RELDIA OLIGANTHA (GESNERIACEAE), A NEW LITHOPHYTIC HERB FROM THE CORDILLERA DEL CÓNDOR IN SOUTHERN ECUADOR

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ABSTRACT

Recent fieldwork in southern Ecuador resulted in the discovery of a new species of *Reldia* (Gesneriaceae) from limestone outcrops in the Cordillera del Cóndor. **Reldia oligantha** J.L. Clark is described here as endemic to the eastern Andean slopes of Ecuador. The species is distinguished by its highly reduced, typically uniflorous inflorescences, lithophytic habit with leaves arranged in a basal rosette, and diminutive stature, representing the smallest species currently recognized in the genus.

Key Words: Ecuador, Gesneriaceae, *Reldia*, taxonomy

RESUMEN

Trabajos de campo recientes en el sur del Ecuador dieron como resultado el descubrimiento de una nueva especie de *Reldia* (Gesneriaceae) en afloramientos de piedra caliza de la Cordillera del Condor. **Reldia oligantha** J.L. Clark, endémica de las estribaciones orientales de los Andes ecuatorianos, se describe aquí. Se distingue por sus inflorescencias muy reducidas, generalmente unifloras, su hábito litofítico con hojas dispuestas en roseta basal y su porte diminuto, siendo actualmente reconocida como la especie de menor tamano dentro del género.

Palabras clave: Ecuador, Gesneriaceae, *Reldia,* taxonomía

INTRODUCTION

The Gesneriaceae, a family within the Lamiales, comprises more than 3,900 species in over 150 genera (Weber 2004; Weber et al. 2013, 2020; GRC 2026). Phylogenetic studies support a classification of three subfamilies and seven tribes, each representing a strongly supported monophyletic lineage (Möller & Clark 2013; Ogutcen et al. 2021). In the Neotropics, species richness is concentrated in the subfamily Gesnerioideae, which includes more than 1,200 species in 77 genera (Clark et al. 2020; GRC 2026).

Within Gesnerioideae, *Reldia* Wiehler is placed in the tribe Beslerieae and subtribe Besleriinae (Weber et al. 2013, 2020). The primary morphological character distinguishing *Reldia* from closely related genera is its alternate leaf arrangement, a phyllotaxy that is rare among Neotropical Gesneriaceae and otherwise characteristic of the predominantly Caribbean subtribe Gesneriinae. *Reldia* currently comprises six recognized species (Clark et al. 2020; GRC 2026). Its distribution extends from Panama to northern Peru and was most recently treated in a monograph by Kvist and Skog (1989).

TAXONOMIC TREATMENT

Reldia oligantha J.L. Clark, **sp. nov.** (**Fig. 1**). Type: ECUADOR: Zamora-Chinchipe, cantón Nangaritza, Laberinto de las Mil Ilusiones, 1–2 km E of Río Numpatakayma, 4°14′54″S, 78°39′34″W, 1000 m alt., 14 May 2009 (fl), *J.L. Clark, J.A. Mayr & D.A. Neill 15073* (holotype: ECUAMZ [accession: 12906]; isotypes: E, F, G, MO, NY, QCA, SEL [barcode SEL94537]!, US).

***Diagnosis.*—** Distinguished from all other species of *Reldia* by its highly reduced, typically uniflorous, epedunculate inflorescences (rarely with a peduncle < 2 mm long bearing two flowers), diminutive habit (< 13 cm wide), and bullate leaves.

***Description.*—Lithophytic** herb. **Stems** reduced with leaves clustered in a basal rosette. **Leaves** alternate, clustered; petiole 3–9 mm long, slender, with dense pilose indumentum, shallowly sulcate in cross-section; blade broadly obovate, 3.1–7.3 × 1.1–2.2 cm, membranous, surface slightly bullate, apex rounded, base

