Revista Mexicana de Biodiversidad

Revista Mexicana de Biodiversidad 92 (2021): e923717

Taxonomy and systematics

Validation of two species' names in the genus *Moussonia* (Gesneriaceae: Gesnerioideae)

Validación de dos nombres de especies en el género Moussonia *(Gesneriaceae: Gesnerioideae)*

Angélica Ramírez-Roa [a, *], Laurence E. Skog [b]

[a] *Universidad Nacional Autónoma de México, Instituto de Biología, Departamento de Botánica, Herbario Nacional MEXU, Tercer Circuito s/n, Ciudad Universitaria, Coyoacán, 04510 Ciudad de México, Mexico*

[b] *Smithsonian Institution, National Museum of Natural History, Department of Botany, P.O. Box 37012, Washington D.C. 20013-7012, USA*

*Corresponding author: aramroa@ib.unam.mx (A. Ramírez-Roa)

Received: 18 August 2020; accepted: 28 October 2020

Abstract

In the revision of the neotropical genus *Moussonia* published as an e-book, 2 species' names were not validly published following the rules in the International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code). Therefore, the nomenclatural modifications are presented here to validate the names. For *M. pedunculata*, a revived name, the lectotypification is amended, for *M. pendula*, a lectotype is selected from the syntypes.

Keywords: Central America; Gloxiniinae; Mesoamerica; Mexico; Nomenclature

Resumen

En la revisión del género neotropical *Moussonia* publicado como un libro electrónico, 2 nombres de especies no fueron válidamente publicados siguiendo las reglas del Código Internacional de Nomenclatura para algas, hongos y plantas (Schenzhen Code). Por lo tanto, se presentan las modificaciones nomenclaturales necesarias para validar los nombres. Para *M. pedunculata*, un nombre revivido, la lectotipificación es modificada y para *M. pendula*, un lectotipo es seleccionado de entre los sintipos.

Palabras clave: Centroamérica; Gloxiniinae; Mesoamérica; México; Nomenclatura

ISSN versión electrónica: 2007-8706; Universidad Nacional Autónoma de México, Instituto de Biología. https://doi.org/10.22201/ib.20078706e.2021.92.3717

Introduction

Moussonia Regel (Gesneriaceae: Gesnerioideae: Gloxiniinae) is a neotropical genus comprising 23 species, up from 11 recognized by Wiehler (1975) in his re-establishment of the genus, and about 10 according to Skog (1979). The genus is distributed from Mexico to Panama, except for Belize.

A revision of *Moussonia* was published as an e-book by the first author (Ramírez-Roa, 2017), and consisted of 3 main contributions: *1)* a complete taxonomic survey of the genus; *2)* segregation of the heterotypic synonyms included in *Moussonia elegans* Decne. complex, and *3)* presentation of 5 new species; thereby adding 11 species to those already included in *Moussonia* as circumscribed by Wiehler (1975) when he separated the genus from *Kohleria* Regel. From the synonyms in *M. elegans*, 5 were again considered as species to be accepted, *M. collina* (Brandegee) Ram.-Roa, *M. costaricensis* Klotzsch ex Oerst., *M. jaliscana* (S.Watson) D.L.Denham ex Ram.-Roa, *M. papillosa* Oerst. ex Hanst, and *M. pedunculata* (Brandegee) Ram.-Roa. *Moussonia formosa* Van Houtte ex Regel was transferred to the synonymy of *Moussonia deppeana* (Schltdl. & Cham.) Klotzsch ex Hanst., and 2 varieties were given new status as species: *M. pendula* (C.V.Morton) Ram.-Roa, formerly *Kohleria papillosa* (Oerst. ex Hanst.) Fritsch var. *pendula* C.V.Morton, and *M. solitaria* (C.V.Morton) Ram.-Roa, formerly *Kohleria papillosa* var. *solitaria* C.V.Morton.

The names of the new species and the new combination in *Moussonia* (Ramírez-Roa, 2017) were published according to Article 29.1 of the Shenzhen Code (Turland et al., 2018). However, one of the revived names, *M. pedunculata*, and one of the stat. nov. species, *M. pendula*, require modifications to be validly published.

Materials and methods

Following Article 30.4 of the Shenzhen Code (Turland et al., 2018), the modifications are presented here to make the species' names effectively published.

