

# RANDIA TAFALLANA (RUBIACEAE): A NEW NAME FOR MUSSAENDA PARVIFOLIA TAFALLA EX ESTRELLA, A TREE FROM THE DRY FORESTS OF COASTAL ECUADOR

XAVIER CORNEJO<sup>1</sup>

**Abstract.** *Randia tafallana* is here proposed as a new name for *Mussaenda parvifolia* Tafalla ex Estrella, a species published in *Flora Huayaquilensis* (1989) and a later homonymous of *Mussaenda parvifolia* Miq. (1867). The present status of the populations of *Randia tafallana* is unknown.

**Resumen.** Se propone *Randia tafallana* como un nombre nuevo para *Mussaenda parvifolia* Tafalla ex Estrella, una especie publicada en *Flora Huayaquilensis* (1989) y homónimo de *Mussaenda parvifolia* Miq. (1867). El estado actual de las poblaciones de *Randia tafallana* es desconocido.

**Keywords:** Ecuador, Guayaquil, *Mussaenda parvifolia*, *Randia tafallana*, Rubiaceae, Juan Tafalla.

During the colonial period, after working in Peru as a field assistant for Hipólito Ruiz and José Pavón in the *Virreinato del Perú y Chile* expedition (1777–1788), Juan Tafalla was assigned to move and settle northwards to lead the first team established in Ecuador for botanical research. His main goal was to prepare an inventory of timber woods from the coastal region and document the Cinchonas in the southern Andes of the country. From 1799 to 1803, Tafalla and his team gathered specimens and elaborated descriptions in Latin and plant size plates *in situ* for more than five hundred species of vascular plants from the region of Guayaquil in the present coastal Ecuador. Some of those species were regarded as new to science and names were handwritten by Tafalla himself. During those years, collections, descriptions, plates and letters were shipped from Guayaquil by Tafalla to Hipólito Ruiz, assigned since 1789 to the “Oficina Botánica de la Flora Peruana y Chilense” in Madrid, Spain. Unfortunately, Ruiz and Pavón were mostly occupied on the study of plants from Peru and Chile and on the edition of the forthcoming volumes of *Flora Peruviana et Chilensis*, a historical and pioneer masterpiece that has partially remained unpublished to the present. Therefore, Tafalla’s botanical work from the region of Guayaquil was neglected. His specimens of plants from Ecuador were recorded on the labels as gathered by Ruiz or Pavón, from a country that they neither visited nor explored (Tafalla, 1989). Subsequently, ca. 60 of those historical collections from Guayaquil were sold by Pavón to Aylmer Bourke Lambert, a British botanist who was mostly interested in building a herbarium by gathering types and important specimens cited in publications. Unfortunately, after Lambert died, his herbarium was dismembered and the specimens purchased from Pavón were dispersed among several herbaria in Europe (Steele, 1964; Miller, 1970). That

would explain why some common species of plants from the city of Guayaquil and surrounding areas are missing in *Flora Huayaquilensis* (Tafalla, 1989). Moreover, botanical studies in a number of taxonomic revisions and monographs unfairly credited Tafalla’s collections as gathered by Ruiz or Pavón (e.g., De Candolle in *Prodromus*, 1824). Some species known to the present as strictly endemic to coastal Ecuador and originally collected by Tafalla were even named after them (e.g., *Erythroxylum ruizii* Peyr., *Thalia Pavonii* Korn) or named after Peru, contributing also to some phytogeographical confusion as if it were collected or occur in the latter country (e.g., *Duguetia peruviana* (R. E. Fr.) J. F. Macbr.). Furthermore, several of the handwritten names Tafalla assigned to the new species were scratched and replaced by Ruiz, who wrote his own names without consulting Tafalla. Regrettably, Tafalla’s botanical work remained unpublished and forgotten in Real Jardín Botánico (MA) for approximately 180 years.

In the twentieth century, Eduardo Estrella, an Ecuadorian doctor in medicine, found at MA the forgotten collections, letters and plates elaborated by Tafalla and his team in Ecuador. The discovered material was edited and finally published as *Flora Huayaquilensis* (Tafalla, 1989), a classic publication of great historical value in which the aforementioned practices of Ruiz and Pavón were brought to light and supported by irrefutable and detailed evidence. Estrella credited Tafalla and made his work known. However, although many of Tafalla’s new names were formally described in Latin with the respective cited collections and illustrations, those names rather unintentionally became, in accordance to the principle of priority (see Arts. 11 and 29 of the ICBN: McNeill et al., 2012), synonyms of names previously published by other authors (e.g., Humboldt et al., 1815–1825).

Thanks are due to Claes Gustafsson (GB), for his useful comments and to Herbario del Real Jardín Botánico, CSIC, Madrid, for allowing the author the use of one of their images in this publication.

