




Original article

## Two new species of *Besleria* (Gesneriaceae) from the Department of Santander, Eastern Cordillera of the Colombian Andes

### Dos nuevas especies de *Besleria* (Gesneriaceae) del departamento de Santander en la cordillera oriental de los Andes colombianos

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#### Abstract

Here, we describe and illustrate two new species of the genus *Besleria* (Gesneriaceae), *Besleria bella* sp. nov. and *Besleria obconica* sp. nov., from premontane forests of the Serranía de Los Yariquíes in the Magdalena Medio region of the Department of Santander, Colombia. We include detailed morphological descriptions of both species and provide comparative discussions of their differences with morphologically similar species. We also make preliminary conservation assessments following IUCN criteria.

**Keywords:** Beslerieae; Colombia; Lamiales; Magdalena Medio; Neotropics; Taxonomy.

#### Resumen

Se describen e ilustran dos nuevas especies del género *Besleria* (Gesneriaceae): *Besleria bella* sp. nov. y *Besleria obconica* sp. nov., provenientes de bosques premontanos de la Serranía de Los Yariquíes, en el Magdalena Medio del departamento de Santander, Colombia. Asimismo, se hacen descripciones morfológicas detalladas de ambas especies y se comparan sus diferencias con las especies morfológicamente similares. Por último, se presentan evaluaciones preliminares de conservación según los criterios de la UICN.

**Palabras clave:** Beslerieae; Colombia; Lamiales; Magdalena Medio; Neotrópico; taxonomía.

#### Introduction

*Besleria* Plum. ex L. is a Neotropical genus of the Gesneriaceae family with 160 to 170 species of perennial herbs, shrubs, and small trees (Cortés, 2019; Clark *et al.*, 2020). These plants grow primarily in the understory of tropical forests from sea level to 3500 meters. *Besleria* is distributed from southern Mexico to Bolivia and Brazil, with the greatest diversity concentrated in the tropical Andes, where more than 100 species are found (Skog, 1979; Skog, 1996; Kvist *et al.*, 1998; Clark *et al.*, 2020). Phylogenetic analyses have confirmed that *Besleria* is monophyletic and strongly supported within the tribe Beslerieae (Smith, 2000; Roalson & Clark, 2006; Clark *et al.*, 2010; Ferreira *et al.*, 2024). Colombia hosts the greatest diversity of the genus, with more than 80 species (Cortés, 2013), most of which are found in the humid forests of the Andes and the Chocó biogeographic region, with some present in the Amazon also (Cortés *et al.*, 2017).

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Morphologically, *Besleria* species are recognized as unbranched (occasionally branched) terrestrial shrubs with several pairs of large leaves, axillary inflorescences without bracts, and fleshy globose berries (Wiehler, 1975; Weber, 2004). Diagnostic characters for species identification are mainly based on the presence or absence of a peduncle in the inflorescence, the dimensions and shape of the calyx lobes, and the corolla colors (red-orange, yellow, or white) and shapes (varying from narrowly tubular to hypocyrtoid) (Ferreira *et al.*, 2024). Flower characteristics of *Besleria* match the definition of the hummingbird pollination syndrome, although few field observations have been recorded (Serrano-Serrano *et al.*, 2017; Ogutcen *et al.*, 2020).

This contribution describes two new species of *Besleria* (Gesneriaceae) endemic to Colombia, discovered in the department of Santander, within the Serranía de los Yariquíes in the Magdalena Medio region. The area is a semi-isolated mountainous massif in the northern part of the Eastern Cordillera, extending approximately 80 km from south to north and separated from the main cordillera by the dry valleys of the Sogamoso and Suárez rivers (Jara & Zabala, 2018). Its elevations range from 500 to 3,200 m, and it transitions from dry ecosystems in the eastern canyons to humid environments of the Magdalena Medio to the west, supporting diverse vegetation types including dry montane forests, humid lowland forests, Andean forests, and páramo zones (Aguilar *et al.*, 2018). These characteristics have resulted in high levels of biological endemism, with some taxa discovered in recent years (e.g., *Magnolia resupinatifolia* Aguilar-Cano & Humberto Mend., *Begonia pax* Jara & Zabala, and *Caryodaphnopsis carmensis* Humberto Mend., J. Quiroga & Díaz-Rueda). Here, we discuss and compare the most morphologically similar species, highlighting the diagnostic differences that support the recognition of these new taxa. Additionally, we provide a preliminary assessment of their conservation status.

