lindl., Edward's Bot. Reg. 19: ad t. 10. 1843 and *Alcantarea* (Morren ex Mez) Harms, Notizbl. Bot. Gart. Berlin-Dahlem 10: 802. 1929.

×Vrieslandsia Ch. Chevalier, Bull. Soc. Natl. Hort. France V, 4: 213–215. 1931. Parent genera: *Vriesea* Lindl., Edward's Bot. Reg. 19: ad t. 10. 1843 and *Tillandsia* L., Sp. pl.: 286. 1 Mai 1753.

LIST V: INVALID NOTHOGENUS

A single published nothogeneric name can not be used because it is invalid.

'×Billque' Anon., Int. Checklist Bromel. Hybrids: 29. Mai-Dec 1979. This name is invalid because it is formed from the first part of the names of both its parent genera (Art. H.6.2 Greuter *et al.* 1994). Therefore, **×Billnelia** (in List IV) is the proper name for the bigeneric hybrid between *Billbergia* and *Quesnelia*.

LIST VI: PUTATIVE FOSSIL GENERA

The five names below that describe putative bromeliad fossils are included here for complete

historical documentation until such time that a thorough analysis is undertaken on the "fossil Bromeliaceae." The Bromeliaceae are a relatively new group that evolved initially in the Andes of South America and are largely restricted to the New World (with *Pitcairnia feliciana* of Guinée, Africa, as the only known exception). Therefore, it is highly unlikely (with the exception of perhaps *Karatophyllum*) that these represent actual bromeliads, but more likely other monocots or cycads. See Gómez (in Rev. Biol. Trop. 20(2): 223. 1972) for a good overview of these genera. In one case, extant species have been placed under a generic name that originally was given to a genus of fossil plants, *Echinostachys*.

Bromeliaceophyllum Weyland, Paleontographica, Abt. B., Paläophytol. 103: 56. 6 Nov 1957.—**T.:** *Bromeliaceophyllum rheneanum* Weyland, Paleontographica, Abt. B., Paläophytol. 103: 56. 6 Nov 1957. Based on leaf remains from Miocene deposits in Germany. From the Latin name of the family 'Bromeliaceae', and the Greek *phyllon*, leaf.

Bromelianthus A. Massal., Sagg. fotogr. piante foss.: 62. 1859.—**T.:** *Bromelianthus heuflerianus* A. Massal., Sagg. fotogr. piante foss.: 62. 1859. Based on a flower from Eocene deposits in Italy. From the generic name *Bromelia*, and the Greek *anthos*, flower.

Bromelites Schmalh., Palaeontol. Abh. 1: 296, 302. 1883.—**T.:** *Bromelites dolinskii* Schmalh., Palaeontol. Abh. 1: 296, 302. 1883. Based on collections from an Eocene deposit near Kiev, Ukraine. From the generic name *Bromelia*, and the Greek suffix *-ites*, having the nature of.

Echinostachys Brongn., Ann. Sci. Nat. (Paris) 15: 457. Dec 1828; Prodr. hist. vég. foss.: 135, 137. Dec 1828.—**T.:** *Echinostachys oblonga* Brongn. Ann. Sci. Nat. (Paris) 15: 457. Dec 1828; Prodr. hist. vég. foss.: 135, 137. Dec 1828. Based on a Triassic fossil from Sultz-les-Bains, France. From the Greek *echinos*, spiny, and *stachys*, spike.

Echinostachys as treated by Planchon (in Hort. donat.: 25. 1858 ['1854–1858']) is not a separate generic name as suggested by 'Index nominum genericorum' 1979: 595. This is evident from Beer (in Fam. Bromel. 148–150. 1856 ['1857']), where four species are treated: *Echinostachys pineliana* and *E. rosea* for extant species; and *E. oblonga* and *E. cylindrica* for fossil species in reference to a Brongniart manuscript. The first of these is the only species treated in Planchon (1858), whereas the third dates from 1828, and provides the type of the genus.

Karatophyllum L.D. Gómez, Revista Biol. Trop. 20: 223. Dec 1972.—T.: *Karatophyllum bromelioides* L.D. Gómez, Revista Biol. Trop. 20: 223. Dec 1972. Based on collections from Costa Rica of leaves that appear similar to that of *Bromelia pinguin*. From the generic name *Karatas*, and the Greek *phyllon*, leaf.

CONCLUSION

As a result of the preparation of this catalogue, a number of nomenclatural problems have surfaced, and are summarized here. Two new lectotypes are selected in this work, namely *Tillandsia regina* for *Alcantarea* and *Tussacia nitida* for *Tussacia*. Accordingly, since *Tussacia* is an obligate synonym of *Catopsis*, the traditionally recognized lectotype of *Catopsis* changes from *Tillandsia nutans* to *Tussacia nitida* (≡*Catopsis nitida*).