Results

First modification

Moussonia pendula is a name given new status from *Kohleria papillosa* var. *pendula* for a species endemic to the state of Jalisco in Mexico. A single gathering was designated by Morton as type, *E.T. Hooper s.n.*, however 2 specimens were indicated, one in MICH and another in US, with neither specimen selected by Morton as holotype (Ramírez-Roa, 2017). Taking into consideration Article 9.6, example 5 and Article 40.2, note 1 of the Shenzhen Code (Turland et al., 2018), these 2 specimens should be considered syntypes. Here, the specimen at MICH is designated as lectotype:

Moussonia pendula (C.V.Morton) Ram.-Roa, comb. et stat. nov. ≡ *Kohleria papillosa* (Oerst. ex Hanst.) Fritsch var. *pendula* C.V.Morton, *Baileya* 15: 72-73. 1967. Type: Mexico. Jalisco: 15-20 mi. SE of Autlán, Sierra de Manantlán, on the "bajada" S and W of the divide between Aserradero San Miguel Uno and Durazno, at ca. 1,700 m., on steep W-facing slopes in pine forest, March 2, 1953, *E.T. Hooper s.n.* (lectotype here designated: MICH!; isolectotype: US!).

Second modification

The name *Moussonia pedunculata*, is based on *Kohleria pedunculata* Brandegee from Chiapas in Mexico and Guatemala. Brandegee typified the species on a specimen at UC, *C.A. Purpus 6664*. Duplicates of the Purpus number exist in several herbaria, but all the sheets are either mixed collections with other species of *Moussonia*, particularly *M. tacanaensis* Ram.-Roa, a new species included in the revision (Ramírez-Roa, 2017), or not *Moussonia pedunculata* at all. For example, the specimen of *Purpus 6664* at MO is wholly *M. tacanaensis*, the specimen at UC is partly *M. skutchii* (C.V. Morton & D.N. Gibson) Wiehler, and the other specimens of *Purpus 6664* are mixed *M. pedunculata* and *M. tacanaensis*. The first author realized the problem of the mixed collections, but unfortunately selected a completely different collection as lectotype, which does not comply with Article 9.14 of the Shenzhen Code (Turland et al., 2018), therefore the correction is made here.

Moussonia pedunculata (Brandegee) Ram.-Roa, comb. nov. ≡ *Kohleria pedunculata* Brandegee, *University of California Publications in Botany* 6(4): 67. 1914, ≡ *Kohleria elegans* var. *pedunculata* (Brandegee) C.V.Morton, *Baileya* 15: 75. 1967. Type: Mexico. Chiapas: cerro del Boqueron, Sept. 1913, *C.A. Purpus 6664* (lectotype designated here: UC-172271! pro parte, branch on the right side; isolectotypes: BM! pro parte, branch on the left side, F! pro parte, branch on the right side, GH [digital image!] pro parte, branch on the right side, NY! pro parte, branches on the left and right sides, US [digital image!] pro parte, branch on the right side).

Acknowledgements

Fred Barrie (MO) is profoundly thanked for his observations about the erroneous designation of the lectotype in *Moussonia pedunculata*, that could be rectified here, as well as his sharing nomenclatural knowledge, and comments on the manuscript, and thanks to the anonymous reviewers for their insightful and valuable comments.

References

Ramírez-Roa, A. (2017). *Revisión del género* Moussonia *(Gesneriaceae)*. Ciencia Nueva: Doctorados UNAM. Dirección General de Publicaciones y Fomento Editorial. Universidad Nacional Autónoma de México, Ciudad de México, Mexico. https://doi.org/10.22201/dgpyfe.9786070283475e.2017

Skog, L. E. (1979). Family 175. Gesneriaceae, *Moussonia*. In R. E. Woodson, R.W. Schery et al. Flora of Panama, Part. IX. *Annals of the Missouri Botanical Garden*, *65*, 947–951.

Turland, N. J., Wiersema, J. H., Barrie, F. R., Greuter, W., Hawksworth, D. L., Herendeen, P. S. et al. (Eds.). (2018). *International Code of Nomenclature for algae, fungi, and plants (Botanical Congress) Shenzhen Code adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017*. Regnum Vegetabile 159. Glashütten: Germany; Koeltz Botanical Books. https://doi.org/10.12705/Code.2018

Wiehler, H. (1975). The re-establishment of *Moussonia* Regel (Gesneriaceae). *Selbyana*, *1*, 22–31.