## Materials and methods

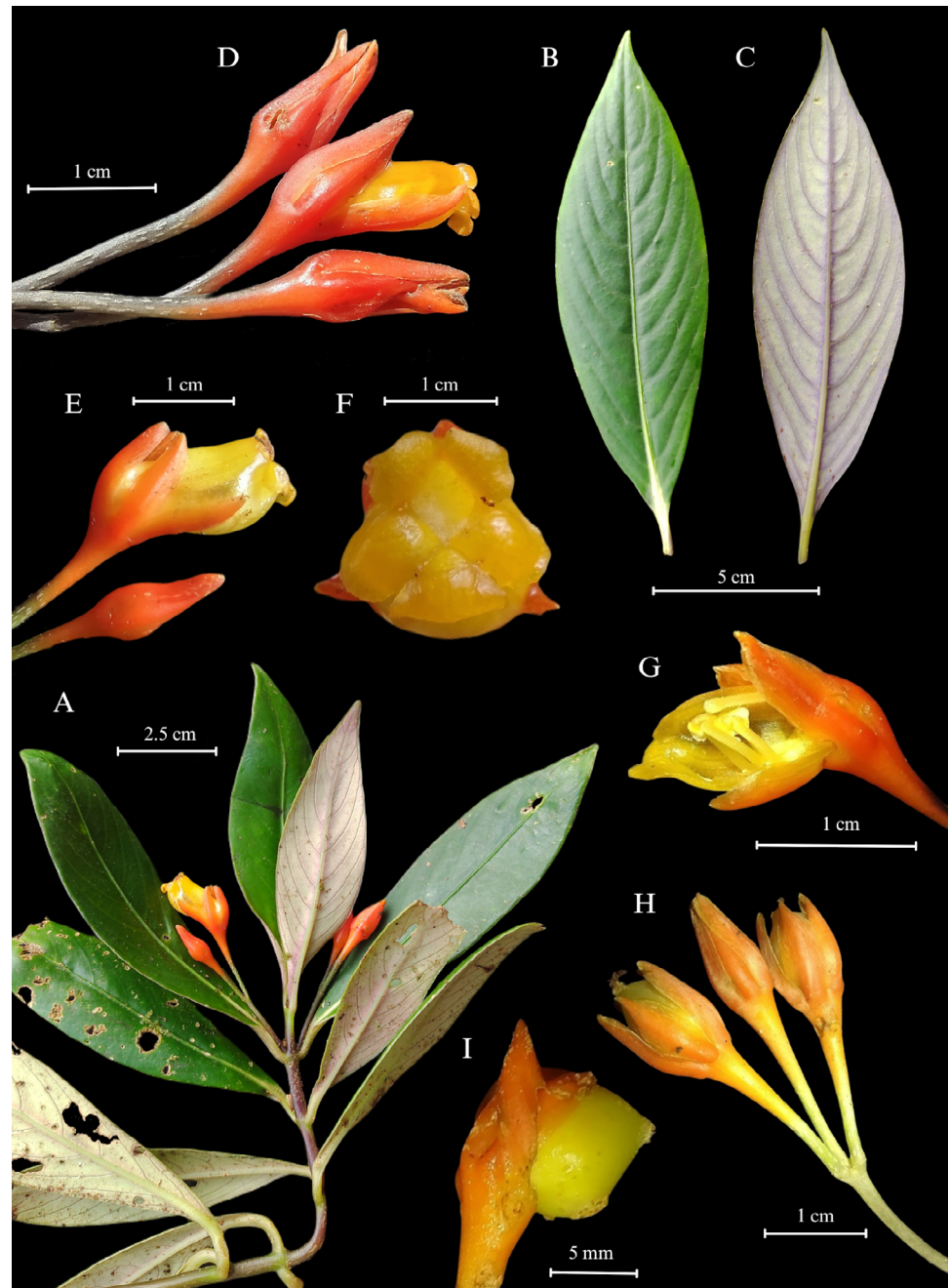
The type material was collected in February 2025 during botanical expeditions conducted in the municipality of El Carmen de Chucurí and surrounding areas. The specimens were processed and analyzed at the UDBC Forest Herbarium. We also reviewed the COL, JBB, FMB, and UDBC herbaria collections, along with virtual collections from the US and NY herbaria (Thiers, 2025, continuously update), as well as those available in the JSTOR Global Plants platform (2025). The morphological observations and measurements were done using a digital caliper on herbarium specimens and alcohol-preserved flowers, while measurements on digital images of live specimens and dissections were done with the software ImageJ (Schneider *et al.*, 2012).

We reviewed the *Besleria* genus monograph by Morton (1939), the only taxonomic revision of the genus, which includes descriptions of all species recognized at that time that are used as support for the discussions and morphological comparisons presented in the Notes section. However, given that the subsequent taxonomic studies have resulted in synonymies and nomenclatural changes affecting the circumscription of some species, we used as a reference the most recent publication of a *Besleria* species for Colombia (Sánchez-Taborda *et al.*, 2020), which provides a more detailed description that we used as the basis for the standardization of morphological characters. Morphological terminology for leaf and indumentum descriptions follows Beentje (2016), Ellis *et al.* (2009), and Hewson (2019). To determine the presence of receptacles in flowers, transverse sections were made and stained with 1% methylene blue for 2-3 minutes. The sections were then mounted on slides with coverslips and observed using an optical microscope at different magnifications. Receptacle identification was based on the morphological characteristics and arrangement of the stained tissues. The extinction risk was assessed according to the guidelines of the IUCN Standards and Petitions Committee (2022). For the preliminary assessment, we considered the observations, collection of localities, and population estimates obtained during fieldwork. The area of occupancy (AOO) and the extent of occurrence (EOO) were calculated using GeoCAT (Bachman *et al.*, 2011) with a 2 km<sup>2</sup> grid.

