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New species of *Ardisia* and *Myrsine* (*Myrsinaceae*) from Cuba**Abstract**

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Three new species are described and illustrated: *Ardisia manitzii* from the Isla de la Juventud (western Cuba), related with *Ardisia mogotensis* (another western Cuban endemic), *Myrsine pipolyi* from Topes de Collantes (central Cuba, prov. Sancti Spíritus) and *Myrsine bissei* from the Moa area (eastern Cuba, prov. Holguín). The flora of Cuba now includes seven species of *Ardisia* and six (one previously unrecorded) of *Myrsine*.

The Cuban *Myrsinaceae* are presently being revised in view of their treatment in the “Flora de la República de Cuba”. A study of relevant herbarium material resulted in the recognition of three new species, described and illustrated here.

Ardisia Sw. is a pantropical genus of approximately 500 species (Lundell 1966, Miller & Pipoly 1993). In Cuba Alain (1957) recognised six species: *A. baracoensis* (Britton & P. Wilson), *A. dentata* (A. DC.) Mez, *Ardisia escallonioides* Cham. & Schltdl., *A. grisebachiana* (Kuntze) Alain, *A. maestrensis* Urb. and *A. mogotensis* Urb., to which *A. manitzii* is here added as the seventh.

Myrsine L., too, is pantropical. Including *Rapanea* Aubl., it comprises about 300 species (see Ricketson & Pipoly 1999 for Venezuela, Liogier 1995 for Puerto Rico and Otegui 1998 for southern South America). The forthcoming treatment in the “Flora de la República de Cuba” will recognise six species: *M. acrantha* Krug & Urb. (a new report for the island), *M. coriacea* (Sw.) R. Br., *M. cristalensis* Borhidi, *M. turquinensis* Panfet and the two newly described below: *M. bissei* and *M. pipolyi*.

***Ardisia manitzii* Panfet, sp. nova** – Holotypus: PFC 45586 (HAJB; isotypi: B, JE). – Fig. 1

Arbuscula 5-10 m alta. *Petiolus* foliorum 0.5-2 cm longus, subcylindricus sed supra leviter canaliculatus. *Lamina* elliptica vel obovata, 7.5-12.5 × 3.5-5.2 cm metiens, coriacea, basi in petiolum decurrens, margine integra revoluta, apice obtusa vel rotundata. *Inflorescentia* pani-



Fig. 1. *Ardisia manitzii* Panflet, holotype specimen.

culata terminalis, subpyramidalis, 6.2 cm longa, glabra. *Bracteae* ovatae, 3 mm longae, glanduloso-punctatae, margine ciliatae. *Pedicellus* 1-2 mm longus, articulatus, striato-angulosus. *Flos* pentamerus, glaber. *Sepala* imbricata, ovata, 3 × 2 mm metientia, glanduloso-punctata, basi connata, margine ciliata, apice obtusa. *Corolla* campanulata, petalis oblongis, 6 × 2 mm metientibus, per $\frac{2}{3}$ connatis, nigro-glanduloso-punctatis, apice rotundatis. *Stamina* 5, oppositipetala, filamento 0.2 mm longo, anthera oblonga, obtusa, longitudinaliter dehiscente. *Ovarium* globosum, stylo 4 mm longo, stigmatibus punctiformi. *Fructus* globosus baccatus, 3 mm metiens, glandulis prominentibus atrobrunneis vel nigris obsitus, stylo persistente coronatus.

Specimens seen. – Western Cuba, Isla de la Juventud, S part of the island, path between Cayo Piedras and Punta del Este, dry scrub, 4.11.1981, *Álvarez & al.* PFC 45586 (B, HAJB, JE); id., same place, 1.5.1975, *Lippold & al.* 26179 (HAJB); id., same place, dry scrub, flooded in some places, on limestone, 5.4.1980, *Álvarez & al.* PFC 41929 (HAJB).

Distribution. – Endemic in the south-easternmost portion of the Isla de la Juventud, in semideciduous, microphyllous woodland near sea level, on rocky, oligotrophic limestone soil, flowering in November and fruiting in February.

Etymology. – The new species is dedicated to Dr Hermann Manitz, prominent scholar of the Friedrich-Schiller University in Jena, Germany, specialist of *Convolvulaceae* of the Cuban flora and untiring searcher of botanical bibliography.

Note. – *Ardisia manitzii* is closely related to *A. mogotensis*, an endemic of the Pinar del Río province in western Cuba, from which it is readily separated by its subglabrous branches and leaves, leaf blade decurrent along the petiole, and 1-2 mm long, articulate pedicels; in *A. mogotensis* the branches are covered by a rusty tomentum, the leaf blades are cuneate at the base and the pedicels are 0-1 mm long, not articulate. Both species have a globose fruit, but in *A. manitzii*, contrary to *A. mogotensis*, it is prominently punctate by dark brown or black glands. Both are limestone specialists, but *A. manitzii* grows in evergreen forest near sea-level, whereas *A. mogotensis* is a member of the mogote vegetation complex, prospering between 400 and 600 m of altitude.

