

**NEW SPECIES AND A NEW COMBINATION IN *Prunus* SUBGENUS
Laurocerasus (ROSACEAE) FROM THE VENEZUELAN GUAYANA**

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ABSTRACT

Three new species of *Prunus* from the southern Venezuelan highlands are described (*P. espinozana* from Cerro Jaua, *P. lichoana* from Cerro Marahuaca, and *P. wurdackii* from the Macizo del Chimantá) and a new combination is proposed (*P. accumulans*). A key to the species of *Prunus* in the Venezuelan Guayana is also provided.

Key words: Rosaceae, *Prunus* sect. *Laurocerasus*, Venezuela.

RESUMEN

Se describen tres especies nuevas del género *Prunus* de los tepuyes en la Guayana Venezolana (*P. espinozana* de la Meseta de Jaua, *P. lichoana* del Macizo de Marahuaca y *P. wurdackii* del Macizo de Chimantá) y se propone una combinación nueva (*P. accumulans*). Se presenta una clave de las especies del género *Prunus* en la Guayana venezolana.

Palabras claves: Rosaceae, *Prunus* sect. *Laurocerasus*, Venezuela.

While preparing the taxonomic treatment of the Rosaceae for the *Flora of the Venezuelan Guayana*, three new species of *Prunus* were detected from separate highland massifs. In addition, a variety of *Prunus myrtifolia* (L.) Urb. was felt to be sufficiently distinct that it is elevated to specific rank. These new species and new combination are validated and discussed below.

***Prunus accumulans* (Koehne) C.L. Li & Aymard, comb. nov.**

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BASIONYM: *Prunus myrtifolia* (L.) Urb. var. *accumulans* Koehne, Bot. Jahrb. Syst. 52:320. 1915. **TYPE:** Guyana [British Guiana]. Demarara, G.S.-Jenman 4361 (BM, K).

Prunus espinozana C.L. Li, sp. nov. **TYPE:** Venezuela. Bolívar: Meseta de Jaua, Cerro Jaua, Cumbre (4°48'50"N; 64°34'10"W), porción sur-oeste, este del Río Marajano, 1810-1880 m, 28 Feb.-5 Mar. 1974, J.A. Steyermark, V. Carreño Espinoza, & C. Brewer-Carias 109,651 (Holotype, VEN; Isotypes, MO, NY, US).

Prunus moritziana Koehne affine, a quo foliis crassicorniaceis, 5.5-6 cm lata, rhachidibus 2-3 mm crassi, sepala triangulares, stamina 25 usque ad 2 mm longa, antheris 0.4 mm longis differt.

Tree to 20 m tall. Young branches brownish-black, 3-4 mm thick, glabrous, with elliptic or orbicular lenticels. Buds ovoid, 1-1.5 mm long, 1 mm wide, glabrous, apex obtuse. Stipules glabrous, caducous. Petioles 5-8(-10) mm long, 2 mm thick, glabrous. Leaves thick-coriaceous, elliptic, 9-12 cm long, 5.5-7 cm wide, apex acute, rounded or obtuse at the base, margin entire, dark green on upper surface, lighter green and glabrous on lower surface, secondary veins 7-8 per side, impressed above, elevated on lower surface, glands 2, obovate-elliptic, 1.5 mm long, 1 mm wide, positioned near the base of "costae." Rachis 2-3 mm in diam., glabrous. Bracts caducous. Pedicels 3-5 mm long, 1 mm wide, glabrous. Hypanthium 2 mm tall, glabrous. Sepals 5, triangular, 1 mm long, 1.5 mm wide, apex acute, glabrous. Petals ovate, 2 mm diam. Stamens 25, up to 2 mm long, filaments pubescent, anthers elliptical, 0.4 mm long.

Paratype. Venezuela. Bolívar: Meseta del Jaua, Cerro Jaua, Cumbre (4°48'50"N; 64°34'10"W), porción sur-oeste, este del Río Marajano, 1810-1880 m, 28 Feb.-5 Mar. 1974, J.A. Steyermark, V. Carreño Espinoza, & C. Brewer-Carias 109,828 (F, NY, US, VEN).