## Results and discussion

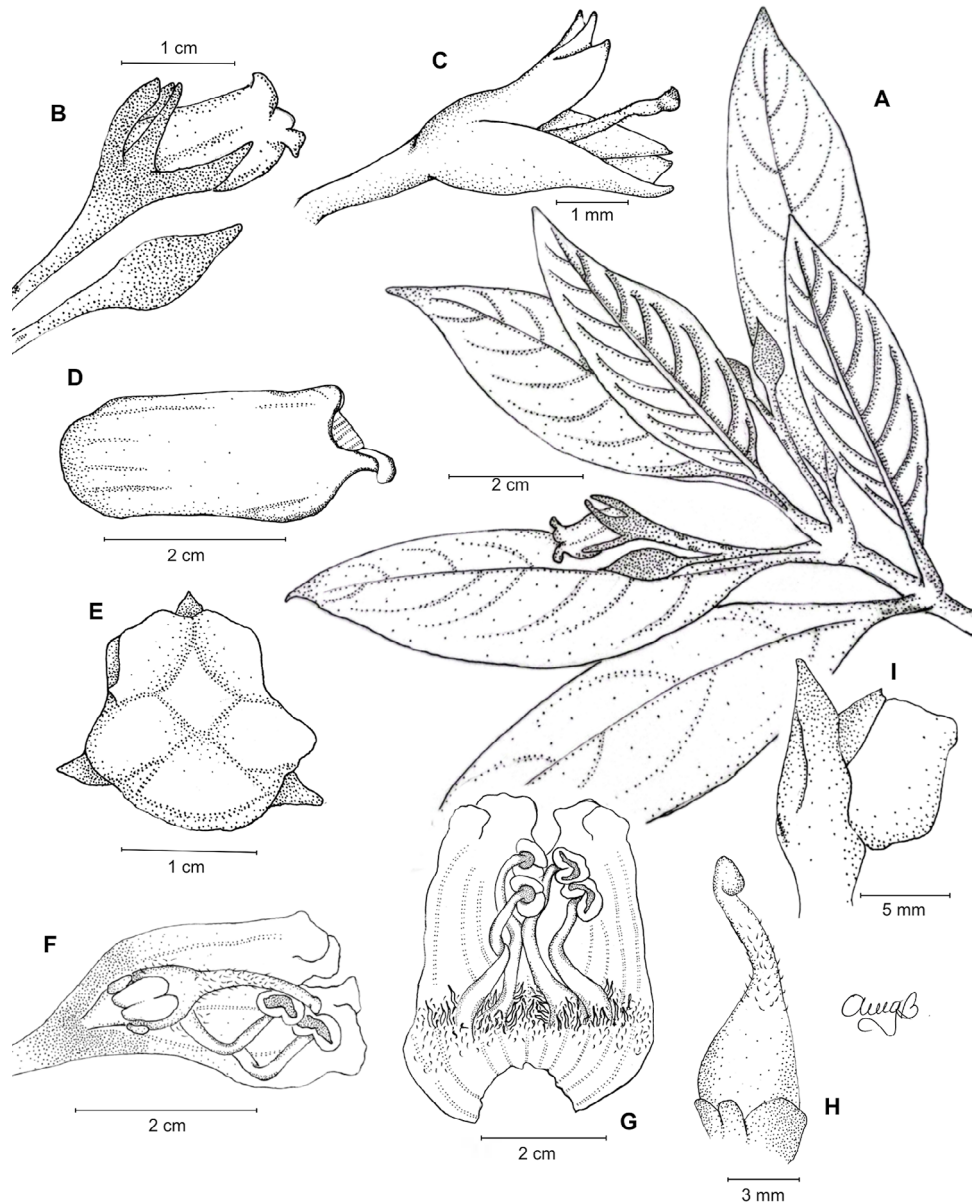
### 1. *Besleria bella* Solano-C., D. Ruiz-Mol. & J. Quiroga, sp. nov. (Figures 1, 2, 3)

**TYPE:** Colombia: **Santander:** Municipio El Carmen del Chucurí, Vereda La Bodega, Finca de Gustavo González, 1550 m, 6°40'28.3" N, 73°27'6.5" W, 20 Feb 2025 (fl., fr.), C. Solano-C, J. Quiroga & L. Carvajal 150 (holotype: UDBC barcode 51562; isotypes: COL, JAUM).



**Figure 1.** *Besleria bella* Solano-C., D. Ruiz-Mol & J. Quiroga. **A.** Habit. **B.** Adaxial leaf view. **C.** Abaxial leaf view. **D. and E.** Lateral view of mature flowers and flower buds. **F.** Frontal view of corolla. **G.** Cross-section of the corolla, orientation of the stamens. **H.** Immature fruit. **I.** Mature fruit. [A-I from holotype. Photos by Javier Quiroga]

**Diagnosis.** *Besleria bella* differs from all its congeners by a combination of characters that includes a pedunculate inflorescence 1.9–4.5 (–11) cm long (**Figure 1A, H and 2A**), an elongated receptacle continuous with the pedicel (**Figure 2F**) and scarcely differentiated from the calyx (**Figure 1D–I**), a thick and fleshy orange calyx, a yellow corolla, and an ovary with five nectary glands (**Figure 2H**). Morphologically, it is similar to *Besleria angusta* C.V. Morton; however, *B. bella* differs by having shorter leaves (9.5–14.5 cm vs. 19.2–24.8 cm) and inflorescences arranged in umbels of 1–4 flowers (vs. fascicles of two flowers or reduced to solitary flowers).

