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A new subspecies of *Magnolia virginiana* (*Magnoliaceae*) from western Cuba

Abstract

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Magnolia virginiana was reported recently from the Majaguillar marshes in western Cuba. This was the first Cuban record of the species, formerly considered an endemic of the USA. The Majaguillar population of *M. virginiana* differs in leaf shape and flower features from those of the North American mainland. It is therefore described as a new subspecies, *M. virginiana* subsp. *oviedoae*.

Additional key words: Antilles, *Magnolia virginiana* subsp. *oviedoae*, taxonomy

The number of *Magnolia* taxa known from Cuba rose from the single first described *Magnolia cubensis* Urb. (León & Alain 1951) to 3 species and 8 subspecies in the latest treatment of Cuban magnolias (Imchanitzkaja 1991): *M. cubensis* with subsp. *cubensis*, subsp. *turquinensis* Imkhan. and subsp. *acunae* Imkhan. (Imchanitzkaja 1974), *M. cristalensis* Bisse with subsp. *cristalensis*, subsp. *moana* Imkhan. and subsp. *baracoana* Imkhan., and *M. cacuminicola* Bisse with subsp. *cacuminicola* and subsp. *bissei* Imkhan. All except *M. cubensis* subsp. *acunae*, endemic to the Guamuhaya massif in C Cuba, are restricted to the mountains of E Cuba. Bisse (1974) had four species instead of the current three, but he later (Bisse 1988) acknowledged that his *M. leonis* “Tujanitskaya” (an error for Imchanitzkaja) was the same as *M. cubensis* subsp. *acunae*.

Oviedo & al. (2008) published the first record of a native *Magnolia* for W Cuba: *M. virginiana* L. They had discovered this species, formerly considered an endemic of the USA (Treseder 1978; Calaway 1994; Meyer 1997), in the Majaguillar marshes in the municipality of Martí, province of Matanzas.



Fig. 1. Holotype specimen of *Magnolia virginiana* subsp. *oviedoae* (HAJB).
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Fig. 2. *Magnolia virginiana* subsp. *oviedoae* – A: flower; B: fruit. – Photographs by L. R. González-Torres.

Upon closer study we now propose recognition of the Cuban population of *Magnolia virginiana* as a new subspecies, morphologically distinct from both North American subspecies, *M. virginiana* subsp. *virginiana* and subsp. *australis* (Sarg.) A. E. Murray.

Magnolia virginiana* subsp. *oviedoae A. Palmarola, M. S. Romanov & A. V. Bobrov, **subsp. nov.**
 Holotype: Cuba, Prov. Matanzas, Municipio Martí, Ciénaga de Majaguillar, camino de la Alameda a la Ciénaga de Gonzalito, 8.10.2006. *Oviedo, Palmarola & González-Torres HFC 84055* (HAJB; isotypes: B, HAJB, JE; other isotypes [same taxon, same locality, same date, same collectors] under the numbers *HFC 84056*: B, HAJB, JE; *84057*: B, HAJB; *84058*: HAJB; *84059*: B, HAJB). – Fig. 1.

Frutex sempervirens paluster, ad 7 m altus, truncis pluribus; ramuli hornotini et pagina inferior foliorum pilis argenteis deciduis $\pm$ sparsis oblecta; foliorum lamina anguste elliptica vel lanceolata, 7.5-17 $\times$ 2.3-5 cm, basi cuneata, apice acutata; flores parvuli, sepalis subloriformibus, petalis anguste obovatis; gynoecium et fructus anguste cylindracei.

