

REMARKS ON THE NOMENCLATURAL TYPE OF THE LINNAEAN NAME *VIOLA PINNATA* (VIOLACEAE)

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ABSTRACT: The lectotype of the name *Viola pinnata* was designated by Espeut in 2020 from an illustration “*Viola montana folio multifido*” published by Joachim Bauhin in *Historia Plantarum universalis* in 1651. However, Lohit and Wagh has recently been published in 2024 that the typification attempted by Espeut is not appropriate, and a “new lectotype” has been selected from other original material used by Linnaeus to describe his species. However, this conclusion is based on a misinterpretation of the International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code). The previously selected lectotype of *V. pinnata* by Espeut is correct and effective. Lohit and Wagh’s proposal is superfluous and ineffective. On the other hand, the lectotype of the name *Viola lanceolata* is discussed and corrected. **Keywords:** Nomenclature; typification; lectotype; Linnaeus; International Code of Nomenclature for algae, fungi, and plants; *Viola lanceolata*.

RESUMEN: **Comentarios sobre el tipo nomenclatural del nombre linneano *Viola pinnata* (Violaceae).** El lectotipo del nombre *Viola pinnata* fue designado por Espeut en 2020 a partir de una ilustración “*Viola montana folio multifido*” publicada en 1651 por Joachim Bauhin en su obra *Historia Plantarum universalis*. Sin embargo, Lohit y Wagh publicaron recientemente en 2024 que la tipificación de Espeut no es apropiada al tiempo que seleccionaron un “nuevo lectotipo” a partir de otro material original utilizado por Linneo para describir su especie. Esta conclusión se basa en una errónea interpretación del Código Internacional de Nomenclatura para algas, hongos y plantas (Código de Shenzhen). El lectotipo de *V. pinnata* designado por Espeut es correcto y efectivo, siendo la propuesta de Lohit y Wagh superflua e inefectiva. Por otro lado, se discute y corrige el lectotipo del nombre *Viola lanceolata*. **Palabras clave:** Nomenclatura; tipificación; lectotipo; Linneo; Código Internacional de Nomenclatura para algas, hongos y plantas; *Viola lanceolata*.

BACKGROUND AND CONCLUSION

The lectotype of the name *Viola pinnata* L. (*Violaceae*) has been designated by ESPEUT (2020: 21), as: “*V. pinnata* L., Sp. Pl. 2: 934. 1753. Loc. cl.: “*Sibiria & Alpibus Europae*”; Linnaeus does not distinguish between Eur. and [Sib.] populations. GINGINS (1824) is the first to differentiate between var. *europaea* et var. *sibirica*. BECKER (1922, 1923c) groups oriental populations with more dissected leaf blades in the subsp. *multifida* (he cites as synonym *V. multifida*, *V. dissecta*). Like REGEL (1862), he assigns the type of species to European populations. Consequently, an European lectotype had to be searched in type material. Linnaean collections possess only one specimen, LINN 1052.3 (JARVIS, 2007). The plant of the upper part of this sheet belongs to *V. multifida*, the bottom one to *V. dactyloides* Schult. No gathering indication is noted. The protologue cites J. Bauhin’s illustration, therefore it could be chosen as lectotype (Art. 9.12). Lectotype here designated: illustration J. Bauhin, *Historia Plantarum universalis* 3: 544 (1651) !p, as “*Viola montana folio multifido*”; the plant described by Bauhin comes from “*Würms*” [ITA: Bormio]”.

Viola pinnata is closely related to *V. multifida* Willd. ex Schult. and *V. milanae* V.I.V. Nikitin. *Viola pinnata* has the leaf blade completely pinnatisect, and the main rachis of the leaf blade broader than rachis of divisions at their insertion point. *Viola milanae* present the leaf blade only palmatispartite or palmatisect. On the other hand, *V.*

multifida als present leaf blade completely pinnatisect but the main rachis of the leaf blade nearly as broad than rachis of divisions at their insertion point (BECKER, 1922, 1923; ESPEUT, 2020).

Surprisingly, LOHIT & WAGH (2024) published that the typification of *V. pinnata* attempted by ESPEUT (2020) is not appropriate, and a “new lectotype” was selected from the original material used by Linnaeus to describe his species.

This conclusion is based on a misinterpretation of the International Code of Nomenclature for algae, fungi, and plants (*ICN, Shenzhen Code*, TURLAND & al., 2018). The previously selected lectotype of *V. pinnata* by ESPEUT (2020) is undoubtedly correct and effective according to the *Shenzhen Code*, and the illustration “*Viola montana folio multifido*” published by Joachim Bauhin in *Historia Plantarum universalis* (1651: 544) should be treated as the lectotype of the name *Viola pinnata*.

LINNAEUS (1753: 934) described *Viola pinnata* providing a short diagnosis “VIOLA acaulis, foliis pinnatifidis”, followed by two synonyms: 1) “*Viola alpina, folio in plures partes dissecto*” cited from BAUHIN (1623: 199), and 2) “*Viola montana, folio multifido*” cited from BAUHIN & al. (1651: 544). The protologue includes as the procedence “*Habitat in Sibiria & Alpibus Europae*”. The reference quoted by Linnaeus (BAUHIN & al., 1651: 544) includes an illustration (fig. 1) that is original element for the name and was used by the author to describe the species.