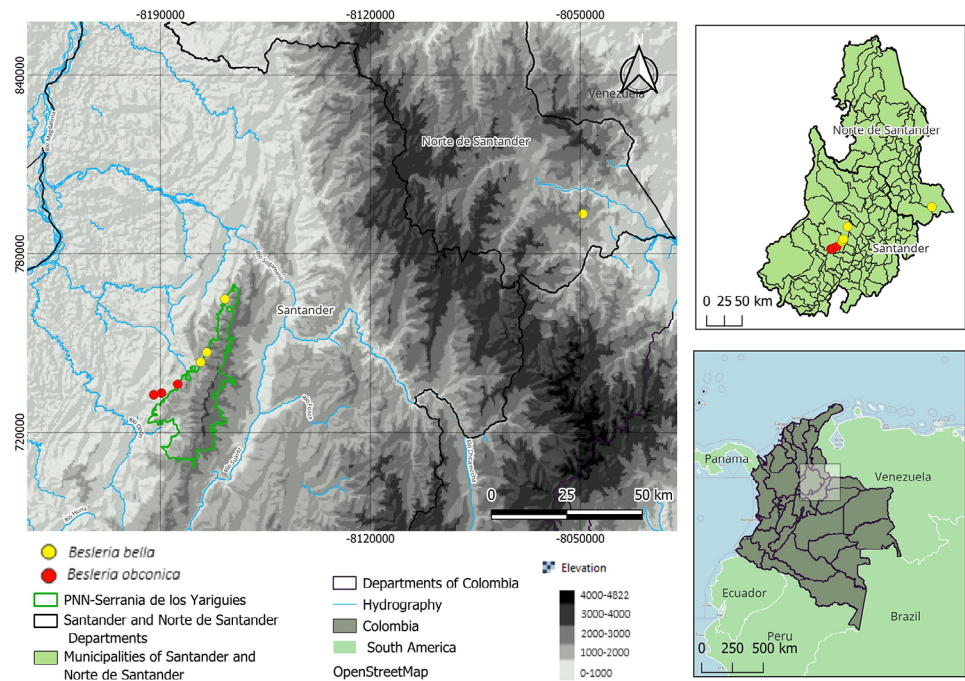


**Figure 2.** *Besleria bella* Solano-C., D. Ruiz-Mol & J. Quiroga. **A.** Habit. **B.** Lateral view of mature flowers and flower buds. **C.** Lateral view of the calyx. **D.** Lateral view of the corolla. **E.** Frontal view of the corolla. **F.** Cross-section of the corolla, receptacle, and pedicel, orientation of the stamens. **G.** Flower, longitudinal cutaway. **H.** Ovary with nectary glands and pistil. **I.** Mature fruit. [A-I based on holotype. Illustration by Angie G. Gasca]

**Suffrutescent herb**, 0.9–1.5 m tall. Stems erect to subhorizontal, terete to subterete (when fresh), 1.4–5.2 mm diameter (when dry), light green to green-purple (when fresh); papillose surface, transversely striated, with scattered multiseptate transparent or yellow (when dry) trichomes ( $>0.5$  mm), glabrescent at maturity; internodes 0.9–6.2 cm long. **Leaves** opposite, decussate, equal to subequal in pairs, evenly spaced, appearing clustered at the apex by the abscission of mature leaves; petioles 4.7–12.8 mm long, terete to subterete, glabrous, light green (when fresh); **blades** 9.5–14.5  $\times$  2.2–3.9 cm, ovate to ovate-lanceolate, slightly falcate, coriaceous, base decurrent 5–7 mm long, margin entire, apex acuminate 8.3–13.4 mm long, smooth on both surfaces, primary venation pinnate, secondary venation brochidodromous with marginal secondary veins, 10–12 secondary veins per side, irregular spaced, spacing decreasing proximally, angle uniform, decurrent secondary attachment to the midvein intersecondary veins 1 or absent; tertiary veins inconspicuous; adaxial and abaxial surface glabrous and papillose, midvein and secondary veins flat on both surfaces. **Inflorescences** axillary in umbels, peduncle 1.9–4.5 (–11) cm long, borne at an oblique angle to the stem, terete, papillose, glabrous, basally purple (when fresh), apically green (when fresh), 1–4 flowers; pedicels 9.5–23.9 mm long, erect to oblique with respect to the peduncle, papillose, glabrous, lenticellate, basally green to purple (when fresh), apically orange (when fresh); receptacle 3.6–6.7  $\times$  3–4.5 mm, cylindrical, continuous with the calyx, orange (when fresh). **Calyx** thick, carnose, venation inconspicuous; lobes 5, 9.7–14.8  $\times$  3.1–4.2 mm, free, equal to subequal, ensiform to ovate, occasionally slightly falcate, apex mucronate or acuminate (acumen 1.2–4.1 mm long), base truncate, margin entire, both surfaces glabrous, orange (when fresh). **Corolla** thick, carnose, 13.9–15.2 mm long, tubular, slightly constricted at the base and throat, zygomorphic, laterally non-compressed, apically ventricose, slightly gibbous towards the base, spur absent, uniformly yellow (when fresh); gibbosity 6.2–6.8 mm long, base 6.1–6.4 mm long, floral pouch 6.4–7.9 mm long, throat 4.1–5.6 mm long, inner surface papillose, both surface glabrous; lobes 5, thick carnose, unequal, recurved, apex rounded to obtuse, base truncate, margin entire and slightly sinuate, conspicuous veins on the inner surface (when dry), glabrous on both surfaces; dorsal lobes 1.7–2.2  $\times$  1.2–2.5 mm, ovate to oblate; lateral lobes 2–2.4  $\times$  2.1–2.8 mm, orbicular to oblate, ventral lobe 2.3–2.6  $\times$  2.5–2.8, oblate. **Androecium** 4 stamens, included, didynamous, filaments adnate to the corolla tube, adnate portion 2.7–4.1 mm long, free portion in the outer ones 7.3–8.2 mm long, inner ones 6.1–6.7 mm long, sparsely papillose, basally densely barbate with multiseptate trichomes on both surfaces; staminode ca. 1.7 mm long, glabrous; thecae 0.9–1.3  $\times$  1.6–2.3 mm, reniform with basifixed insertion, dehiscence in longitudinal slits, coherent at the apex and lateral walls, glabrous. **Gynoeceum** with nectary comprising an annular nectary gland 1.5–1.9 mm long and four smaller lateral glands 0.9–1.3 mm long; ovary 4.3–4.6  $\times$  2.7–3.5 mm, ovate, apically pilose with multiseptate trichomes; style 5.3–6.8 mm long, puberulent, stigma stomatomorphic, glabrous. **Fruit** a berry, indehiscent, ovoid ca. 10  $\times$  5 mm, mature yellow (when fresh), seeds ovate, brown (when fresh).

**Etymology.** The specific epithet refers to the remarkable beauty (from Latin *bella*: beautiful or pleasant) of the flowers and leaves of this species.

**Distribution and habitat.** *Besleria bella* is distributed across two adjacent Colombian departments: Santander and Norte de Santander. In Santander, the species has been collected in the municipalities of Carmen de Chucurí and San Vicente de Chucurí (pers. obs.), while in Norte de Santander it occurs in the Sarare region (**Figure 3**). Both populations are found at approximately 1500 meters above sea level on the Eastern Cordillera. This species inhabits the interior of well-conserved Andean forests, where it can be locally abundant under optimal conditions (pers. obs.). Notably, robust populations have been documented in the field in conservation areas adjacent to and within the Serranía de Los Yariquíes National Natural Park, suggesting the species' dependence on well-conserved forest habitats suitable for long-term survival.



