

Wallenia maestrensis (Myrsinaceae), a new species from eastern Cuba

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Abstract

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A species new to science, belonging to *Wallenia* subg. *Homowallenia*, has been discovered in the Sierra Maestra, Granma Province, in E Cuba. It is described and illustrated as *W. maestrensis*, then compared with its closest relative, *W. bumelioides*, known from several Cuban provinces and also illustrated.

Wallenia subg. *Homowallenia* Mez consists of c. 10 species growing on the Caribbean islands of Cuba, Puerto Rico, Hispaniola, and the Lesser Antilles, but is absent from Jamaica. The subgenus is characterised by pentamerous flowers arranged in axillary, pendulous racemes, whereas in *Wallenia* subg. *Wallenia* the flowers are mostly tetramerous and arranged in terminal, upright panicles (Mez 1901, 1902, Stearn 1969, Adams 1972).

***Wallenia maestrensis* Panfet & Ventosa, sp. nova** – Holotype: Eastern Cuba, Prov. Granma, Bartolomé Masó, estribo del Pico Turquino, 20.4.1979, Bisse & al. PFC 40493 (HAJB; isotypes: B, JE). – Fig. 1.

Arbor parva vel frutex, dioecius. *Folia* alterna, apicem ramorum versus valde conferta, 5.2-9.3 cm longa, 2.3-4.1 cm lata; petiolus 0.8-1.8 cm longus, pilis glanduliferis multiseriatis instructus, haud canaliculatus; lamina pilis glanduliferis multiseriatis et peltatis obsita, in sicco atrorubenti-brunnea, coriacea, venatione simplici craspedodroma, ambitu obovata, basi cuneata vel in petiolum decurrens, apice subacuta vel acuta. *Inflorescentiae* axillares, pendulae, racemosae, pauciflorae, 4 cm longae; pedunculus parce pilosus; pedicelli 2-3 mm longi. *Flores masculi* 5-7 mm longi; sepala 5(-6) persistentia, ima basi connata, ovata, 2-3 mm longa, 1.5 mm lata, margine serrata, apice acuta; petala 5, per tertiam partem coalita, oblongo-ovata, 3 mm longa, 1.7 mm lata, in centro laminae glandulis conspicuis gregariis prominentibus obsita, apice rotundata; stamina 5, filamentum 1-1.5 mm longo complanato, anthera sagittata 1 mm longa; ovarium reductum. *Flores foeminei* 3-4 mm longi; sepala 5 persistentia, libera, ovata, 1-2 mm longa, 1.5 mm lata,