Evergreen many-stemmed shrub about 4-7 m high, with a crown diameter of up to 10 m. Young branches and underside of leaves covered with $\pm$ sparse silvery hairs, usually persisting for a short time on fully grown branches and sometimes for nearly one year on the shoots. *Leaf blade* lanceolate or narrowly elliptic, 7.5-17 $\times$ 2.3-5 cm, medium green above, glaucous beneath; base narrowly cuneate, apex narrowly acute. *Flower buds* protected by pubescent bud scales. *Flowers* (Fig. 2A) smallish, with 3 almost ribbon-shaped, greenish white sepals with a rounded tip and 7-8(-9) narrowly obovate petals; stamens numerous, flattened, acute, pollen pale or whitish; gynoecium and fruit (a polyfollicle: Fig. 2B) narrowly ellipsoidal or cylindrical.

Both *Magnolia virginiana* subsp. *virginiana* and subsp. *australis* have broader, elliptic leaves with a more broadly cuneate base and cuneate acute tip, larger flowers with wider sepals and petals, and a broader spheroid-cylindrical or ellipsoidal gynoecium and fruit. The former, which is



Fig. 3. Distribution of *Magnolia virginiana* subsp. *oviedoae*.

also a shrub, has deciduous leaves. The latter always grows as a single-stemmed tree in water-logged areas (only on poor, thin soils it may occasionally develop additional stems as a result of damage), and the silvery pubescence of the branches and leaf underside is denser, persisting during one or more seasons.

Eponymy. – The new subspecies is named after the Cuban botanist Ramona Oviedo Prieto, curator of the herbarium HAC, who discovered this population.

Distribution. – Only known from the type locality (Fig. 3).

Habitat. – The plants grow in small mounds within the swamp grassland and in the ecotone areas between swamp grassland and swamp forest.

Other specimens seen. – Cuba, Prov. Matanzas, Municipio Martí, Ciénaga de Majaguillar, Ciénaga de Gonzalito, 19.2.2006, *Oviedo, Blanco & Muñoz* SV 42997 (HAC, HAJB); *ibid.*, al NO de Martí, Ciénaga de Gonzalito cerca del Canal de Blanquizar, bosque secundario de ciénaga, alt. 5 m, 10.-11.2.2007, *Palmarola, González-Torres & Cruz* HFC 84667, 84668, 84669, 84670, 84672 (HAJB), 84671, 84674 (B, HAJB), 84673 (B, HAJB, JE); *ibid.*, 22°59'45"N, 80°58'45"W, bosque secundario de ciénaga, flores color crema, 27.2.2007, *Greuter, Palmarola & Rankin* 26651 (B, HAJB, JE, PAL-Gr); *ibid.*, Ciénaga de Gonzalito, 21.3.2007, *Palmarola, Romanov, Bobrov & Pérez-Montesino* HFC 84633 (HAJB).

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References

- Bisse, J. 1974: Nuevos árboles de la flora de Cuba I. – Feddes Rept. **85**: 587-608.
 — 1988: Árboles de Cuba. – La Habana.
 Callaway, D. 1994: Magnolias. – London.

- Imchanitzkaja [Imkhanitskaya], N. N. 1974: Kriticheskaya zametka o *Magnolia cubensis* Urb. – *Novosti Sist. Vyssh. Rast.* **11**: 176-182.
- 1991: Rod *Magnolia* L. (*Magnoliaceae*) vo flore Kuby. – *Novosti Sist. Vyssh. Rast.* **28**: 58-77.
- León, bro. & Alain, bro. 1951: Flora de Cuba 2. Dicotiledóneas: Casuarinaceas a Meliaceas. – *Contr. Ocas. Mus. Hist. Nat. Colegio “De La Salle”* **10**.
- Meyer, F. G. 1997: *Magnoliaceae* Jussieu, *Magnolia* family. – Pp. 3-10 in: Anonymous (ed.), *Flora of North America* **3**. – New York & Oxford.
- Oviedo, R., Palmarola-Bejerano, A., Gómez, N. & González-Torres, L. R. 2008 [“2006”]: Primer reporte de *Magnolia virginiana* (*Magnoliaceae*) en Cuba. – *Revista Jard. Bot. Nac. Univ. Habana* **27**: 137-139.
- Treseder, N. G. 1978: *Magnolias*. – London.

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