

ON THE NONEXISTENCE OF *LISYANTHUS* AUBLET

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Abstract. "*Lisyanthus* Aubl. 1775" is asserted to be an orthographic variant of *Lisianthus* P. Browne 1756. Struwe and Albert's (1998) suggestion of *Lisyanthus* as a later parohomonym of *Lisianthus* is disputed here. Their lectotypification of "*Lisyanthus*," tribe Lisianthieae Griseb. 1838 (cited as "*Lisyantheae*" by Griseb. and by Struwe and Albert), and subtribe Lisianthiinae G. Don 1838 are considered by us as nomenclaturally irrelevant.

Keywords: Gentianaceae, Lisianthieae, Lisianthiinae, *Lisyanthus*, nomenclature.

Struwe and Albert (1998: 63–71), among others, discussed the status of "*Lisyanthus* Aubl." (Aublet, 1775: 201) and differentiated it from *Lisianthus* P. Browne (Browne, 1756: 157). They (p. 63) categorized the former as a "problematic genus name" and (p. 66) believed that it "should be regarded as a new genus." However, the following statement by Struwe and Albert indicates a lack of confidence: "If Aublet's *Lisyanthus* was indeed intended as a new genus, the name is a parohomonym of *Lisianthus* P. Br. and therefore cannot be used; otherwise, the name would merely represent an orthographical variant of *Lisianthus*." To settle this issue, they plan to submit a request to the Committee for Spermatophyta to treat "*Lisyanthus* Aubl." as a later homonym of *Lisianthus*.

Prior to Struwe and Albert's published version, we reviewed their manuscript; at that time, we disagreed with their suggestion that "*Lisyanthus* Aubl." could be considered as a validly published latter parohomonym. In our review, we stated that "*Lisyanthus*" is merely an orthographic variant of *Lisianthus*. Despite this, Struwe and Albert published their view without discussing our comments. Therefore, we now feel obliged to give our arguments in favor of treating *Lisyanthus* as an orthographic variant.

Struwe and Albert cited Weaver's (1972: 77) reference to W. T. Stearn's opinion "(in litt.)" that "*Lisyanthus* Aubl." was a new genus. Weaver stated that according to Stearn, "when Aublet furnished a detailed generic description, as he did in the case of *Lisianthus*, his intent

was to establish a new genus." However, Weaver had his own doubts about Stearn's opinion, which is evident from his (Weaver's) remarks: "It is difficult to believe that Aublet meant to establish a new genus, in view of the close relationship of his plants to *Lisianthus* P. Browne and the nearly identical spelling of the names." Weaver's statement reflects the views of Kuntze (1891: 428–429), who stated that Aublet, who demonstrated a thorough knowledge of the pre-1775 literature, could not have overlooked the work of Browne or of Linnaeus.

Nevertheless, Struwe and Albert followed Stearn's opinion. To emphasize their view, they compared the situation of "*Lisyanthus*" with several new genera of Aublet 1775 (generic descriptions given) and also with two genera of Linnaeus 1753 treated by Aublet (*Mirabilis* and *Exacum*; no generic descriptions given by Aublet).

We reject Struwe and Albert's analysis and Stearn's opinion on *Lisyanthus*. There are several pre-1775 generic names for which Aublet did furnish descriptions. Examples include *Xyris* L. 1753 (originally a Gronovius 1739 name; p. 40), *Psychotria* L. 1759 (p. 145), and *Coffea* L. 1753 (originally a Jussieu 1713 name; p. 150.). We assert that in the preceding three examples, Aublet provided generic descriptions only to emend the original descriptions; these emended descriptions do differ from the protologues of those generic names. We extend the same logic even to Aublet's *Lisyanthus*; for this reason, it is obvious to expect some differences between Aublet's description of *Lisyanthus* and P. Browne's

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description of *Lisianthus*. With this assertion, we place Aublet's "*Lisyanthus*" along with his *Coffea*, *Psychotria*, and *Xyris* as having emended descriptions. Of these four generic treatments, *Lisyanthus* differs in one aspect, as noted below.

Within his treatments of *Coffea*, *Psychotria*, and *Xyris*, Aublet made a reference to Linnaeus, whereas within *Lisyanthus*, Aublet did not refer to either P. Browne or Linnaeus. This may be explained by the fact that Aublet's reference to Linnaeus is not within his descriptions of those genera but within species of those genera, which occur in French Guiana, such as *Coffea arabica* and *C. occidentalis* (p. 154), *Psychotria asiatica* and *P. herbacea* (p. 147), and *Xyris indica* (p. 42). In the case of "*Lisyanthus*," Browne's two species (*L. cordifolius* L. and *L. longifolius* L.) do not occur within French Guiana; for this reason, Aublet did not refer to the previous authors.