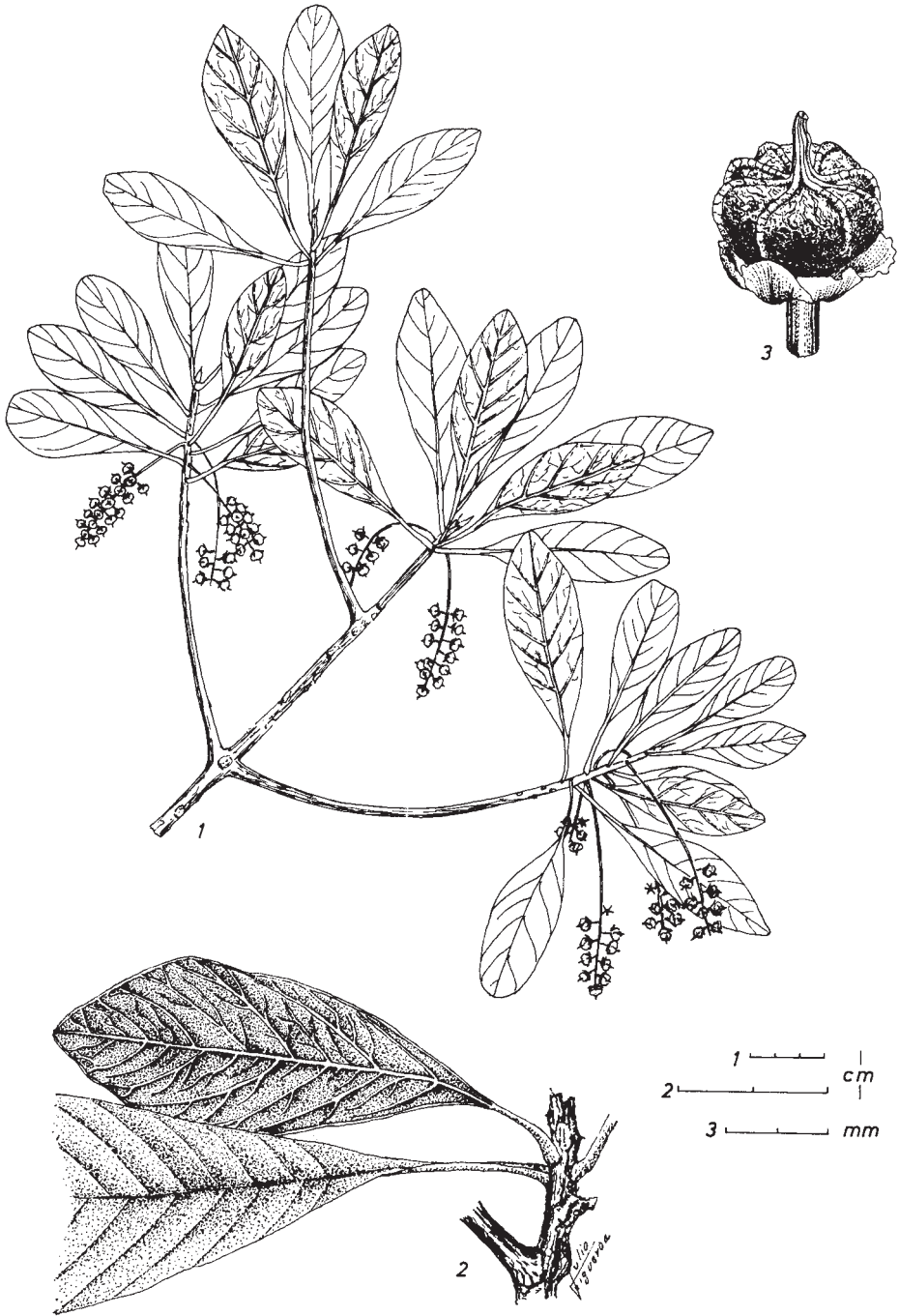


Fig. 1. *Wallenia maestrensis* – 1: fruiting branch; 2: leaves, showing venation; 3: fruit. – Drawn from the holotype.

apice subacuta vel acuta; petala 5, per tertiam partem coalita, oblonga, 2-3 mm longa, 1.5 mm lata, in centro laminae glandulis conspicuis gregariis obsita, apice rotundata; staminodia 5, filamento 1 mm longo complanato, anthera sagittata 0.5-1 mm longa; ovarium globosum, 1.3 mm diametro; stylus ultra 1 mm longus; stigma integrum, punctiforme. *Bacca* obverse trullata (apice applanata, basi attenuata), costis pluribus longitudinalibus inaequidistantibus percursa, inter costas glandulis atris numerosis sed indistinctis oblecta; semen singulum. – Florens et fructos ferens mensibus aprili et maio.