**Figure 3.** Distribution map of *Besleria bella* and *Besleria obconica* in the eastern cordillera of the Andes in Colombia

**Phenology.** *Besleria bella* exhibits distinct seasonal reproductive patterns based on continuous field observations conducted by the authors since early 2024 at the known population sites. The flowering and fruiting periods occur during February and November (based on herbarium labels and personal communication from the authors in the field). This temporal restriction in reproductive activity can make field detection challenging outside these periods, despite the species' potential abundance.

**Preliminary conservation status.** *Besleria bella* has an estimated extent of occurrence (EOO) of 1,159 km<sup>2</sup> and an area of occupancy (AOO) of 24 km<sup>2</sup> according to currently available records (field observations and herbarium specimens). To date, the species is only known from a single locality on the western slopes of the Serranía de Los Yariquies. However, this region has historically been poorly explored. Biological surveys have been constrained by the steep and complex topography that restricts access to many areas, as well as by the armed conflict that has limited safe research activities for decades across both municipalities. Although floristic studies have been conducted, they have been concentrated mainly on the eastern slopes and within accessible areas of the national park (Díaz-Rueda *et al.*, 2025). Consequently, the absence of additional records more likely reflects a lack of systematic sampling rather than a truly narrow distribution. Given these limitations, the available information is insufficient to assess population status, trends, or threats with confidence, and the species is best treated as Data Deficient (DD) under IUCN criteria.

**Taxonomic notes.** Due to its coriaceous, ovate-lanceolate, discolor and glabrous leaves with smooth surfaces and inconspicuous tertiary veins, flowers with a calyx continuous with the pedicel, and calyx lobes with mucronate to acuminate apex, *Besleria bella* is morphologically similar to *Besleria angusta* C.V. Morton. However, *B. bella* differs from the latter by having smaller leaves (9.5–14.5 × 2.2–3.9 cm vs. 19.2–24.8 × 4.7–6.4 cm), shorter petioles (0.4–1.2 cm vs. 2.5–4.5 cm), pedunculate umbels with 1–4 flowers (vs. flowers arranged in 2-flowered fascicle or reduced to a solitary flower), and a yellow corolla (vs. orange). Additionally, *B. bella* is endemic to Colombia, whereas *B. angusta* is endemic to Peru.

Specimens of *B. bella* have occasionally been misidentified in herbaria as *Besleria longipedunculata* Britton ex Rusby. However, it can be distinguished from the latter by its glabrous stems (vs. strigose), larger ovate-lanceolate leaves  $9.5\text{--}14.5 \times 2.2\text{--}3.9$  cm (vs. elliptic leaves up to  $35 \times 13$  cm), a shorter peduncle (1.9–4.5 (–11) cm vs. up to 20 cm long), and a pilose ovary with five nectary glands (vs. a glabrous ovary with an annular nectary). Besides, *B. longipedunculata* is endemic to Bolivia.

The nectaries in the genus *Besleria* and their intra- and interspecific morphological variation have been documented primarily as annular and semi-annular nectaries. *Besleria bella* is, to date, the only species in the genus known to exhibit a distinct morphology, characterized by the presence of five well-differentiated nectary glands. Traditionally, the shape of the nectary disc has been regarded as a diagnostic character of high taxonomic value and has been used to delimit infrageneric sections and subsections (Morton, 1939). However, the phylogenetic analyses and character reconstructions by Ferreira *et al.* (2024) demonstrated that floral characters, including nectaries, exhibit a high degree of homoplasy and evolutionary convergence, thereby limiting their utility for inferring deep phylogenetic relationships within the genus. Such a novel nectary morphology in a genus typically characterized by annular nectaries may have broader implications for understanding the evolution of nectaries within Gesneriaceae and represents a unique and previously unrecognized morphological character within the genus.