In the Linnaean herbarium at LINN, there is a relevant sheet (Herb. Linn. No. 1052.3) that bears two plants that are part of the original material of *V. pinnata* (image available at <https://linnean-online.org/11100/#?s=0&cv=0&z=0.3872%2C0.9305%2C0.3651%2C0.3484>). According to ESPEUT (2020), the plant mounted on the upper part of the sheet No. 1052.3 (LINN) can be identified as belonging to *V. multifida* and the plant mounted on the bottom of the sheet can be identified as *V. dactyloides* Schult. However, LOHIT & WAGH (2024) noted that the plant in the upper portion of the sheet is *V. pinnata*, and mentioned that: “the choice of lectotype made by ESPEUT (2020) was wrong. For this reason, the lectotype designated by ESPEUT (2020) must be overturned and a new lectotype is to be designated (TURLAND & al., 2018, Art. 9.3)”. According to these authors “Unfortunately, LINN 1052.3 is the only herbarium sheet that is available as a lectotype because no other specimen linked with *V. pinnata* could be found in any other Linnaean or Linnaeus-related herbaria. Even though the illustration in BAUHIN & al. (1651) clearly depicts Linnaeus’s *V. pinnata* and thus constitutes original material, we here select the specimen deposited in LINN as the lectotype since specimens are preferred over illustrations as types where specimens are available as per ICN Art. 9.3 & 9.12 (TURLAND & al., 2018)”.

Unfortunately, this conclusion is a misinterpretation of the Art.9.3 and 9.12 of the ICN. According to Art. 9.3 “A lectotype is one specimen or illustration designated from the original material (Art. 9.4) as the nomenclatural type, in conformity with Art. 9.11 and 9.12 [...]”, and Art. 9.12 specifies: “In lectotype designation, an isotype must be chosen if such exists or otherwise a syntype or isosyntype if such exists. If no isotype, syntype or isosyntype is extant, the lectotype must be chosen from among the paratypes if such exist. If none of the above specimens exists (as is the case of the *V. pinnata*), the lectotype must be chosen from among the uncited specimens and cited and uncited illustrations that comprise the remaining original material, if such exist”. According to this article (9.12), the “uncited specimens and cited and uncited illustrations that comprise the original material” have the same preference, and one does not prevail over the other. Furthermore, the LINN specimen No. 1052.3 cannot be treated as a syntype of *Viola pinnata*.

In addition, the lectotype designated by ESPEUT (2020) cannot be superseded according to ICN Art. 9.19, because “Only a choice of uncited material as lectotype may be superseded under Art. 9.19(c); cited specimens and illustrations are part of the protologue and cannot therefore be in serious conflict with it” (see Art. 9 Note 7). Furthermore, LOHIT & WAGH (2024) stated that “the illustration in BAUHIN & al. (1651) clearly depicts Linnaeus’s *V. pinnata*”.

In conclusion, the lectotype of *Viola pinnata* was designated by ESPEUT (2020) and is the illustration “*Viola montana folio multifido*” published by Joachim Bauhin in *Historia Plantarum universalis* (1651: 544) (fig. 1).

AMENDMENT TO A THE LECTOTYPE DESIGNATED FOR THE LINNAEAN NAME *VIOLA LANCEOLATA*

REVEAL (in JARVIS, 2007: 924) wrongly indicates the specimen Herb. Linnaeus No. 1052.4 (LINN) as the

lectotype of the name *Viola lanceolata* L. (image available at <https://linnean-online.org/11101/#?s=0&cv=0>) (see also The Linnaean Plant Name Typification Project - Linnaean Plant Names - *Viola lanceolata*; available at <https://data.nhm.ac.uk/dataset/the-linnaean-plant-name-typification-project/resource/ec9fffe8-f7f4-4dcd-9471-641c4922d956/record/19339>). This specimen belonging to *V. pinnata*, the specimen lectotype of *V. lanceolata* is corrected here to Herb. Linnaeus No. 1052.6 (LINN) (image available at <https://linnean-online.org/11103/#?s=0&cv=0&z=0.0396%2C0.5915%2C0.9097%2C0.8591>). This material can be treated as a syntype, collected by Kalm, Linnaeus mentioned in the protologue: “*Habitat in Canada, Sibiria*” / “*Planta Canadensis a D. Kalm. allata. Folia habuit angusta, longe petiolata, nervis alternis, parallelis, obsolete serrata; Sibirica a D. Gmelino: Folia habuit ovato-lanceolata, petiolis folio dimidio brevioribus, minus striata & Flores majores*”. In the Burser herbarium at UPS-BURSER is preserved another syntype.

Viola lanceolata L., Sp. Pl.: 934. 1753.

Lectotype designated by REVEAL (in JARVIS, 2007: 924) as “*Kalm s.n.*, Herb. Linnaeus No. 1052.4 (LINN)” and **corrected here:** *Kalm s.n.*, Herb. Linnaeus No. 1052.6 (LINN).

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(Recibido el 22-II-2024)
(Aceptado el 11-III-2024)