J. Bot. Res. Inst. Texas 20(1): 75–78. 2026
https://doi.org/10.17348/jbrit.v20.i1.1465
Published online: 15 April 2026

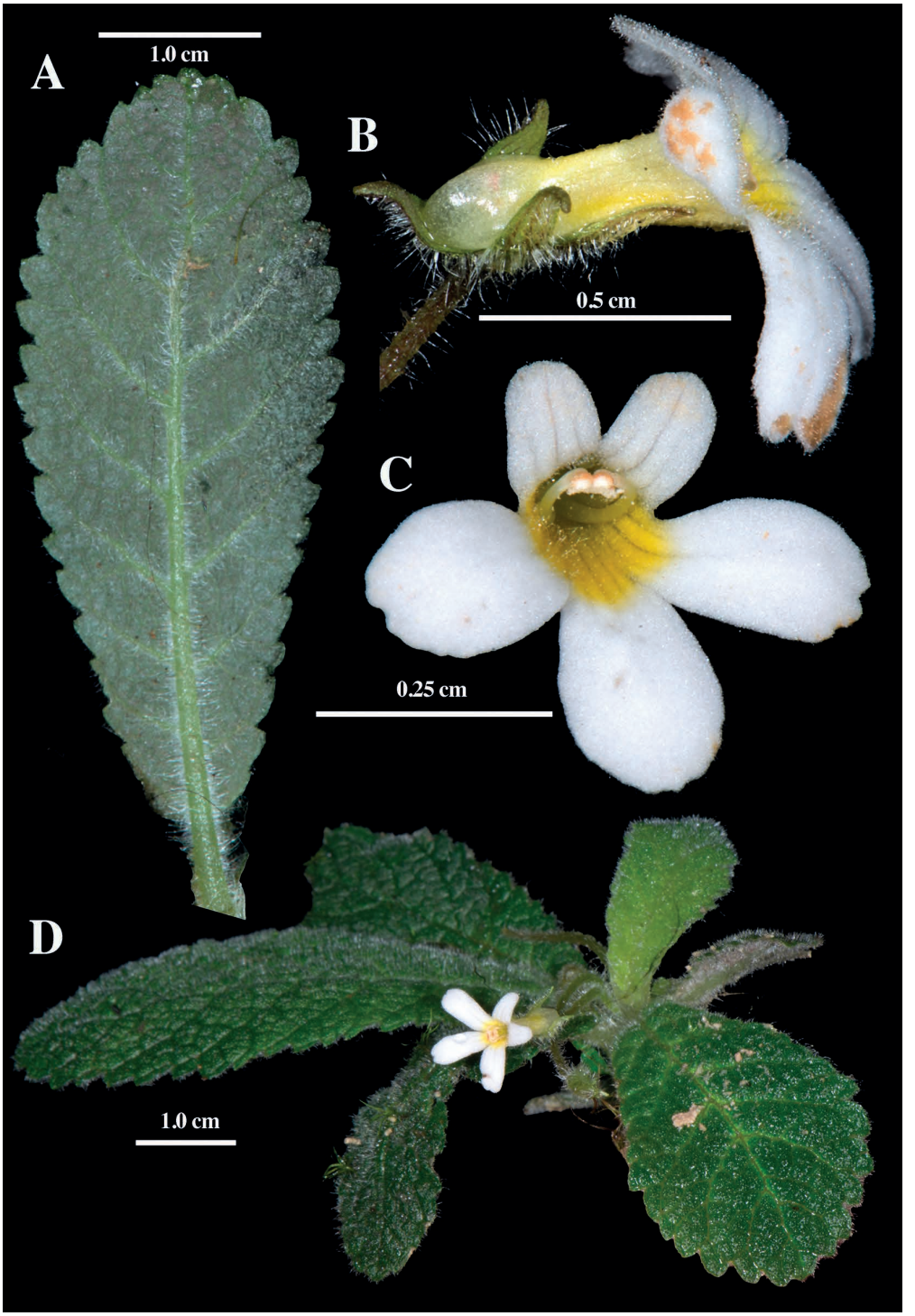

Fig. 1. *Reldia oligantha* J.L. Clark. **A.** Lower leaf surface. **B.** Lateral view of flower. **C.** Front view of corolla. **D.** Habit (A–D from *J.L. Clark & A. Wilcox 16241*. Photos by John L. Clark).