***Myrsine bissei* Panfet, sp. nova** – Holotypus: PFC 56176 (HAJB; isotypi: B, JE). – Fig. 2

Planta dioica, ramis gracilibus striatis. *Folia* alterna, ad apicem ramorum congesta, petiolo 2-4(-6) mm longo non canaliculato suffulta. *Lamina* anguste obovata, 4-6.5 cm longa, 0.5-2.5 cm lata, glabra, supra brunneo-rubens inconspicue nigro-punctata, subtus (in sicco) pallide brunnea opaca in facie et secus marginem nigro-punctata, basi angustata in petiolum decurrens, margine integra ad partem latissimam laminae laeviter revoluta, apice obtusa, rotundata vel leviter emarginata, nervo medio supra canaliculato subtus valde prominente, secundariis utrinque inconspicuis. *Inflorescentiae* brachyblastos axillares 0.5-2(-4) mm longos terminantes, umbellatae, 4-6-florae. *Bracteae* ad 0.5 mm longae imbricatae triangulares concavae nonnusquam minute crebre rubido-glanduloso-pilosae, acutae vel rotundatae, margine leviter dentatae. *Pedicelli* 1-2 mm longi, tota longitudine tenuiter striati, lacunis schizogenis sparsis sed numerosis praediti. *Flos* (foemineus tantum notus) tetramerus. *Sepala* basi connata, persistentia, orbiculata, 1 × 1 mm metientia, brunneo-rubentia, in parte centrali et secus marginem leviter crenato-denticulatum et glanduloso-ciliatum lineolis nigris notata, marginem versus pallidiora et tenuiora, apice rotundata. *Petala* cito caduca, ergo ignota. *Fructus* globosus, 3 mm metiens, lineolis nigris quam lacunis schizogenis diaphanis minoribus et aequae ac illis valde prominentibus notatus, stylo cum stigmatibus persistente breviter coronatus.

Specimens seen. – Eastern Cuba, prov. Holguín, Moa, La Veguita, Monte la Breña, surroundings of the camp site Los Carboneros, 400-500 m, 14.4.1981, *Bisse & al.* PFC 44151 (B, HAJB, JE); id., same place, 300-400 m, 2.5.1981, *Dietrich & al.* PFC 45448 (B, HAJB, JE); id.: Moa, scrub-

