

## NOMENCLATURAL UPDATES IN *VARRONIA* (CORDIACEAE, BORAGINALES) FROM SOUTH AMERICA

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**Abstract.** Two new combinations in *Varronia* (Cordiaceae, Boraginales) are proposed, both species endemic to Colombia: *V. fuertesii* and *V. ramirezii*.

**Resumo.** Duas novas combinações em *Varronia* (Cordiaceae, Boraginales) são propostas, ambas as espécies endêmicas da Colômbia: *V. fuertesii* e *V. ramirezii*.

**Keywords:** Boraginales, Colombia, *Cordia*, nomenclature

The genus *Varronia* P. Browne (Cordiaceae) currently comprises ca. 125 Neotropical species, occurring from the United States (Arizona) to Argentina, mainly in the northern Andean region, Mexico, and Brazil (Miller, 2013). Since it was originally described by Browne (1756), *Varronia* has been treated in various ways: as a subgenus or section of *Cordia* and as a distinct genus. Borhidi et al. (1988) treated *Varronia* and published a list of new combinations. However, until the first decade of the 21st century, floristic works continued treating the species of *Varronia* under *Cordia* sensu lato, for example, Taroda and Gibbs (1986), Vitta (1992), Estrada Sánchez (1995), Melo and França (2003), and Melo and Sales (2005). Recently, morphological and molecular data confirmed *Varronia* as a genus distinct from *Cordia* (Miller and Gottschling, 2007) and belonging to the Cordiaceae family (BWG, 2016).

To update the names in *Varronia*, new combinations were proposed recently by Miller (2007, 2013), Stapf (2010), and Feuillet (2016). However, because of the representativeness of the genus and of Cordiaceae in the Neotropics, the correct names of several taxa of *Varronia* still need to be reevaluated or re-assigned in the genus.

During a taxonomic study of *Varronia* species from South America, we found the need to propose new combinations for two Colombian species that Estrada Sánchez (1995) originally described under *Cordia*, and they

are proposed herein. Tropicos (<http://www.tropicos.org>), JSTOR Global Plants (<https://plants.jstor.org>), and Plants of the World Online (<http://www.plantsoftheworldonline.org/>) were consulted for the protologues and type specimens. The acronyms of herbaria are based on Thiers's Index Herbariorum (Thiers, 2019).

***Varronia fuertesii*** (Estrada) T.S. Silva & J.I.M. Melo, *comb. nov.*

Basionym: *Cordia fuertesii* Estrada, Flora de Colombia 14: 125–127. 1995. TYPE: COLOMBIA. Santander: Mpio de Virolín, 1800 m, 6–12 May 1986, J.L. Fernández, R. Bernal & Estudiantes de Biología 6094 (Holotype: COL [000004050]).

**Distribution:** Colombia.

***Varronia ramirezii*** (Estrada) T.S. Silva & J.I.M. Melo, *comb. nov.*

Basionym: *Cordia ramirezii* Estrada, Flora de Colombia 14: 147–148. 1995. TYPE: COLOMBIA. Nariño: Road to Buesaco, ca. 10 km NE of Pasto, 2600–2850 m, 11 January 1981, A. Gentry, M. Mulampy, S. Libenson, M. Olson & A. Cogollo 30429 (Holotype: COL [000004059]; Isotype: JAUM [0000142]).

**Distribution:** Colombia.

### LITERATURE CITED

- BORHIDI, A., E. GONDÁR AND Z. S. OROSZ-KOVÁCS. 1988. The reconsideration of the genus *Cordia*. Act. Bot. Hung. 34: 375–423.
- BROWNE, P. 1756. *The Civil and Natural History of Jamaica*. Osborne, London.
- BWG (BORAGINALES WORKING GROUP). 2016. Familial classification of the Boraginales. Taxon 65(3): 502–522.
- ESTRADA SÁNCHEZ, J. E. 1995. *Cordia* subgénero *Varronia* (Boraginaceae). Pages 1–171 in S. S. PIEDRAHITA, M. T. TELLERÍA, S. CASTROVIEJO, W. J. MEJÍA, P. R. CARRANZA, AND G. L. CONTRERAS, EDS., *Flora de Colombia*. Universidad Nacional de Colombia, Santafé de Bogotá.
- FEUILLET, C. 2016. Lectotypifications of six taxa in the Boraginales (Cordiaceae and Heliotropiaceae). PhytoKeys 62: 95–100.

The authors thank the National Council for Scientific and Technological Development (CNPq) for generously providing a Ph.D. scholarship for T. S. Silva (Proc. No. 141011/2017-3) and a Productivity Research Grant for J. I. M. Melo ([PQ-2] Proc. No. 303867/2015-9). We also thank the Rufford Foundation for a grant supporting this work (Rufford Small Grant 24813-1).

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- JSTOR. 2019. Global Plants. Available at <https://plants.jstor.org> (last accessed March 17, 2019).
- MELO, E., AND F. FRANÇA. 2003. Flora de Grão Mongol, Minas Gerais: Boraginaceae. *Bol. Bot. Univ. São Paulo* 21(1): 127–129.
- MELO, J. I. M., AND M. F. SALES. 2005. Boraginaceae A. Juss. na região de Xingó: Alagoas e Sergipe. *Hoehnea* 32(3): 369–380.
- MILLER, J. S. 2007. New Boraginales from Tropical America 5: New Names and typifications for Neotropical species of *Cordia* and *Varronia*. *Novon* 17: 372–375.
- . 2013. New Boraginales from tropical America 8: Nomenclatural notes on *Varronia* (Cordiaceae: Boraginales). *Brittonia* 65: 342–344.
- . AND M. GOTTSCHLING. 2007. Generic classification in the Cordiaceae (Boraginales): Resurrection of the genus *Varronia* P. Br. *Taxon* 56: 163–169.
- PLANTS OF THE WORLD ONLINE. Available at <http://www.plantsoftheworldonline.org> (accessed March 17, 2019).
- STAPP, M. N. S. 2010. Nomenclatural notes on *Varronia* (Boraginaceae s.l.) in Brazil. *Rodriguésia* 61(2): 133–135.
- TARODA, N., AND P. E. GIBBS. 1986. A revision of the Brazilian species of *Cordia* subgenus *Varronia* (Boraginaceae). Notes from the Royal Botanic Garden Edinburgh 44: 105–140.
- THIERS, B. 2019 [continuously updated]. Index Herbariorum: A global directory of public herbaria and associated staff. New York Botanical Garden's Virtual Herbarium. <http://sweetgum.nybg.org/ih/> (last accessed February 20, 2019).
- TROPICOS. Available at [www.tropicos.org](http://www.tropicos.org) (last accessed March 17, 2019). Missouri Botanical Garden, St. Louis.
- VITTA, F. A. 1992. Flora da Serra do Cipó, Minas Gerais: Boraginaceae. *Bol. Bot. Univ. São Paulo* 13(1): 23–29.