Habitat and distribution. Known only from the type and paratype collection from Cerro Jaua, Bolívar state, Venezuela, where it has been collected in evergreen upper-montane forests at 1810-1880 m (Steyermark & Brewer-Carias, 1976) on the western side of the mountain.

Relationships. *Prunus espinozana* belongs to subgenus *Laurocerasus* (Koehne 1915; Kalkman 1965) and is most closely allied to *P. moritziana* Koehne, from Colombia and the Venezuelan Andes. *Prunus espinozana* has thick coriaceous leaves 5.5-6 cm wide, rachis 2-3 mm wide, triangular sepals, 25 stamens up to 2 mm long, and anthers 0.4 mm long. In contrast, *P. moritziana* has coriaceous leaves 1.8-

4.5 cm wide, rachis 1 mm wide, oblong sepals, 16-22 stamens that are 3 mm long, and anthers 0.5-0.6 mm long.

Prunus lichoana Aymard, sp. nov. TYPE: Venezuela. Amazonas: Dpto. Atabapo. Forested slope of Cerro Marahuaca, 1-2 km N of Sima Camp, 1100 m, 03°43'N; 65°31'W, 8-9 Mar. 1985, R. Liesner 18,457 (Holotype, VEN; Isotype, MO).

Species nova quae a *P. recurviflora* Koehne foliis elliptica-lanceolata, petiolus 9-11 cm longe, 6-9 mm lata, pedicelli 7-10 mm longe, 1-1.5 mm late differt.

Tree 7-10 tall. Branches brown, lenticellate. Leaves subcoriaceous, lanceolate or elliptic-lanceolate, 10-18 cm long, 6-9 cm wide, apex cuspidate, base rounded, glabrous on both sides, lower surface with 2 glands placed 5-8 mm from the base. Petiole 9-11 mm long. Inflorescence glabrous, 7-12 cm long; pedicels glabrous, 7-10 mm long, 1-1.5 mm wide. Flowers not seen. Fruit glabrous, globose, black, 10 mm long, 10 mm wide.

Paratype. Venezuela. Amazonas: Dpto. Atabapo. Cerro Marahuaca, riverine forest upstream from Sima Camp, along branch of Caño Negro, south-central portion of meseta, 1140 m, 03°43'N; 65°31'W, 22 Mar 1985, J.A. Steyermark & B. Holst 130,578 (MO, VEN).

Habitat and distribution. Known only from the type locality, the Cerro Marahuaca Massif, Amazonas state, Venezuela, where it has been collected in evergreen upper-montane forests (Huber, 1995).

Relationships. *Prunus lichoana* belongs to subgenus *Laurocerasus* (Koehne, 1915; Kalkman, 1965) and is most closely allied to *P. recurviflora* Koehne from Colombia and the Peruvian Andes, but is distinguished by its elliptic-lanceolate leaves, petioles 9-11 cm long, 6-9 mm wide, and pedicels 7-10 mm long and 1-1.5 mm wide. *Prunus recurviflora* has ovate-oblong leaves, petioles 4-5 cm long, 3.5-4 mm wide, and pedicels 2.5-6 mm long, 0.7-0.9 mm wide.

Prunus wurdackii C.L. Li, sp. nov. TYPE: Venezuela. Bolívar. Chimantá Massif, Torono-tepui, north-facing slopes on summit above valley of Caño Mojado, 2030-2150 m, 21 Feb. 1955, J.A. Steyermark & J.J. Wurdack 1016 (Holotype, VEN; Isotypes, F, NY, US). Fig. 1.

A *P. espinozano* C.L. Li, foliis ovatis vel oblongis, petiolis 8-15 mm longis, rhachilibus 1.5 mm diam., pedicellis 2-3 mm longis 0.5-0.6 mm crassi differt.