Small tree or shrub, dioecious. *Leaves* alternate, crowded at the tips of the branches, 5.2-9.3 cm long and 2.3-4.1 cm wide; petiole 0.8-1.8 cm long, not channeled, with multiseriate glandular hairs; leaf blade with several multiseriate and peltate glandular hairs, dark brown-red when dry, leathery, with simple craspedodromous venation, obovate in outline, the base cuneiform or decurrent on the petiole, the apex subacute to acute. *Inflorescences* axillary, pendulous, racemose, 4 cm long; peduncle sparsely hairy; pedicels 2-3 mm long. *Male flowers* 5-7 mm long; calyx 5(-6)-merous, sepals persistent, joined only at the very base, ovate, 2-3 mm long and 1.5 mm wide, margin serrate, apex acute; corolla 5-merous, the segments joined in their lower third, ovate-oblong, 3 mm long and 1.7 mm wide, with a cluster of conspicuous, prominent glands in the middle, apex rounded; stamens 5, with a flat 1-1.5 mm long filament and a sagittate 1 mm long anther dehiscing by longitudinal slits; ovary reduced. *Female flowers* 3-4 mm long; calyx 5-merous, sepals persistent, free, ovate, 1-2 mm long and 1.5 mm wide, margin serrate, apex subacute to acute; corolla 5-merous, the segments joined in their lower third, oblong, 2-3 mm long and 1.5 mm wide, with a cluster of conspicuous glands in the middle, apex rounded; staminodes 5, with a flat 1 mm long filament and a sagittate 0.5-1 mm long anther; ovary globose, 1.3 mm in diameter; style slightly more than 1 mm long, the stigma entire, punctiform. *Fruit* an obversely top-shaped (apically flattened, basally narrowed) berry with a single seed, its surface with several longitudinal, irregularly spaced ridges and numerous, indistinct dark glands in-between. – Flowering and fruiting in April and May.

The new species is closely related to *Wallenia bumelioides* (Griseb.) Mez (Fig. 2, 3). The diagnostic features of both are set out in Table 1.

Table 1. Comparison between <i>Wallenia maestrensis</i> and <i>W. bumelioides</i> .		
Character	<i>W. maestrensis</i>	<i>W. bumelioides</i>
Petiole	not channeled	channeled above
Leaf apex	subacute to acute	rounded to truncate
texture	leathery	pupery
venation	craspedodromous, simple	craspedodromous, mixed
Trichome types	peltate and multiseriate	peltate only
Sepal margin	serrate	fimbriate
tip	acute	rounded
Fruit shape	obversely top-shaped	spheroidal
surface	with several longitudinal ridges; many indistinct dark glands	wrinkled, not ridged; few, prominent dark glands
Altitude a.s.l.	900-1974 m	0-400 m
Habitat	cloud forest	(sub)littoral xeromorphic scrub
Distribution (Prov.) see Fig. 3	Sierra Maestra (Granma)	(Pinar del Rio, La Habana, Isla de la Juventud, Villa Clara, Cienfuegos, Sancti Spíritus, Camaguey, Holguín)