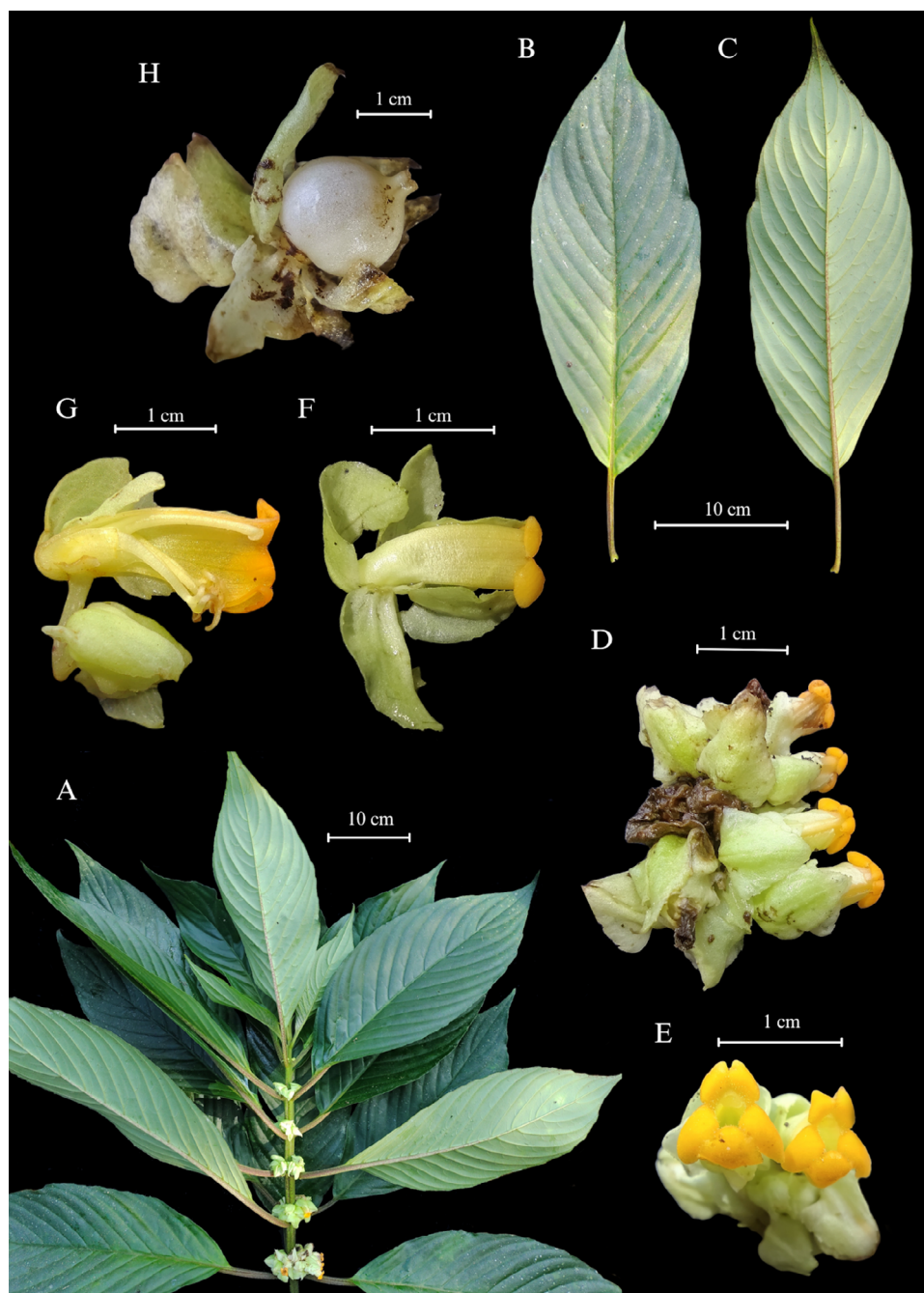
**Additional specimens examined (paratypes):** COLOMBIA. Norte de Santander: Región del Sarare: Hoya del río Margua, cabeceras del río Negro, ladera Norte entre El Amparo y La Mesa, 1400–1700 m, 7 Nov 1941 (fl.), *J. Cuatrecasas* 12858 (COL, US). Santander: Municipio El Carmen de Chucurí, Vereda La Bodega, Sector Manchurrias, Finca Buenos Aires, Trocha entre la casa del señor Reinaldo y la quebrada San Guillermo, 1607 m,  $6^{\circ} 40' 59.4''$  N,  $73^{\circ} 26' 10.8''$  W, 26 Feb 2018 (fl.), *H. Mendoza* 20540 (FMB); *ibid.*, 1845 m,  $6^{\circ} 40' 34.4''$  N,  $73^{\circ} 26' 55.5''$  W, 20 Feb 2025 (fl.), *C. Solano-C et al.* 158 (COL, JBB, UDBC).

**2. *Besleria obconica*** Solano-C., D. Ruiz-Mol & J. Quiroga **sp. nov.** (Figures 3, 4, 5).

**TYPE:** Colombia: **Santander:** Municipio El Carmen de Chucurí, Vereda La Belleza, hacia la finca de don Reinaldo Galeano, 848 m,  $6^{\circ} 34' 18.3''$  N,  $73^{\circ} 34' 9.1''$  W, 20 Feb 2025 (fl., fr.), *C. Solano-C, J. Quiroga & L. Carvajal* 156 (holotype: UDBC barcode 51559; isotypes: COL, HUA, JAUM).

**Diagnosis.** *Besleria obconica* differs from all its congeners by a combination of characters that includes longitudinally sulcate stems with small purple spots, leaves arranged in whorls of three (Figures 4A and 5A1), umbellate inflorescences with peduncles 4.7–7.1 mm long (Figure 5B), up to 14 flowers per axil (Figure 3D), whitish-green serrate calyx lobes (Figures 4F and 5E), and an obconical corolla with a spur (Figures 4F and 5F). Morphologically, it is similar to *Besleria oxyphylla* C.V. Morton, but *B. obconica* differs by having verticillate leaves (vs. opposite), pedunculate inflorescences (vs. with a reduced peduncle), and spurred corollas (vs. unspurred).

