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Transfer of West Indian *Marsdenia* to *Ruehssia* (Apocynaceae-Asclepiadoideae)

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Transfer of West Indian *Marsdenia* to *Ruehssia* (Apocynaceae–Asclepiadoideae).

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Abstract

Although current phylogenetic studies indicate that all American species of *Marsdenia* should be recognized in *Ruehssia*, only about half of them have been transferred to *Ruehssia*. Particularly, only 13 of the 24 species recognized in the catalogue “Flora of the West Indies” are currently placed in *Ruehssia*, with the remaining 11 species still classified as *Marsdenia* because the needed combinations have not been made. To consistently recognize all West Indian species belonging to this clade as *Ruehssia*, the following new combinations are here proposed: *Ruehssia dictyophylla*, *R. dussii*, *R. ekmanii*, *R. elliptica*, *R. haitiensis*, *R. macfadyenii*, *R. macroglossa*, *R. nitida*, *R. nubicola*, *R. suffruticosa*, and *R. troyana*.

Key words

Floristics, Greater Antilles, Guadeloupe, Hispaniola, Jamaica, Lesser Antilles, Martinique, Puerto Rico.

Introduction

In a recent paper by Espírito Santo et al. (2019), strong support was presented for the recognition of the American species of *Marsdenia* as a clade not closely related to *Marsdenia tinctoria*, the type of the genus. They opted to recognize this American clade as a separate genus instead of lumping several genera into a morphologically diverse and un-diagnosable *Marsdenia*. *Ruehssia* H. Karst. being the oldest available name applicable to this taxon, was resurrected in order to accommodate the American species of *Marsdenia* (ca. 127 spp.). However, they only provided new combinations for the Brazilian species of *Marsdenia*. Following their work, Liede, S. Reuss & Meve (Reuss et al. 2019), transferred all species of *Marsdenia* occurring in Cuba into the genus *Ruehssia*, and Goyder (Bárrios et al. 2020) transferred the Puerto Rican Bank endemic *Marsdenia woodburyana* into *Ruehssia*. As a result, the West Indian members of this clade are currently classified under two different genera. Thirteen species are recognized as *Ruehssia* while 11 are still classified as *Marsdenia*. The Smithsonian Institution webpage on West Indian

flora (Acevedo-Rodríguez and Strong 2005 onwards) is committed to providing the most up-to-date nomenclature for this diverse floristic region and therefore 11 combinations are here proposed.

Taxonomic treatment

***Ruehssia dictyophylla* (Urb.) Acevedo-Rodríguez, comb. nov.**

Marsdenia dictyophylla Urb., Repert. Spec. Nov. Regni Veg. 18: 194. 1922.

Type. HAITI. Sud-Est: Furcy, Mt. Trauchant, open area, 1300 m, 26 May-15 Jun 1920 (fl)
Leonard 4378 (**holotype**: B†; **isotypes**: US!, NY).

***Ruehssia dussii* (Schltr) Acevedo-Rodríguez, comb. nov.**

Marsdenia dussii Schltr. in I. Urban, Symb. Antill. 1: 275. 1899.

Type. MARTINIQUE. Without locality, *Duss s.n.* (type not known). “*Based on a single collection that Duss sent to Theodore Bernhardi*”

***Ruehssia ekmanii* (Alain) Acevedo-Rodríguez, comb. nov.**

Marsdenia ekmanii Alain, Brittonia 20: 149. 1968.

Type. HAITI. Nord-Ouest: Montagnes Terre-Neuve, Dumirail, limestone cliffs, in thickets, 1000 m, 9 Oct 1925 (fl), *Ekman H-5038* (**holotype**: US!; **isotype**: S).

***Ruehssia elliptica* (Decne.) Acevedo-Rodríguez, comb. nov.**

Marsdenia elliptica Decne. in A.L.P.P. de Candolle, Prodr. 8: 616. 1844.

Type. PUERTO RICO. Without locality, 1827 (fl), *Wydler 308* (**holotype**: G-DC, image!).

***Ruehssia haitiensis* (Urb. & Ekman) Acevedo-Rodríguez, comb. nov.**

Marsdenia haitiensis Urb. & Ekman, Ark. Bot. 20A(5): 40. 1926.

Type. HAITI. Quest: Montagne de Trou d’Eau, Morne a Cabrits, on limestone, 250 m, 14 Jul 1924 (fl), *Ekman H-891* (**holotype**: S; **isotype**: US!).

***Ruehssia macfadyenii* (Rendle) Acevedo-Rodríguez, comb. nov.**

Marsdenia macfadyenii Rendle, J. Bot. 75: 349. 1937.

Type. JAMAICA. Without locality, without date (fl), *Macfadyen s.n.* (**holotype**: K, image!).

***Ruehssia macroglossa* (Schltr.) Acevedo-Rodríguez, comb. nov.**

Marsdenia macroglossa Schltr. in I. Urban, Symb. Antill. 1: 276. 1899.

Type. GUADELOUPE. Without locality, *Duss* 3774 (**holotype**: B†; **isotypes**: F, GH, MO, NY, US!).

***Ruehssia nitida* (Poir.) Acevedo-Rodríguez, comb. nov.**

Ceropogia nitida Poir., Encycl. suppl. 2. 178. 1811; *Marsdenia nitida* (Poir.) Decne., Ann. Sci. Nat. Bot., sér. 2, 9: 275. 1838.

Type. HAITI [“Saint-Domingue”]. Without locality or date (fl), *Nectoux* s.n. (**holotype**: P, image!). This specimen was annotated by Gilberto Morillo as the lectotype but apparently such lectotypification was never published.

***Ruehssia nubicola* (Alain) Acevedo-Rodríguez, comb. nov.**

Marsdenia nubicola Alain, Phytologia 63: 66. 1987.

Type. DOMINICAN REPUBLIC. **La Vega**: Alto Casabito, Bonao, cloud forest, 1300 m, 13 Apr 1969 (fl). *Liogier* 14763 (**holotype**: NY!).

***Ruehssia suffruticosa* (Alain) Acevedo-Rodríguez, comb. nov.**

Marsdenia suffruticosa Alain, Moscosoa 1(1): 36. 1976.

Type. DOMINICAN REPUBLIC. **Peravia**: Baní, along Baní river, El Recodo, 250 m, Sep 1974 (fl), *Liogier* 21820 (**holotype**: JBSD).

***Ruehssia troyana* (Urb.) Acevedo-Rodríguez, comb. nov.**

Marsdenia troyana Urb., Repert. Spec. Nov. Regni Veg. 16: 36. 1919.

Type. JAMAICA. **Manchester**: Vic. of Troy, ca. 2000 feet elevation, 17 Sep 1906 (fr); *Harris* 9515 (**holotype**: B†; **isotype**: NY, image!).

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