

## TYPIFICATION OF THE SPECIES OF *OTTOSCHULZIA* (ICACINACEAE)

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**Abstract.** *Ottoschulzia* (Icacinaceae) includes four species of small trees found in the Antilles, Southern Mexico, and Central America. Several species in the genus have never been explicitly typified. Herein a lectotype is proposed for *Ottoschulzia cubensis*, and neotypes are proposed for *O. domingensis*, and *O. rhodoxylon*.

**Keywords:** *Ottoschulzia*, Icacinaceae, Greater Antilles, Flora of the Antilles, lectotype, neotype, nomenclature

*Ottoschulzia* (Urban, 1912) is a small genus in the family Icacinaceae with four recognized species. The genus occurs in the Great Antilles (except in Jamaica), Mexico, Belize and Guatemala. *Ottoschulzia* is easily distinguished because the surface of the young branches and flowers have diminute ferruginous malpighiaceus hairs; the leaves are subcoriaceous to coriaceous with the margins conspicuously differentiated; the flowers are disposed in a short reduced panicle, generally with one or three flowers, on occasion five; it is morphologically bisexual but functionally it could be unisexual; the petals are joined in the base forming a small tube; and the stamens are fleshly with the anther sagittate in shape and the connective is narrowly triangular. *Ottoschulzia* was proposed by Ignatz Urban, segregating two species of the genus *Poraqueiba* Aubl.: *P. cubensis* (Grisebach, 1866), and *P. rhodoxylon* (Urban, 1908). Additionally, he proposed a third species: *O. domingensis* (Urban, 1912). Howard (1942) published the most comprehensive monograph of the genus. Nevertheless, the

herbarium material consulted was limited and incomplete and many of the conclusions were mainly based on previous work (Grisebach, 1866; Urban, 1908, 1912, 1922). Latter, Lundell described *O. pallida* (Lundell, 1975), from collections from Guatemala.

One of these names needs to be lectotypified (*O. cubensis*) and two neotypified (*O. domingensis* and *O. rhodoxylon*) according to the Code of Botanical Nomenclature to increase the nomenclatural precision in concordance with the articles 9.2, 9.6, 9.10, 9.11, 9.15, 9.20, 9.21 of the CINB (McNeill et al., 2006).

***Ottoschulzia cubensis*** (C. Wright ex Griseb.) *Symb. Antill.* 7: 273–274. 1912.

Basionym: *Poraqueiba cubensis* C. Wright ex Griseb., *Cat. Pl. Cub.* 119. 1866. LECTOTYPE (designated here): CUBA: Retiro, *C. Wright 2639* (GOET); Isolectotypes: (G, GH-2, K, MA, MO, NY, US).

This species was originally described by August Grisebach as a member of the genus *Poraqueiba*.

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Grisebach used the unique collection collected by C. Wright in Cuba as type material, and one sheet was deposited at Göttingen (GOET). Despite the fact that this specimen does not have the original label of Ch. Wright or a mixed specimen of a *Zuelania tremula* Griseb., as mentioned in the protologue, the collection matches the original description with flowers and fruits, congruent with the specimen at GOET.

*Ottoschulzia cubensis* is endemic to Cuba, growing in small populations in the evergreen and semideciduous forest in calcareous substrate between 0 and 400 m (Duno and Angulo, 2010).

***Ottoschulzia domingensis*** Urb., *Symb. Antill.* 274. 1912. TYPE: DOMINICAN REPUBLIC. Hab. in Sto. Domingo australi prov. Barahona, *M. D. Fuentes s.n.* NEOTYPE (designated here): DOMINICAN REPUBLIC. Barahona: Sierra Martín García, cerca de la divisoria entre las prov. de Azua y Barahona. Lado s de la Sierra, en la parte de Barahona. En la zona llamada El Copey. 18°19'N, 70°55'W, 600–750 m, 5 September 1986, *R. García 1782a* (MO); isoelectotype: JBSD, NY. Fig. 1.

Urban described *Ottoschulzia domingensis*, using as type material a collection made in 1911 by Miguel Domingo Fuertes, with no indication of the herbarium it was stored. It was probably deposited in Berlin and destroyed in 1943. There are no duplicates or fragment material of this collection in Dominican Republic's herbaria (JBSD nor USD). A fragment of the specimen is found in the New York Botanical Garden, but it is not enough for an appropriate identification. *O. domingensis* seems to flower occasionally and there are very few specimens with flowers and fruits. Liogier and Martorell's (1982) first volume of the "Flora de la Española" includes a treatment of the Icacinaceae and a description of the fruit of *O. domingensis*. The specimen chosen

here for neotypification is the most representative of the material currently found in herbaria.

*Ottoschulzia domingensis* is endemic to the island of Hispaniola (Haiti and the Dominican Republic), where it grows in deciduous forest on calcareous substrate between 0–1000 m.

***Ottoschulzia rhodoxylon*** (Urb.) Urb., *Symb. Antill.* 274. 1912.

Basionym: *Poraqueiba rhodoxylon* Urb., *Symb. Antill.* 5: 405. 1908. Type: PUERTO RICO. Magagüez: without exact locality, *Krug 1442* (B, possible destroyed). NEOTYPE (designated here): PUERTO RICO. Manatí: Tierras Nuevas Poniente, Reserva Natural Hacienda La Esperanza. Cerca del tope del mogote de la "Vereda del Carso," 18°27'82.1"N, 66°30'70.8"W, aprox. 35m snm, 17 May 2009, *E. Santiago 1909* (UPR); isoelectotypes (UPRRP, MAPR, SJ, JBSD). Fig. 2.

*Ottoschulzia rhodoxylon* was described by I. Urban using a vegetative specimen collected by Leopold Krug (*Krug 1442*) in Puerto Rico, with no indication of the herbarium where these specimens were stored. It is known that Krug deposited his collection in the Berlin herbarium, where the type material was probably stored and destroyed in 1943. A fragment of the specimen is found in the New York Botanical Garden, but it is not enough for an appropriate identification. Santiago-Valentín and Viruet-Oquendo (this issue of HPB) described the flowers and fruits of the species and from that list of specimens we chose a representative one.

*Ottoschulzia rhodoxylon* is found in Northern and Southwestern Puerto Rico, and the southern-Eastern Dominican Republic. It grows in evergreen to semi-deciduous forests, from low elevation to montane forests, on calcareous and serpentine between 0–650 m.

#### KEY FOR SPECIES OF THE GENUS *OTTOSCHULZIA*

1. Leaves 6–11 cm long, in general green or pale brown when dry, both sides very similar in color or slightly different . . . . . 2
1. Leaves 2,5–7 cm long, in general dark or pale brown when dry, bicolorous, pale in the abaxial face . . . . . 3
2. Flower functionally hermaphrodite; leaves coriaceous; apex acute to rounded . . . . . *O. rhodoxylon*
2. Flower functionally unisexual; leaves subcoriaceous; apex acute to shortly acuminate . . . . . *O. pallida*
3. Leaves subcoriaceous, sharply bicolored, distance between the secondary nerves about 0.5 cm . . . . . *O. cubensis*
3. Leaves coriaceous to subcoriaceous, bicolored, distance between the secondary nerves about 1.0 cm . . . . . *O. domingensis*

FIGURE 1: Neotype of *Ottoschulzia domingensis* Urb. (R. García 1782a, MO).



FIGURE 2: Flowering material *Ottoschulzia rhodoxylon* (Urb.) Urb. (E. Santiago 1911, UPR).

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