
Besleria beltranii (Gesneriaceae), a New Species from Peru

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ABSTRACT. A new species of *Besleria* L. (Gesneriaceae) is described and illustrated from Peru. This species is distinguished by having inflorescences composed of few (1 to 5) flowers, lanceolate calyx lobes with the apex acute, and the corolla strongly ventricose.

RESUMEN. Una nueva especie de *Besleria* L. (Gesneriaceae) del Perú es descrita e ilustrada. Esta especie se caracteriza por sus inflorescencias compuestas de pocas flores (1 a 5), lóbulos del cáliz lanceolados de ápice agudo y la corola fuertemente ventricosa.

Key words: *Besleria*, Gesneriaceae, Huánuco, IUCN Red List, Peru, San Pedro de Carpish.

Besleria L. is one of the Neotropical genera of Gesneriaceae with a high number of species, and so far 171 have been described (Kvist et al., 1998). The distribution of the genus ranges from southern Mexico to Bolivia and Brazil (Skog, 1996). Its center of diversity is located in northwest South America (Feuillet & Steyermark, 1999), where the highest concentration of species is found in Colombia with 40 species.

Peru has 35 species of *Besleria* (Kvist et al., 2005) and should be ranked second in species diversity. In Brako (1993), of the 32 species considered for Peru, 27 were treated as endemic. However, in recent studies (Salinas & León, 2006) only 18 species are considered endemic. *Besleria* does not have a modern taxonomic treatment, which implies that the real number of species for the country may be unknown.

During evaluation of the flora and vegetation of San Pedro de Carpish (Department of Huánuco), I collected specimens of an unknown species of *Besleria*. The study of this material leads me to the conclusion that the species is new for the science, and it is described below.

Besleria beltranii I. Salinas, sp. nov. TYPE: Peru. Huánuco: Prov. Huánuco, Chinchao, San Pedro de Carpish, 2 hrs. to Hacienda Paty, 09°41'59"S, 76°05'42"W, 2300 m, 17 Aug. 2002, I. Salinas & M. Chocce 485 (holotype, USM; isotypes, MO, US). Figure 1.

Haec species a *Besleria barbata* (Poeppig) Hanstein inflorescentia 1- ad 5-flora, lobulis calycinis lanceolatis, acutis et corolla fortiter ventricosa, ca. 1.0 cm lata differt.

Shrub, 0.5–0.6 m tall; stems unbranched, subterete, 0.4–0.5 cm diam., cortex with longitudinal fissures, brown, glabrous, golden glabrescent to apically scabrose, internodes 2.0–3.5 cm. *Leaves* opposite to ternate, slightly unequal in pairs; petioles canaliculate, 1.2–3.5 cm, green, shortly sericeous to glabrescent; blades elliptic to ovate, 11.0–13.5 × 5.5–7.5 cm, apex acute to obtuse, cuneate to rounded at base, margins scattered denticulate, coriaceous; adaxially green, golden velutinous; abaxially yellowish green, shortly golden sericeous, 6 to 8 pairs of secondary veins. *Inflorescence* not pedunculate, cymose, axillary, with 1 to 5 flowers per node; pedicels terete, 0.8–1.2 cm, greenish brown, glabrescent to scattered pilose. *Flowers* zygomorphic; calyx lobes 5, lobes erect, basally imbricate, adpressed to the corolla, dorsally keeled, slightly equal, dorsal lobe lanceolate, ventral and lateral lobes narrowly lanceolate, 0.5–0.6 × 0.3–0.5 cm, apex acute, margin entire or sometimes ciliate, greenish brown, outside sparsely pilose, inside glabrous; corolla tube contracted in throat, limb regular, ca. 1.7 cm long, ca. 1.0 cm at the widest point, ca. 0.4 cm at the narrowest point, throat ca. 0.5 cm wide, dorsally and basally slightly gibbous, strongly ventricose, orange, outside glabrous, inside sparsely glandular-pilose from the ventricose surface until the throat; lobes 5, reflexed, slightly equal, semiorbicular, ca. 0.1 × 0.2 cm, margin entire, orange, glabrous; nectary annular, ca. 0.5 mm wide, glabrous; stamens 4, included; filaments 0.7–1.0 cm, epipetals, arising ca. 0.2 cm from the base of the corolla, glabrous; anthers ca. 0.1 × 0.2 cm, longitudinally dehiscent; ovary conical, ca. 0.4 × 0.2–0.3 cm, shortly pilose; style included, ca. 0.5 cm, shortly pilose; stigma bifid. *Fruit* a berry, globose, ca. 0.7 × 0.8 cm, glabrescent, calyx persistent; seeds numerous, ovoid to widely elliptic, ca. 1.0 × 0.5 mm, light brown to dark red, longitudinally striate.