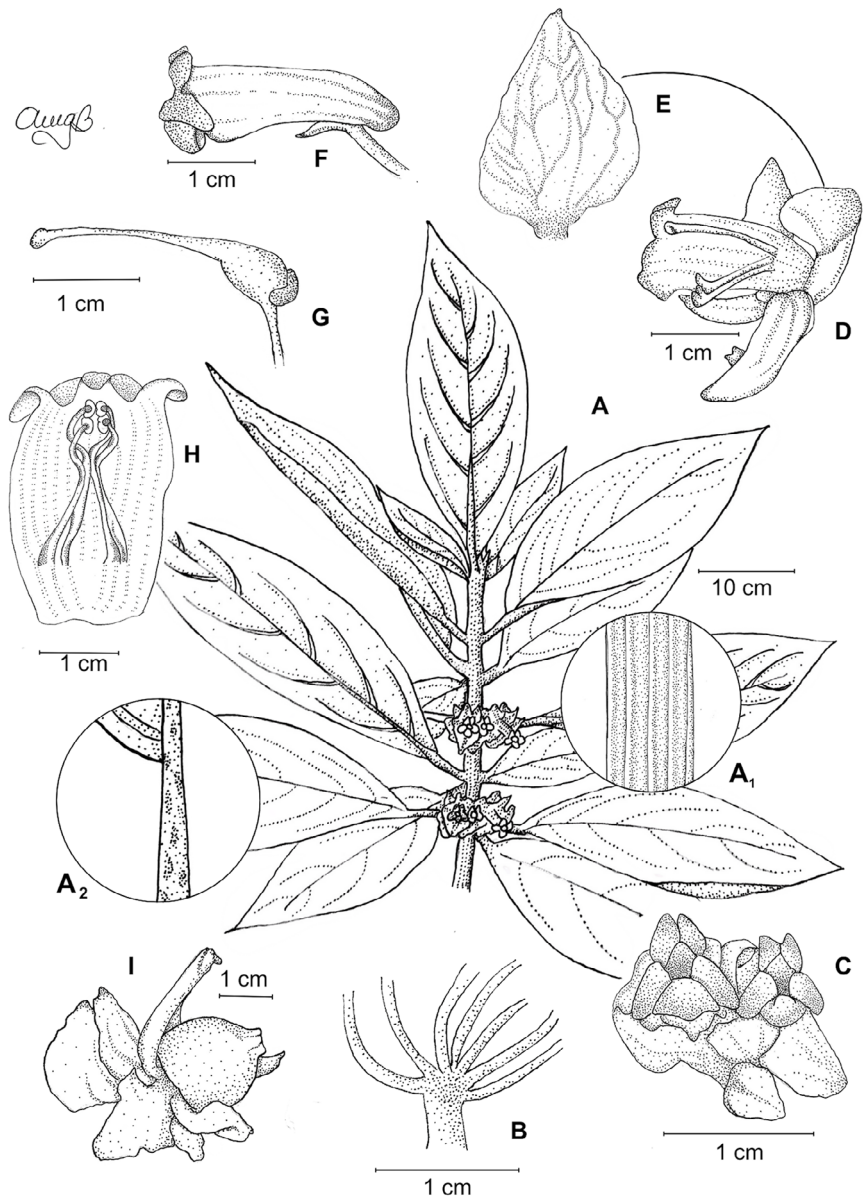
**Unbranched shrub** up to 2.5 m tall. Stems erect, sulcate (when fresh), 3.5–9.8 mm diameter (when dry), light green with small purple spots (when fresh), papillose surface, glabrous; internodes 3.7–7.5 cm long. **Leaves** 3-verticillate, equal to subequal per node, evenly spaced, appearing clustered at the apex by the abscission of mature leaves; petioles (1.8–) 3.3–6.9 cm long, canaliculate, glabrous, light green with small purple spots (when fresh); **blades**  $9.5\text{--}14.5 \times 2.2\text{--}3.9$  cm, ovate to ovate-lanceolate, slightly falcate, coriaceous, base decurrent, margin entire, apex acuminate 8.3–13.4 mm long, smooth surface; primary venation pinnate, secondary venation brochidodromous, with marginal secondary veins, 10–12 secondary veins per side, irregular spaced, spacing decreasing proximally, angle uniform, secondary attachment to the midvein decurrent; intersecondary veins 1 or absent; tertiary veins inconspicuous or transversely freely ramified tertiary fabric, both surfaces glabrous and papillose, midvein and secondary veins flat on both surfaces (when fresh), prominent on the abaxial surface (when fresh). **Inflorescences** axillary in umbels, peduncle



**Figure 4.** *Besleria obconica* Solano-C., D. Ruiz-Mol & J. Quiroga. **A.** Habit. **B.** Adaxial leaf view. **C.** Abaxial leaf view. **D.** Inflorescence. **E.** Frontal view of the corolla. **F.** Lateral view of a mature flower. **G.** Cross-section of the corolla, orientation of the stamens. **H.** Mature fruit. [A-H from holotype. Photos by Javier Quiroga]

4.7–7.1 mm long, terete to subterete, borne at an oblique angle to the stem, papillose, glabrous, light green (when fresh), up to 14 flowers per axilla; pedicels 8.4–14.6 mm long, pendent to erect or oblique with respect to the peduncle, papillose, glabrous, slightly lenticellate, light green (when fresh). **Calyx** membranous; lobes 5, thickly imbricate, ovate, apex acute to mucronate, base rounded to subcordate, margin serrate, teeth evenly

spaced ending in a white (when fresh) gland, both surface glabrescent, conspicuous veins basal actinodromous, light green to white (when fresh); dorsal lobe 14.2–18.5 × 10.3–11.7 mm, lateral lobes 10.1–14.6 × 7.6–9.4 mm, ventral lobes 9.4–13.2 × 6.4–8.6 mm. **Corolla** membranous, 16.4–18.5 mm long, obconic, slightly constricted at the throat, zygomorphic, laterally non-compressed, apically slightly ventricose, spurred at the base, the tube greenish yellow, yellow lobules (when fresh); spur 2.1–3.9 mm long, base 3.1–3.8 mm long, floral pouch 5.1–5.5, throat 4.6–4.8 mm long, inner surface papillose, both surface glabrous; lobes 5, carnosae, unequal, reflexed, apex rounded, base truncate, margin entire, scattered multiseptate trichomes on both surfaces; dorsal lobes 3.1–3.4 × 1.8–2.7 mm, oval



**Figure 5.** *Besleria obconica* Solano-C., D. Ruiz-Mol & J. Quiroga. **A.** Habit. **A1.** Detail of the stem. **A2.** Detail of the petiole. **B.** Inflorescence axes. **C.** Frontal view of corollas. **D.** Cross-section of the corolla, orientation of the stamens. **E.** Detail of calyx lobe. **F.** Lateral view of the corolla. **G.** Spur. **H.** Flower, longitudinal cutaway, **I.** Mature fruit. [A-I based on holotype. Illustration by Angie G. Gasca]

to orbicular; lateral lobes 3.4–4.2 × 2.9–3.7 mm, oval to orbicular; ventral lobe 3.1–4.3 × 3.9–4.3 mm, obovate. **Androecium** 4 stamens, included, didynamous, filaments adnate to the corolla tube, adnate portion 3.7–4.3 mm long, free portion in the outer ones 9.1–12.3 mm long, inner ones 7.8–8.9 mm long, sparsely papillose, glabrous; staminode ca. 3.1 mm long, glabrous; thecae 0.5–0.7 × 0.1–1.2 mm, reniform with basifixed insertion, dehiscence in longitudinal slits, coherent at the apex and lateral walls, glabrous. **Gynoecium** with semi-annular nectary gland ca. 1.1 mm long; ovary 2.4–2.7 × 3.7–4.2 mm, ovate, glabrous; style 8.3–10.1 mm long, glabrous, stigma stomatomorphic, pubescent. **Fruit:** a berry, indehiscent, subglobose, ca. 10–16 mm diam., white when mature (when fresh).

