



## Research note

# Lectotypification of *Salvia elegans* (Lamiaceae)

## Lectotipificación de *Salvia elegans* (Lamiaceae)

Sabina I. Lara-Cabrera<sup>1\*</sup> and María del Rosario García-Peña<sup>2</sup>

<sup>1</sup> Laboratorio de Sistemática Molecular, Facultad de Biología, Universidad Michoacana de San Nicolás de Hidalgo. Apartado postal 18. Administración 3, Santa María, 58091 Morelia, Michoacán, México

<sup>2</sup> Herbario Nacional, Departamento de Botánica, Instituto de Biología, Universidad Nacional Autónoma de México. Apartado postal 70-367, 04510 México, D. F.

\*Correspondent: slaracabrera@gmail.com

**Abstract.** *Salvia incarnata* Cavanilles (1800) is an illegitimate name, for an earlier homonym by Etlinger (1777) already exists; it has therefore been substituted by *Salvia elegans* Vahl (1804). Both homotypic synonyms are herein lectotypified based on original material at MA collected by L. Née, and studied and annotated by A. J. Cavanilles.

Key words: *Salvia*, nomenclature, lectotypification, Lamiaceae.

**Resumen.** *Salvia incarnata* Cavanilles (1800) es un nombre ilegítimo, al preexistir un homónimo de Etlinger (1777); por ello, ha sido substituido por *Salvia elegans* Vahl (1804). Se lectotipifican ambos sinónimos homotípicos con material original de L. Née, empleado por A. J. Cavanilles y que se conserva en MA.

Palabras clave: *Salvia*, nomenclatura, lectotipificación, Lamiaceae.

The name *Salvia incarnata* Cav. has never been explicitly typified. Cavanilles (1800: 112-113) described *S. incarnata* based on a collection made by Luis Née (no collection number was given) in Querétaro, Mexico. The locality is cited as “crece en los campos inmediatos a Querétaro en la Nueva España, y florece en octubre”. Cavanilles also mentioned having observed a dry specimen in Née’s house.

The itinerary followed by Née in the course of the Malaspina expedition (1789-1794) appeared in Muñoz’s Appendix 1 (1993). Here it was established that Née collected in the “Hacienda de San Vicente (a cinco leguas de Querétaro, cerca de San Bartolomé, perteneciente a Don Antonio Setién): cantera de la Mesa”, during the early days (4-6) of October 1791. Thus, this is most likely the locality where he collected *Salvia incarnata*.

In his *Enumeratio Plantarum*, Martin Vahl (1804: 238-239) gives a description of *S. incarnata*, by Cavanilles (1800), but on page 225 he also included another *S. incarnata*, described by Etlinger in 1777. Pages later (p. 362) in the Addenda et Corrigenda, presumably after belatedly noticing the use of these 2 homonyms, he

provided a new name, *S. elegans* for *S. incarnata* Cav. and made an explicit reference to page 238. The usage of *Salvia elegans* Vahl for this taxon has persisted ever since.

In treatments by Bentham (1832-1836, 1848) there is no mention of the specimens collected by Née. Epling (1938-1939), when citing *S. elegans*, stated not having seen the type, and when he referred to the specimen of *S. incarnata* Cav. from Querétaro, also stated not having seen it. Fernald (1900) divides the species into var. *typica* and var. *sonorensis*, but made no reference of the typification of *S. elegans*.

Concerning the type of *S. elegans*, which by definition is the type of *S. incarnata* Cav., original material is mounted on 2 sheets at the Herbario del Real Jardín Botánico de Madrid (MA) with the same accession number 255607. These 2 specimens come into contention as possible lectotypes.

A specimen (Fig. 1) bearing 2 handwritten labels, a small one that reads: “*Salvia* de Querétaro en la Hacienda de Sn. Vicente” in Née’s handwriting, verified by comparison with specimens and documents of Née (Muñoz Garmendia, 1993), and by identification made by Paloma Blanco from MA (pers. comm.). The other label



Figure 1. One of 2 specimens at MA bearing number 255607, with annotation by Née but not by Cavanilles.



**Figure 2.** The second specimen bearing number 255607, with handwritten annotations by Née and Cavanilles, designated here as the lectotype of *Salvia incarnata* Cav.

states “*Salvia*. de N. España. Née iter”. The handwriting on this label has not been identified, but it is definitely not Née’s or Cavanilles’s (P. Blanco, pers. comm.).