Distribution and habitat. *Besleria beltranii* is only known from the type locality in San Pedro de Carpish, Peru. It grows in humid montane forests ranging from

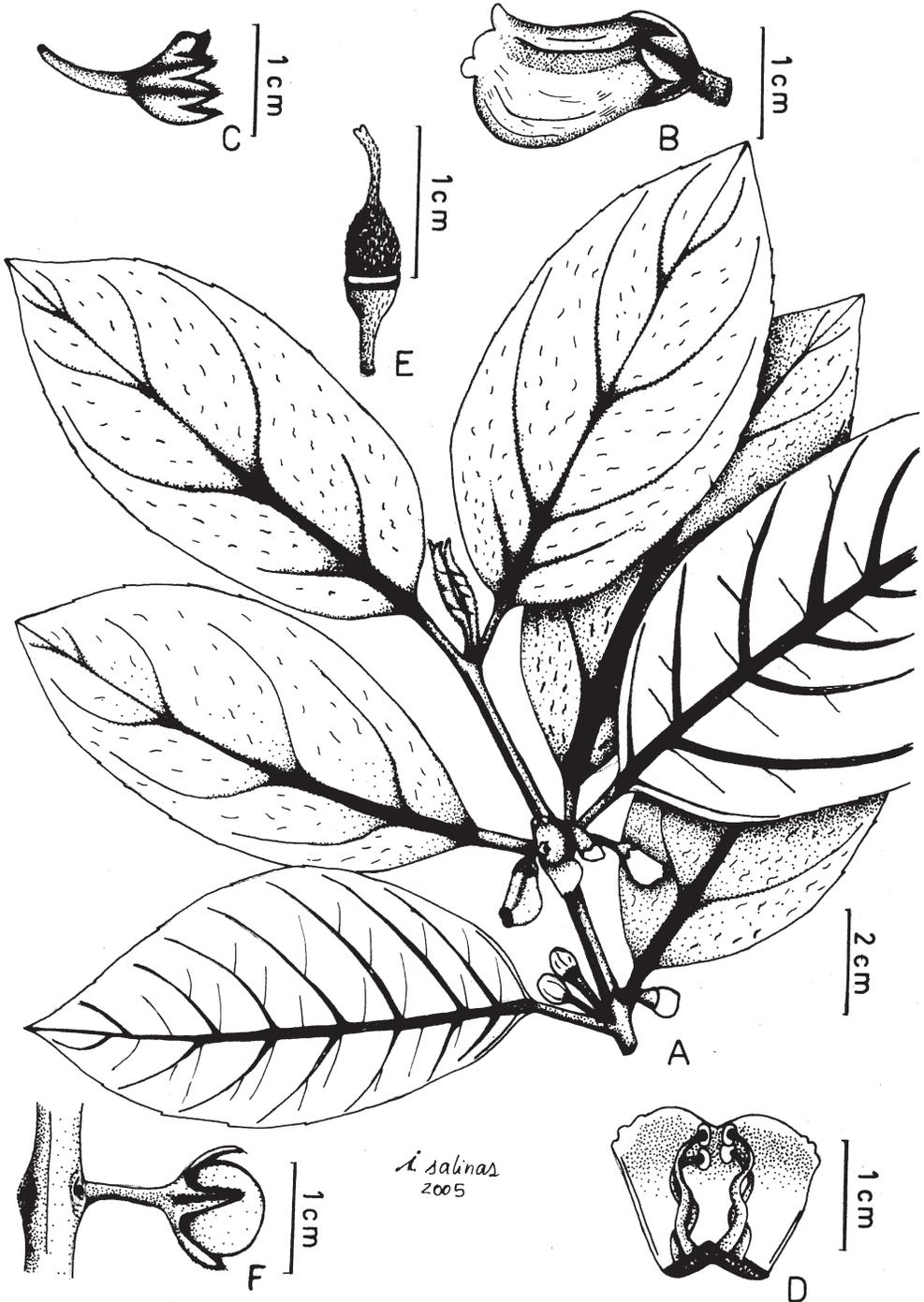


Figure 1. *Besleria beltranii* I. Salinas. —A. Branch. —B. Flower. —C. Calyx. —D. Open flower. —E. Pistil. —F. Fruit. A–F drawn from the holotype I. Salinas & M. Choce 485 (USM).

2300 to 2400 m in elevation. Here, the forest reaches 20 m in height and is characterized by a conspicuous richness of epiphytes and profuse development of the understory. The vegetation is mainly composed of

species of Melastomataceae, Cunoniaceae, Rubiaceae, Asteraceae, Cyatheaceae, Clusiaceae, Orchidaceae, Bromeliaceae, and Araceae as well as pteridophytes.

IUCN Red List category. The conservation status of *Besleria beltranii* was determined following IUCN Red List criteria (IUCN, 2001). It is treated under the category Endangered (EN B1a). The distribution of the species can be extended approximately 250 km², as we can assume the species is present in the surrounding forest of the Department of Pasco because of its similarity to the humid montane forest of Huánuco. The populations of *B. beltranii* are severely fragmented, with approximately five subpopulations. Studies in conservation should focus on the biology of the species and how it is impacted by the fragmentation of its habitat as a consequence of anthropogenic activities.

Phenology. The flowering period is from June to September, and fructification lasts from December to March.

Etymology. The specific epithet honors Hamilton Beltrán for his contribution to the knowledge of the Peruvian flora.