**Etymology.** The specific epithet *obconica* derives from the Latin *obconicus*, meaning “in the shape of an inverted cone,” referring to the shape of the corolla, which widens toward the apex and narrows toward the base.

**Distribution and habitat.** *Besleria obconica* is an endemic species restricted to the Department of Santander in Colombia, where it has been exclusively collected in the municipality of Carmen de Chucurí (**Figure 3**). The species occurs at elevations between 700 and 900 meters on the eastern slopes of the Eastern Cordillera. This understory plant grows along stream edges in soils with high organic matter content within humid forest understories (pers. obs.). *B. obconica* has been observed with abundant flower and fruit production throughout the year, but appears sporadically distributed within the known localities of occurrence. This patchy distribution pattern is typical for many Gesneriaceae species and may reflect the specialized habitat requirements common to understory forest plants (Clark & Skog, 2011). Recent phylogenetic and biogeographical analyses of *Besleria* indicate that species are primarily associated with rainforest understories and often exhibit geographically circumscribed and restricted distributions, suggesting that ecological specialization and habitat availability play an important role in shaping their spatial occurrence (Ferreira *et al.*, 2024).

**Phenology.** Multiple flowering and fruit development events have been observed throughout the year in herbarium specimens and by the authors (ined.).

**Taxonomic notes.** Due to its glabrous stems, ovate to ovate-lanceolate leaves with a long-acuminate apex, somewhat congested inflorescences, and calyx lobes with conspicuous veins and serrate margins, *B. obconica* is morphologically similar to *B. oxyphylla* C.V. Morton. However, it differs from the latter by its longitudinally sulcate stems (vs. subquadrangular), 3-verticillate leaves (vs. opposite leaves), longer petioles ((1.8–) 3.3–6.9 cm vs. about 2.5 cm), umbellate inflorescences with peduncles 4.7–7.1 mm long, up to 14 flowers per axilla (vs. inflorescences with reduced peduncle bearing less than 6 flowers), and a corolla with a basal spur, which is absent in *B. oxyphylla*.

In species with basally spurred corollas, a marked thickening of the nectary disc is frequently observed on the posterior side; under these conditions, the anterior portion of the disc is poorly developed or absent. In such cases, the disc can be described as being reduced to a posterior “gland.” Basally spurred corollas in the genus *Besleria* were documented and extensively discussed by Morton (1939, 1944) in the infrageneric sections *Neobesleria* and *Gasteranthus*. However, as discussed above for *B. bella*, these characters are highly convergent. Furthermore, several species traditionally assigned to these sections were later transferred to the genus *Gasteranthus*. Nevertheless, the presence of basally spurred corollas remains a useful morphological character, as this type of corolla morphology is rare within the genus.

Morton (1939) reported basally spurred corollas in the following species currently accepted in *Besleria*: *Besleria floribunda* Fritsch, *B. gibbosa* (Poepp.) Hanst., *B. miniata* C.V. Morton, *B. pennellii* C.V. Morton, *B. pendula* Hanst., and *B. penduliflora* Fritsch. More recently, Aymard *et al.* (2020), in their description of *B. naquenensis* Arellano-P. & Aymard, characterized this species as having a basally spurred corolla and discussed its affinities with *B. neblinae* Feuillet and *B. yatuana* Feuillet. Consequently, *B. obconica* represents the tenth known species with a basally spurred corolla within a megadiverse

genus comprising more than 100 species. Moreover, none of the previously known species exhibits a combination of characters that includes an obconic corolla and leaves arranged in whorls of three.

**Preliminary conservation status.** *Besleria obconica* is known only from the municipality of El Carmen de Chucurí (Santander), in areas adjacent to the Serranía de Los Yariquíes National Natural Park. Its extent of occurrence (EOO) and area of occupancy (AOO) are estimated both at 12 km<sup>2</sup>. As with *B. bella*, the scarcity of records is likely influenced by historical limitations to biological exploration in the region, including difficult access due to rugged terrain and periods of restricted research during armed conflict (Díaz-Rueda *et al.*, 2025). These factors have resulted in low sampling intensity, and many areas remain botanically underexplored. Therefore, the current distributional information is inadequate to infer population size, fragmentation, or decline. Until further fieldwork is undertaken, the species should be considered Data Deficient (DD) under IUCN criteria.

**Additional specimens examined (paratypes).** COLOMBIA. Santander: Region about Jordan, 50 km N of Velez, 914 m, 17 May 1944 (fl., fr.), *N. C. Fassett & H. St. John 25246* (US two sheets); Mun. El Carmen del Chucurí, Vereda La Belleza, hacia la finca de don Reinaldo Galeano, 848 m, 6°34'18.3"N, 73°34'9.1"W, 20 Feb 2025 (fl., fr.), *C. Solano-C, J. Quiroga & L. Carvajal 183* (JAUM, UDBC barcode 52441).

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## Author contributions

**CASC:** morphological dissections, data compilation, analysis of information, and writing of the article. **DRM:** data compilation, analysis of information, and writing of the article. **JQN:** field trip leader, georeferencing of individuals, photography, data compilation, and manuscript review.

## Conflict of interests

The authors declare that there are no conflicts of interest.

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