<sup>1</sup>Herbario GUAY, Facultad de Ciencias Naturales, Universidad de Guayaquil, Av. Raúl Gómez Lince s.n. y Av. Juan Tanca Marengo (Campus Mapasingue), P.O. Box 09-01-10634, Guayaquil, Ecuador; xcornejoquay@gmail.com

*Harvard Papers in Botany*, Vol. 22, No. 1, 2017, pp. 9–11.

© President and Fellows of Harvard College, 2017

ISSN: 1938-2944, DOI: 10.3100/hpib.v22iss1.2017.n3, Published online: 30 June 2017



FIGURE 1. *Randia tafallana* Cornejo. Holotype from the Ruiz & Pavón herbarium at MA. The label reads: F.H. D. 366 L. 597, meaning *Flora Huayaquilensis*, description 366, plate 597. Photograph courtesy of Herbario del Real Jardín Botánico, CSIC, Madrid, ©RJB-CSIC.

There was a tree among the new species documented in *Flora Huayaquilensis*, *Mussaenda parviflora* Tafalla ex Estrella (Rubiaceae) that Juan Tafalla collected in Guayaquil in 1802, of which there is a specimen at MA in the Ruiz and Pavón herbarium and a description and plate published in Tafalla (1989: 80–81, description 366, plate 597).

*Mussaenda parviflora* sensu Tafalla present brachyblasts armed with short apical spines, small flowers and small baccate fruits. *Mussaenda parviflora* sensu Tafalla is a perfect match for the genus *Randia* L. (Rubiaceae) and not the “unarmed” *Mussaenda* L. Furthermore, the fully reflexed sepals and the small, yellow corollas, ca. 1 cm long, of *Mussaenda parviflora* sensu Tafalla do not fit any known species of *Randia*. In the meantime, Tafalla’s work was not published until 1989, and a morphologically different species of Rubiaceae was formally proposed in 1867 in *Proflusio Florae Japonicae*, having the same generic name and epithet (as *Mussaenda parviflora* Miq.). Consequently, *Mussaenda parviflora* Tafalla ex Estrella

in *Flora Huayaquilensis* is a later homonym and, in accordance to the principle of priority ruled by Art. 11 of ICBN (McNeill, 2012), a new name is needed for Tafalla’s species, that is formally proposed here as:

***Randia tafallana* Cornejo, nom. nov.**

Replaced synonym: *Mussaenda parviflora* Tafalla ex Estrella, *Flora Huayaquilensis* 80–81, description 366, plate 597 (1989), non *Mussaenda parviflora* Miq., Ann. Mus. Bot. Lugduno-Batavi 3:110 (1867). TYPE: ECUADOR. Guayaquil: 1802 (fl, y fr), *Juan Tafalla s.n.* (holotype: MA-815635, in Ruiz and Pavón herbarium). Fig. 1.

**Etymology:** The epithet of this historical species honors Juan José Tafalla Navascués, the author of the first flora of Guayaquil, in coastal Ecuador.

*Randia tafallana* is known only from the type collection gathered in 1802 by Juan Tafalla in the area of Guayaquil. The present status of its populations is unknown.

LITERATURE CITED

- CANDOLLE, A. P. DE. 1824. *Prodromus systematis naturalis regni vegetabilis*. Vol. 1. Treuttel et Würtz, Paris.
- HUMBOLDT, A. DE, A. BONPLAND, AND C. KUNTH. 1815–25. *Nova genera et species plantarum*. Vol. 1–7. Librairie grecque-latino-allemande 1815–1818 (Vol. 1–3), Paris; N. Maze 1820–1821 (Vol. 4–5), Paris; Gide fils 1823–1825 (Vol. 6–7), Paris.
- IUCN. 2012. IUCN Red List Categories and Criteria Version 4. IUCN Gland, Switzerland, and Cambridge, United Kingdom.
- MCNEILL, J., F. R. BARRIE, W. R. BUCK, V. DEMOULIN, W. GREUTER, D. L. HAWKSWORTH, P. S. HERENDEEN, S. KNAPP, K. MARHOLD, J. PRADO, W. F. PRUD’HOMME VAN REINE, G. F. SMITH, J. H. WIERSEMA. 2012. International Code of Nomenclature for algae, fungi, and plants (Melbourne Code) adopted by the Eighteenth International Botanical Congress Melbourne, Australia, July 2011. *Regnum Vegetabile* 154. Koeltz Scientific Books, Koenigstein.
- MILLER, H. S. 1970. The Herbarium of Aylmer Bourke Lambert: notes on its acquisition, dispersal, and present whereabouts. *Taxon* 19: 489–553.
- STEELE, A. R. 1964. *Flowers for the King: The Expedition of Ruiz and Pavón and the Flora of Peru*. Duke University Press, Durham.
- TAFALLA, J. 1989. *Flora Huayaquilensis. Sive descriptiones et icones plantarum Huayaquilensium secundum systema Linnaeanum digestae*. Eduardo Estrella, Ed. Instituto ad Conservandam Naturam/CSIC, XIII-CVI, Madrid.