Tree (3-) 10-15 m tall. Branches brown to black, 2-3 mm wide, glabrous, with closely spaced orbicular lenticels. Buds ovate, glabrous. Stipules oblong, 2.5-3 mm long, 2 mm wide, apex obtuse, caducous, glabrous. Petioles 8-14 cm long, 1.5-2.5 mm wide, glabrous. Leaves thick-coriaceous, ovate to oblong, 6-20 cm long, 3.5-10 cm wide, apex obtuse, base truncate, margin entire, green on the upper surface, lighter green and glabrous on the lower surface, veins 7-8 impressed above, elevated on lower surface. Glands absent or 2, orbicular, 1-2 mm diam., positioned 2.6-14 mm from the base of the blade. Inflorescence solitary, 6 cm long. Rachis 1.5 mm diam., glabrous. Bracts caducous. Pedicels 2-3 mm long, 0.5-0.6 mm wide, glabrous. Hypanthium 2.5-3 mm tall, glabrous. Sepals 6, irregularly ovate, oblong or transverse-elliptic, 2-3 mm long and wide. Stamens 23, 2-2.5 mm long, anthers elliptic, 0.5 mm long. Ovary glabrous, 1-1.2 mm long, style 1.2-1.5 mm long, stigma dish-shaped, 1 mm diam.

Paratypes. Venezuela. Bolívar: Chimantá Massif, Torono-tepui, summit, along Caño Mojado, between base of upper falls and drop to escarpment, 1895-1910 m, 23 Feb. 1955, J.A. Steyermark & J.J. Wurdack 1068 (F, US). Ptari-tepui, southwest slope forest and savannas, 1500-2000 m, 17 Dec. 1952, B. Maguire & J.J. Wurdack 33,898 (F, NY, US).

Habitat and distribution. Known only from from Chimantá Massif, Bolívar state, Venezuela, where it has been collected in evergreen upper-montane forests (Huber, 1995) on Torono-tepui and from Ptari-tepui.

Relationships. *Prunus wurdackii* belongs to subgenus *Laurocerasus* (Koehne, 1915; Kalkman, 1965) and is most closely allied to *P. espinozana* C.L. Li (described above), but *P. wurdackii* has ovate-oblong leaves, petioles 8-15 mm long, rachis 1.5 mm diam. and pedicels 2-3 mm long, 0.5-0.6 mm wide. It is named in honor of John J. Wurdack, renowned collector of plants in the Venezuelan Guayana.

KEY TO THE SPECIES OF *Prunus* IN THE VENEZUELAN GUAYANA

1. Leaves lanceolate or elliptic-lanceolate; base of inflorescences 2-3 mm in diam.; pedicels 7-10 mm long *P. lichoana*.
1. Leaves ovate-oblong, ovate-elliptic or elliptic; base of inflorescences 1-1.5 mm in diam., pedicels 2-5 cm long.
 2. Leaves papery, ovate, ovate-elliptic; inflorescence 3-4 cm long *P. accumulans*.
 2. Leaves subcoriaceous to coriaceous; ovate to oblong or elliptic; inflorescence 5-11 cm long.

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3. Leaves ovate-oblong, petioles 8-14 mm long *P. wurdackii*.
3. Leaves elliptic, petioles 5-7 mm long.
4. Leaves thick-coriaceous, 9-12 cm long, 3-8 cm wide; base rounded or obtuse *P. espinozana*.
4. Leaves subcoriaceous, 5-8 cm long, 2-3 cm wide; base rounded *P. myrtifolia*.

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LITERATURE CITED

- Huber, O. 1995. Mapa de vegetación de la Guayana Venezolana. Escala 1:2.000.000. Eds. Tamandúa, Caracas.
Kalkman, C. 1965. The Old World species of *Prunus* subgenus *Laurocerasus* including those formerly referred to *Pygeum*. *Blumea* 13:1-115.
Koehne, E. 1915. Zur Kenntnis von *Prunus* Grex *Calycopadus* und Grex *Gymnospadus* Sect. *Laurocerasus*. *Bot. Jahrb. Syst.* 52:279-333.
Steyermark, J.A. y C. Brewer-Carías. 1976. La vegetación de la cima del Macizo de Jaua. *Bol. Soc. Venez. Ci. Nat.* 132/133:179-405.

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Figure 1. *Prunus wurdackii* C.L. Li. A. Fruiting branch. Based on J.A. Steyermark & J.J. Wurdack
1016 (VEN).