Discussion. Floral morphology is determinant to distinguish sections of *Besleria* (Morton, 1939, 1968), and according to Morton's treatment, *B. beltranii* belongs to section *Besleria* subsection *Sessiles* C. V. Morton where the calyx lobes measure less than half the length of the corolla, the common peduncle is obsolete, with a regularly shaped limb of the corolla and the contraction in the throat of the corolla as typical. *Besleria beltranii* is similar morphologically to *B. barbata*, which belongs to the same section and is known from Colombia, Ecuador, and Peru. While the inflorescence of *B. beltranii* is composed of few (1 to 5) flowers, the lanceolate calyx lobes have an acute apex, and the corolla tube is markedly ventricose (1 cm wide). In contrast, *B. barbata* has 10 to 25 flowers densely arranged, the calyx lobes are oblong with rounded apex, and the corolla tube is only slightly ventricose (0.4–0.5 cm wide). Vegetatively, *B. beltranii* is distinguished from *B. barbata* in its glabrous stems and leaf blades that are cuneate to rounded at the base; *B. barbata* presents a hirsute indumentum and leaf blades that are only cuneate at base.

Besleria beltranii may be confused vegetatively with *B. reticulata* Fritsch, a species that grows at the type locality, but the latter species has opposite leaves with the abaxial surface densely sericeous.

Besleria beltranii is added to other endemic species known from the humid montane forest of San Pedro de

Carpish: *Miconia carpishana* Wurdack, *Oxalis salticola* Lourteig, *Nordenstamia rimachiana* (Cuatrecasas) B. Nordenstam, and *N. carpishensis* (Cuatrecasas) B. Nordenstam. It is also added to the 18 endemic species of *Besleria* from Peru (Salinas & León, 2006).

Paratypes. PERU. **Huánuco:** Huánuco, betw. Carpish & Paty, C. Díaz & S. Baldeón 2252 (MO, USM); Dist. Chinchao, San Pedro de Carpish, Hacienda Paty, I. Salinas & M. Chocce 418 (USM), J. Clark, H. Beltrán & I. Salinas 8179 (US, USM), trail towards Hacienda Patti, J. Clark, H. Beltrán & I. Salinas 8198 (US, USM), J. Clark, I. Salinas & H. Beltrán 8226 (US, USM).

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