There is another specimen (Fig. 2) also bearing 2 handwritten labels. One label at the lower left with 2 different handwritings, and the one at the top: “Cultivada en la hacienda de Sn. Vicente a 5 legüas de Queretaro, propia de Dn Antonio Setien crece hasta 4 pies; y algo menos en los campos”, is in Née’s handwriting. The other handwritten annotation is by Cavanilles, and reads as follows, “*Salvia incarnata* No. 4,” where No. 4 refers to the part number of Anales de Historia Natural, volume 2, where *S. incarnata* was described in 1800. There is a second label, a printed label of the Herbario Matritense, with unidentified handwriting that reads as follows: “*Salvia elegans* Vahl *Salvia incarnata* Cav.” Unfortunately Garilleti (1993) never saw the specimens while discussing this species in his Herbarium Cavanillesianum treatment and could not verify Cavanilles’s handwriting. But comparing the labels and the examples of his handwriting (Garilleti, 1993) it is possible to conclude it is indeed Cavanilles’s.

Therefore, the specimen of MA referred here as Fig. 2, which includes both annotations by Née and Cavanilles is herein designated as the lectotype of *S. incarnata* Cav. The characters exhibited by the lectotype do conform with Cavanilles’s protologue: leaves ovate to deltoid-ovate; 5 calyx teeth equal in length, the upper 2 teeth connate almost to the tip, the 3 lower ones also connate; corolla tube entire; stamen connective thrust downwards to the middle of the corolla tube; stamens exerted 1 – 3 mm from the galea, all typical features of *Salvia elegans*.

***Salvia elegans*** Vahl, Enum. Pl. 1: 362 (1804), nom. nov. pro *S. incarnata* Cav., Anales Hist. Nat. 2: 112 (1800), non Etlinger, Comm. Bot.-Med. *Salvia* 25 (1777). Type: Mexico. Querétaro. «Cultivada en la hacienda de Sn. Vicente a 5 legüas de Queretaro, propia de Dn Antonio Setien » L. Née s/n, (Lectotype, here designated, MA

255607[Fig. 2]).

Alfonso Delgado, Hilda Flores, Bente Klitgaard, Teresa Germán-Ramírez, Paloma Blanco Fernández de Caleyá, Olof Ryding, Gerrit Davidse and an anonymous reviewer are gratefully acknowledged. We thank the keepers and staff of BM, C, F, G, K, MA, MEXU, MO, P, US, W for allowing access to relevant herbarium specimens.

#### Literature cited

- Bentham, G. 1832-1836. Labiatarum genera et species. J. Ridgeway. London. p. 286-287.
- Bentham, G. 1848. Labiatae In Prodomus systematicis naturalis regni vegetabilis, A. P. de Candolle (ed.). G. Masson, Paris 12:27-603.
- Cavanilles, A. J. 1800. Descripción de algunas plantas nuevas. Anales de Historia Natural 2:112-113.
- Epling, C. 1939. A revision of *Salvia*, subgenus *Calosphace*. Feddes Repertorium Specierum Novarum Regni Vegetabilis 110:1-383.
- Etlinger, A. E. 1777. De *Salvia*: Dissertatio inauguralis. Commentatio Botanico-Medica de *Salvia*. Erlangæ. 25.
- Fernald, M. L. 1900. A synopsis of the Mexican and Central American species of *Salvia*. Proceedings of the American Academy of Arts and Sciences 35:550.
- Garilleti R. 1993. Herbarium Cavanillesianum: seu enumeratio plantarum exsiccatarum aliquo modo ad novitates Cavanillesianas pertinentium, quae in horti regii matritensis atque Londinensis Societatis Linnaeanae herbariis asservantur. Fontqueria 38:6-248.
- Muñoz Garmendia F. 1992. La expedición Malaspina 1789-1794. Tomo III. Diarios y trabajos botánicos de Luis Née. Ministerio de Defensa. Museo Naval. Lunwerg Editores. Barcelona. 416 p.
- Vahl, M. H. 1804. Enumeratio Plantarum, vel ab aliis, vel ab ipso observatarum, cum earum differentiis specificis, synonymis selectis et descriptionibus succinctis. Copenhague 1:225, 238, 362.