Aublet's spelling of the generic name *Lisyanthus* differs from those of *Lisianthus* by P. Browne (1756: 157), *Lysianthus* by Adanson (1763: 225), and *Lisianthus* by Linnaeus (1767: 6, 43). Being confronted with three orthographic variants, we wondered whether the etymology of *Lisianthus* could be found. Unfortunately, the preceding three authors did not comment on the etymology. Although it has been generally known what the Greek terms "λυσις" (*lysis*, dissolution) and "ανθος" (*anthos*, flower) represent, it was Don (1838: 207), to the best of our knowledge, who first discussed the etymology of this generic name. Citing those Greek terms, he explained the name "*Lisianthus*" as "a name given to the plant, on account of medical virtues possessed by it, of dissolving humors, being a powerful cathartic."

This above-mentioned derivation seems quite probable and explains why a "y" was introduced by Adanson. It also concurs with the names presented by Desrousseaux (in Lamarck, 1792: 658–662): for the plant with the Latin name "*Lisianthus*," he gave the French name "Lysianthe." It is not unlikely that Aublet wished to use the "y" but put it in the wrong place.

Dan Nicolson (US) drew our attention to another possible etymology of the first part of the name. Pfeiffer suggested (1873: 134, footnote): "λις s. λισσόζ, glaber" (*lis* or *lissos*, smooth/*glabrous*). For reasons unknown, Pfeiffer

provided Linnaeus's etymology of *Lisianthus*, rather than Browne's of *Lisianthus*. Pfeiffer's view was followed by Genaust (1976: 226): "gr. *leios*, *lissos* <glatt>" (smooth). Nevertheless, we consider Don's etymology as more probable, a view also shared by Dan Nicolson.

Struwe and Albert stated that the nomenclatural problems with these gentians began when Aublet described "*Lisyanthus*." We disagree. Aublet's contemporaries and later authors did not have any problem with it. They simply considered Aublet's species as additions within Browne's genus (for which they used the *Lisianthus* spelling, which was in use until about 1970). Examples include Desrousseaux (in Lamarck, 1792: 661–662), Don (1838: 207–210), Kunth (in Humboldt et al., 1819: 182), Sprengel (1824: 585–586) and Steudel (1841: 55). Martius (1827: 92) indicated Aublet as one of the amending author as follows: "(P. Browne.) Aubl. Ruiz et Pav."

The problems with *Lisianth(i)us* surfaced when Grisebach (1838: 173–200) split the genus into two unequal segments. He assigned the smaller part (including Browne's two species) to a new genus, *Leianthus* (pp. 196–200); for the larger part, he retained "*Lisyanthus* Aubl." (pp. 173–194). Don (1838: 207–210) made the same kind of error: he retained a "*Lisianthus*" (with references to, among others, Browne, Linnaeus, and Aublet) with many species, yet he transferred the two original species of Browne to *Tachia* Aubl. 1775 (p. 197); this, in essence, is similar to what Grisebach did.

Later, Grisebach (in Candolle, 1845: 38–141) further complicated the problem; even though he maintained *Leianthus* (pp. 82–83), he (p. 72) changed "*Lisyanthus* Aubl." to "*Lisianthus* Aubl." (the Linnaean spelling), which he continued to use (1862a: 423; 1862b: 521). In other words, Grisebach returned to the spelling in general use but continued to mention the amending author: Aublet. Grisebach's ascription was followed by Bentham and Hooker (1876: 813). However, Grisebach (1866: 180) reversed the spelling to *Lisyanthus*.

After the above analysis, we asked the following question: Does the usage of "*Lisianthus* Aubl." by Martius, Grisebach, and Bentham and Hooker mean anything? In our opinion, these authors are suggesting that for the generic characters of *Lisianthus*, one should not look

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- . 1767. *Mantissa Plantarum*. Impensis Direct. L. Salvii, Stockholm.
- MARTIUS, C. F. P. 1827. *Nova Genera et Species Plantarum*. Vol. 2(2). Typis C. Wolf, München.
- NICOLSON, D. H. 1991. A history of botanical nomenclature. *Ann. Missouri Bot. Gard.* 78: 33–56.
- PFEIFFER, L. K. G. 1873 (1874). *Nomenclator Botanicus*. Vol. 2(1). Sumtibus Theodori Fisheri, Kassel.
- SPRENGEL, K. P. J. 1824 (1825). *Caroli Linnaei... Systema vegetabilium*. 16th ed. Vol. 1. Sumtibus Librariae Dieterichianae, Göttingen.
- STEUDEL, E. G. von. 1841. *Nomenclator Botanicus*, ed. 2, vol. 2. Stuttgartiae et Tubingae.
- STRUWE, L. AND V. A. ALBERT. 1998. *Lisianthus* (Gentianaceae), its probable homonym *Lisyanthus*, and the priority of *Helia* over *Irlbachia* as its substitute. *Harvard Pap. Bot.* 3: 63–71.
- WEAVER, R. E., JR. 1972. A revision of the neotropical genus *Lisianthus* (Gentianaceae). *J. Arnold Arb.* 53: 76–100.