Several of the lectotypes or types of genera indicated in Smith & Downs 'Flora Neotropica' are incorrect (e.g., *Pogospermum*). The more important cases include those of *Bromelia*, *Pepinia*, and *Thecophyllum*. In the case of *Pepinia*, under the new rules on 'ex' and 'in' (Art. 46.1–6 Greuter *et al.* 1994), the type changes from *Pitcairnia aphelandriflora* to *Pitcairnia punicea*. In *Bromelia*, the lectotype changes from *B. pinguin* to *B. karatas* [where the name *Bromelia karatas* predates its illegitimate renaming to *Bromelia plumieri*.] Lastly, the type of *Thecophyllum* changes from *T. poortmanii* to *T. wittmackii*.

Five generic names have substitutes if they are recognized as homonyms of previously published names: *Allardtia* (*Platystachys*), *Bakeria* (*Bakerantha*), *Nidularium* (*Aregelia*), *Regelia* (*Neoregelia*), and *Tussacia* (*Catopsis*). For various reasons, only two of these substitutes are currently recognized, *Catopsis* and *Neoregelia*.

Several recently established or resurrected generic names are either illegitimate or incorrect. In several cases of Smith & Kress' elevation of seven subgenera of *Aechmea* (*sensu* Smith & Downs 1979) to the generic rank [Phytologia 66: 70–79. 27 Apr 1989; Phytologia 69: 272–274. 14 Nov ('Oct') 1990], they did not follow correct nomenclature or taxonomy. Their recognition of *Platyaechmea* was superfluous since it includes *Hoplophytum*; *Macrochordion* is superfluous since it includes *Eriostax*; and *Pothuava* is illegitimate since *Hoiriri* predates it with the same type species. In the future, consultation of this catalogue when resurrecting names or describing new genera should prevent any further large-scale nomenclatural errors, especially in the anticipated generic revisions of *Aechmea*, *Guzmania*, and *Tillandsia*.

However, once the taxonomy these genera is resolved, it may be desirable to propose the nomenclatural rejection of several names before formal recognition of these groups. For example, if *Diaphoranthema* (*Tillandsia* subg. *Diaphoranthema*) and *Macrochordion* (*Aechmea* subg. *Macrochordion*) are recognized, it may be desirable to submit a proposal to the Committee for Spermatophyta for the nomenclatural rejection of their predating names *Dendropogon* and *Eriostax* respectively. There is a good case to be made for the rejection of each since neither has ever been recognized in any major taxonomic treatment, not even at the subgeneric rank. Nomenclatural stability would be maintained through such rejection.

Since two nothogenic names are in use, although they have not been validly published, they are validated in this catalogue: *xDyckcohnia* G.H. Anderson ex J.R. Grant, and *xHeckcohnia* G.H. Anderson ex J.R. Grant. Regarding the illegitimate nothogenic names, since the two corresponding legitimate names seem to have never been adopted (*xNidulistrum* and *xNiduregelia*), it may be desirable to submit a proposal for their rejection against the currently used (though superfluous) names *xCanularium* and *xNeolarium* respectively. Since the field of bromeliad hybridization and the naming of such results seem somewhat disorganized, the more stability that can be maintained is for the better.

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APPENDIX: CHRONOLOGICAL LIST OF BROMELIACEAE MONOGRAPHS AND OTHER WORKS SIGNIFICANT TO THE FAMILY

- PLUMIER C. 1703. *Nova plantarum americanarum genera*. Parisis: apud Joannem Boudot.
- LINNAEUS C. 1753. 1 Mai. *Bromeliaceae In Species plantarum, exhibentes plantas rite cognitas, ad genera relatas, cum differentiis specificis, nominibus trivialibus, synonymis selectis, locis natalibus, secundem systema sexuale digestas*. Holmiae [Stockholm]: Impensis Laurentii Salvii. 285–287.
- . 1762. Sep. *Bromeliaceae In Species plantarum, exhibentes plantas rite cognitas, ad genera relatas, cum differentiis specificis, nominibus trivialibus, synonymis selectis, locis natalibus, secundem systema sexuale digestas*, Ed. 2. Holmiae [Stockholm]: Impensis Direct. Laurentii Salvii. 2: 408–411.
- LINDLEY J. 1827. *Billbergia iridifolia*. Bot. Reg. ad t. 1068. Within this paper is the first synopsis of the genera of the Bromeliaceae. Also found is a poignant message of the difficulty of bromeliad taxonomy. Lindley states: "It would be difficult to point out a family of plants more interesting from their beauty or singularity than that of the Bromeliaceae, and of which, notwithstanding, the systematic arrangement has been less carefully studied."
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- MEZ C. In: C.F.P. MARTIUS. 1894. *Bromeliaceae In: Flora Brasiliensis. Enumeratio plantarum in Brasilia habentis detectarum quas suis aloirumque botanicis studiis descriptas et methodo naturali digestas partim icone illustratas editit C.P.F. de Martius*. 3(3): 1–172. 1 Jan 1890, 173–286. 1 Nov 1891, 281–430. 15 Mai 1892, 425–634. 1 Feb 1894, 635–816. 15 Apr 1894. Leipzig: Frid. Fleischer in Comm.
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