Novelties in *Prestonia* (Apocynaceae)

J. Francisco Morales

Instituto Nacional de Biodiversidad (INBio), Apto 22-3100, Santo Domingo de Heredia, Costa Rica

ABSTRACT. *Prestonia folsomii* is described from Colombia and Panama. A new combination, *Prestonia longifolia* (Sesse & Mocino) J. F. Morales, is proposed, and two new synonyms of *Prestonia portobellensis* are given.

In preparing the treatment of Apocynaceae for *Flora Mesoamericana*, I encountered the following novelties here described.

**Prestonia folsomii** J. F. Morales, sp. nov. TYPE: Colombia. Valle: Buenaventura Municipio, Bajo Calima region: along the road between Buenaventura–Malaga at km 51.3, deep gorge in virgin forest, 100 m, 8 Feb. 1990 (fl), Croat & Watt 70348 (holotype, INB; isotypes, MO, USF). Figure 1.

A *Prestonia perplexa* foliis infra conspicuis puberulis, eaulibus suberosis differt.

Liana, stems densely puberulent when young, soon usually becoming conspicuously suberose when fully mature. Leaves (2.5)4–12 × (1.8)2.5–5.5 cm, membranaceous, oblanceolate to oblong-obovate, caudate-mucronate at apex, cuneate to attenuate at base, very sparsely puberulent to glabrave above, beneath usually puberulent, eglandular; petiole 0.4–1.2 cm, stipular appendages interpetiolar, numerous. Inflorescence subumbelliform, racemose to subcorymbose, somewhat agglomerate, bearing 10–16 pale yellow flowers; peduncle 2.2–3.6 cm, pedicels 7–24 mm, both densely puberulent; bracts 2.5–4 × 1 mm, linear-ensiform, scarious; calyx lobes 8–13 × 3–4 mm, oblong-ovate to lanceolate, acute, very sparsely puberulent, soon becoming glabrate, the internal squamellae ca. 1 mm long, deltoid, glabrous, entire; corolla hypocrateriform, yellow or greenish yellow, glabrous or glabrate, tube 11–14 × 3–4 mm diam. at the orifice, epistaminal appendages ca. 2 mm, much surpassed by the anthers, inserted 1–1.5 mm below the faucal annulus; faucal annulus conspicuous, entire; lobes 1.2–1.4 cm × 8–9 mm, obliquely obovate to oblong-ovate, reflexed or widely spreading, usually obtuse; stamens inserted at about the upper ⅓ of the corolla tube, filaments inconspicuous, glabrous, anthers 4–4.5 mm, glabrous, narrowly sagittate, exserted ca. 2–3 mm; ovary ca. 1 mm, ovoid, glabrous, shorter than the nectary; stigma ca. 1 mm, style 8–9 mm; nectary 1.5–2 mm long, 5-lobed. Follicles unknown.

*Prestonia folsomii* is found in forest, secondary growth, thickets, and along roadsides from eastern Panama to southeastern Colombia, at 100–800 m. This new species is closely related to *Prestonia exserta* (A. DC.) Standley, but differs notably in the deeply inserted epistaminal appendages much surpassed by the anthers. In addition, it is related to *Prestonia perplexa* Woodson, but is easily distinguished by its leaves, which are conspicuously puberulent beneath, and by its usually suberose stems.

*Prestonia folsomii* is named for James Folsom in recognition of his extensive fieldwork in Panama while employed by the Missouri Botanical Garden.


Notes on the *Prestonia portobellensis* Complex

When Woodson (1936) described *Prestonia guatemalensis* and *P. schippii* from Guatemala and Belize, respectively, he separated them from *P. portobellensis* (Beurling) Woodson by such features as the size of the calyx lobes, the exsertion of the epistaminal appendages, and the amount of inflorescence development. Examination of the types and additional collections from the type locality of the former species shows that the characters used by Woodson are continuously variable and thus not useful for species distinction. Therefore, two new synonyms of *P. portobellensis* are proposed here.


In his monograph of the family, Woodson (1936) cited the name Echites longifolia Sessé & Mocino as “possibly referring to Echites tuxtlensis Standley” mainly due to the difficulty of interpreting the original descriptions of Sessé and Mocino and because of his inability to see type collections of the many
species described by them, which are deposited in the Madrid (MA) herbarium.

However, in the process of preparing the Apocynaceae for the Manual de las Plantas de Costa Rica and Flora Mesoamericana, a fragment of the type collection of _E. longifolia_, as well as the type of _Prestonia concolor_ (S. F. Blake) Woodson, were examined. I conclude that these are identical, and thus a new combination based on the Sessé and Mocino name is made here.


_Prestonia longifolia_ belongs to the section _Annulares_ Woodson and is closely related to _P. portobellensis_ (Beurling) Woodson, which has oblong-lanceolate calyx lobes that are usually thick and apically acute to obtuse. However, sometimes in _P. portobellensis_ the calyx is reduced and thus can be confused with the former species. In addition, both occur in the same geographical area: _P. longifolia_ ranges from Mexico to Panama, while _P. portobellensis_ ranges from Mexico to Colombia. The two species can be separated by the following key:

1a. Calyx lobes triangular-ovate to deltate, long-acuminates, 3–6 mm long; leaves usually thin and membranaceous
1b. Calyx lobes oblong to oblong-lanceolate, obtuse to acute, rarely acuminate (then larger than 10 mm), (7)9–18 mm long; leaves thick and subcoriaceous

**Acknowledgments.** I thank the curators of CR, DUKE, F, GH, MEXU, MO, NY, US, and USJ for providing specimens for examination and the loan of material. I thank Michael Grayum and Alvaro Fernández for critical comments on the manuscript and consultation. Herbarium work in the United States was supported by NSF grant DEB-9300814—Manual to the Plants of Costa Rica to the Missouri Botanical Garden, Barry Hammel and Mike Grayum, co-principal investigators.

**Literature Cited**


View This Item Online: https://www.biodiversitylibrary.org/item/14666
DOI: https://doi.org/10.2307/3392095
Permalink: https://www.biodiversitylibrary.org/partpdf/28355

Holding Institution
Missouri Botanical Garden, Peter H. Raven Library

Sponsored by
Missouri Botanical Garden

Copyright & Reuse
Copyright Status: In copyright. Digitized with the permission of the rights holder.
License: http://creativecommons.org/licenses/by-nc-sa/3.0/
Rights: https://biodiversitylibrary.org/permissions

This document was created from content at the Biodiversity Heritage Library, the world’s largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.

This file was generated 16 April 2022 at 20:09 UTC