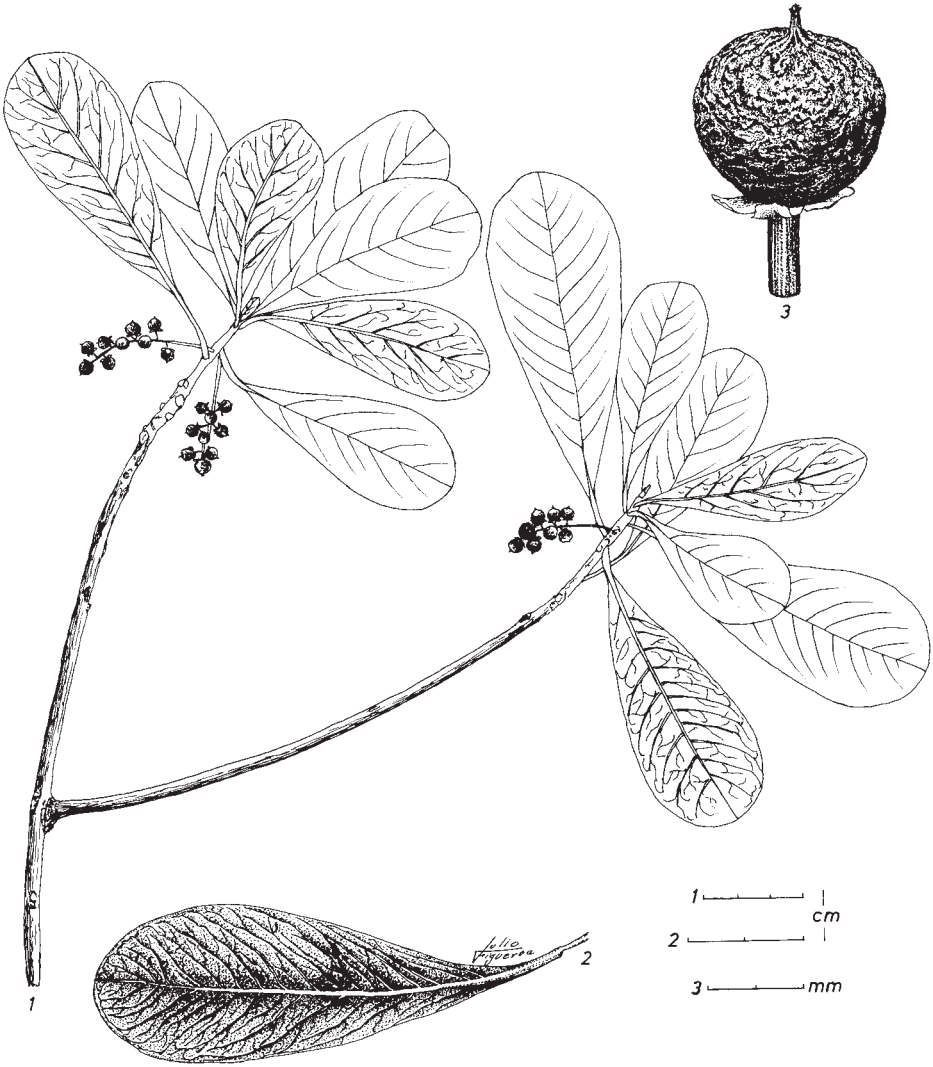


Fig. 2. *Wallenia bumelioides*. – 1: fruiting branch; 2: leaf, showing venation; 3: fruit. – Drawn from specimen PFC 34817, HAJB.



Fig. 3. Map showing the total known distribution of *Wallenia bumelioides* (dots) and *W. maestrensis* (squares).

Distribution: Endemic to the Sierra Maestra, E Cuba (Fig. 3). Growing in cloud forest (monte nublado) on yellowish-red mountain soil, at altitudes of 900-1974 m a.s.l.

Other specimens seen: EASTERN CUBA, PROV. GRANMA: Bartolomé Masó, firme de la Sierra Maestra entre Lagunitas y Aguada de Joaquín, 900-1300 m, 19.4.1970, *Bisse & al. PFC 40424* (B, HAJB, JE); Buey Arriba, alrededores del poblado Barrio Nuevo, 18.5.1988, *Alvarez & al. PFC 64718* (B, HAJB, JE); Buey Arriba, alrededores del poblado Barrio Nuevo, 18.5.1988, *Alvarez & al. PFC 64736* (B, HAJB, JE).

References

- Adams, C. D. 1972: Flowering plants of Jamaica. – Mona.
 Mez, C. 1901: IX. *Myrsinaceae*. – Pp. 389-433 in: Urban, I., *Symbolae antillanae seu fundamenta florae Indiae occidentalis* 2. – Berlin, etc.
 — 1902: IV. 236. *Myrsinaceae*. – In: Engler, A. (ed.) *Das Pflanzenreich* 9. – Leipzig.
 Stearn, W. T. 1969: A synopsis of Jamaican *Myrsinaceae*. – *Bull. Brit. Mus. (Nat. Hist.), Bot.* 4: 143-173, t. 6-13.

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