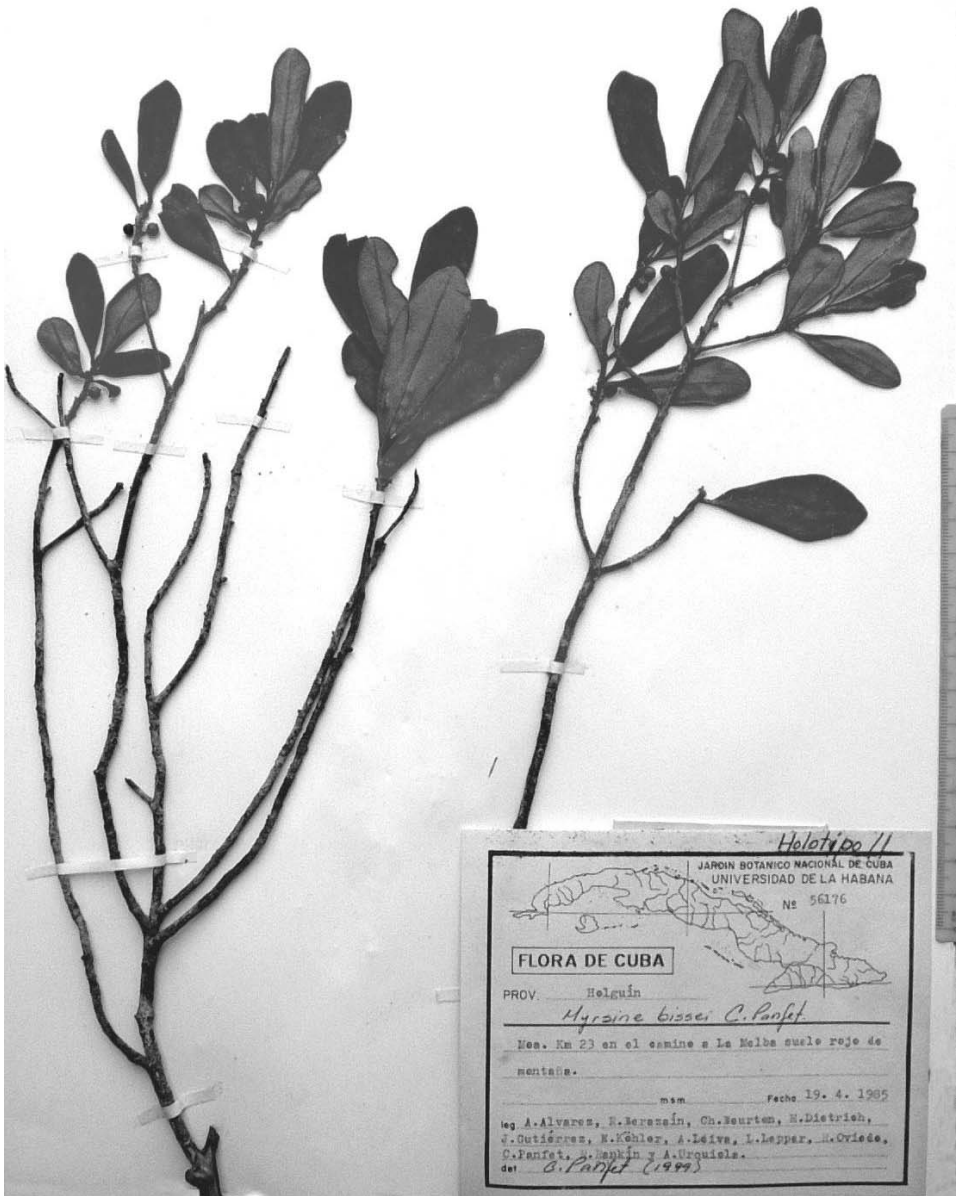


Fig. 2. *Myrsine bissei* Panfet, holotype specimen.

land by the sawmill La Melba, 400-500 m, 25.4.1981, *Bisse & al.* PFC 44953 (B, HAJB, JE); id., Moa, La Veguita, La Breña, path near Río Limones, 400 m, 28.4.1981, *Bisse & al.* PFC 45065 (B, HAJB, JE); id., Moa, km 23 of the path toward La Melba, 19.4.1985, *Álvarez & al.* PFC 56176 (B, HAJB, JE).

Distribution. – Endemic to the Moa area of Holguín province, eastern Cuba, where it grows in montane rainforest on the Sierra de Moa, on lateritic soil, flowering and fruiting January to March.



Fig. 3. *Myrsine pipolyi* Panfet, holotype specimen.

Etymology. – This new species I dedicate to the memory of the eminent student and expert of the Cuban flora, Professor Dr Johannes Bisse.

Myrsine pipolyi Panfet, **sp. nova** – Holotypus: Panfet & al. 72727 (HAJB; isotypus: HAC). – Fig. 3
Frutex 2-3 m altus. *Rami* striati, glanduloso-punctati. *Petiolus* foliorum 3-5 mm longus, subcylindricus sed supra canaliculatus et leviter alatus, subtus lineolis et punctis nigris obsitus, glanduloso-pubescent. *Lamina* anguste elliptica, 3.5-6 × 1.5-2.7 cm metiens, coriacea, subtus

dense lineolata et punctata, praesertim secus lineam margine contiguam, basi angustata et in petiolum decurrens, margine integra revoluta, apice ex acuto emarginata, nervo medio supra impresso subtus parum prominente, striato, nigro- et pellucido-punctato, secundariis in utraque facie inconspicuis. *Inflorescentiae* umbelliformes fasciculatae 6-7-florae, brachyblastis laterali-bus 1-2 mm longis insidentes. *Bracteae* ovato-triangulares. *Pedicellus* 1 mm longus. *Flos* hexa-merus. *Sepala* 5 mm longa, triangulari-ovata vel cochlearia, basi connata, centro interdum lineolis rubro-brunneis notata, margine irregulariter dentata, apice acuta. *Fructus* baccati, in quaque inflorescentia singuli vel bini evoluti, ellipsoidales, 5-6 mm longi, laeves vel striis longitudinalibus glandulisque ovatis prominulis notati, acuti.

Specimen seen. – Central Cuba, prov. Sancti Spíritus, Sierra del Escambray, Topes de Collantes, mogote Mi Retiro, 850 m, 6.7.1996, Panfet & al. 72727 (HAJB, HAC).

Distribution. – A narrow endemic, so far only known from the type gathering. At its single known locality, it grows on the top of limestone bluffs (mogotes) on skeletal karstic rock, flowering and fruiting in July.

Etymology. – I take pleasure in dedicating this species to Dr John J. Pipoly III, world specialist of the *Myrsinaceae*, whose contributions have brought about a modern view of their systematics.

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