tapering to acute, symmetrical, margin serrate to crenate, uniformly green on adaxial and abaxial surfaces, densely pilose abaxially, uniformly pilose adaxially, 5–7 pairs of secondary lateral veins. **Inflorescences** reduced to a single axillary flower, or rarely borne on a peduncle < 2 mm long with two flowers. **Pedicels** 1.1–2.2 cm long, pilose. **Calyx** with 5 subequal lobes, exterior green with pilose indumentum, interior glabrous, broadly ovate, apex acute, margin entire, usually with three prominent secondary veins arising from the base and converging at the apex. **Corolla** tubular to narrowly campanulate, tube 4–6 mm long, 1.8–2.6 mm wide, corolla lobes spreading, upper two lobes oblong, 1.5–1.9 × 0.9–1.4 mm, lateral and lower lobes broadly oblong to obovate, 2.5–3.4 × 1.4–1.8 mm, outer surface of corolla tube glabrous, corolla throat sparsely pilose, upper lobes with glandular trichomes, other lobes sparsely pilose, corolla tube yellow, corolla lobes white. **Androecium** of 4 didynamous stamens; filaments stout, included, ca. 4 mm long, adnate to corolla base for 2 mm, anthers ca. 2 × 2 mm, included in the corolla throat, quadrangular. Gynoecium superior, ovary ca. 1.5 mm long, globose, pilose; style 2.5–3.5 mm long, glabrescent, stigma rounded. **Fruit** not observed.

Distribution and habitat.—*Reldia oligantha* is currently known from the southern Ecuadorian province of Zamora-Chinchipe near the Río Numpatakayma, a tributary of Río Nangaritza. The area is locally known as the Laberinto de las Mil Ilusiones (The Labyrinth of a Thousand Illusions) due to its maze-like formation of rocks reaching 20 meters in height and 5 meters in width. The type locality is a popular tourist destination managed by a local landowner who charges a nominal fee for exploring the property. It is accessible only by boat and is often visited by nature enthusiasts staying at Cabañas Yankuam (Yankuam Lodge).

Discussion.—*Reldia oligantha* is readily distinguished from other congeners by highly reduced inflorescences, mostly with single axillary flowers or rarely with two flowers on a reduced peduncle (< 2 mm long). The entire plant is less than 7 cm wide (Fig. 1D) and is therefore the smallest member of the genus. The only other relatively small taxon in the genus is *Reldia minutiflora* var. *veraguensis* (Wiehler) L.P. Kvist & L.E. Skog from Panama to southern Colombia. The peduncles in *R. minutiflora* var. *veraguensis* are erect, elongate, and well-developed, often exceeding the length of the leaf blades. In addition, the leaves of *R. minutiflora* var. *veraguensis* are glabrous and flat, whereas those of *R. oligantha* are bullate and pilose.

Etymology.—The specific epithet *oligantha* is derived from the Greek *oligos* (few) and *anthos* (flower), referring to the reduced inflorescence that bears few flowers and often appears solitary.

Specimens examined: **ECUADOR. Zamora-Chinchipe:** cantón Nangaritza, parroquia Nuevo Paraiso, Laberinto de las Mil Ilusiones, 1–2 km east of Río Numpatakayma (tributary of Río Nangaritza), 4°22 02″S, 78°39′39.6″W, 1001 m, 5 Mar 2018, *J.L. Clark 15570* (ECUAMZ, SEL, US); same locality, 11 Mar 2019, *J.L. Clark & A. Wilcox 16241* (QCA, SEL).

ACKNOWLEDGMENTS

I thank Jeanne Katzenstein and Laurence E. Skog for their helpful comments on earlier versions of the manuscript. I also acknowledge the participants in the 2017, 2018, and 2019 Lawrenceville School Ecuador programs for their engagement in learning field biology and the science of biodiversity. I am grateful to my co-teachers Jennifer Mayr, Ann Wilcox, Noelle Niu, Stephen Laubach, Rebecca Findlay, and Alison Easterling. Special thanks to Clara Guillermina León García and Carlos Humberto Gálvez Guamán of Cabañas Yankuam (Yankuam Lodge) for hosting us during three consecutive years of field courses. I also thank my late colleague David A. Neill (1953–2025) and the Universidad Estatal Amazónica for providing institutional support for ongoing field courses through the Lawrenceville School. I thank Yuley Encarnación for the Spanish translation of the abstract.

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