

**GNAPHALIOTHAMNUS COLUMBIANUS (ASTERACEAE, GNAPHALIEAE)  
AND GNAPHALIOTHAMNUS PERIJENSIS, SP. NOV.**

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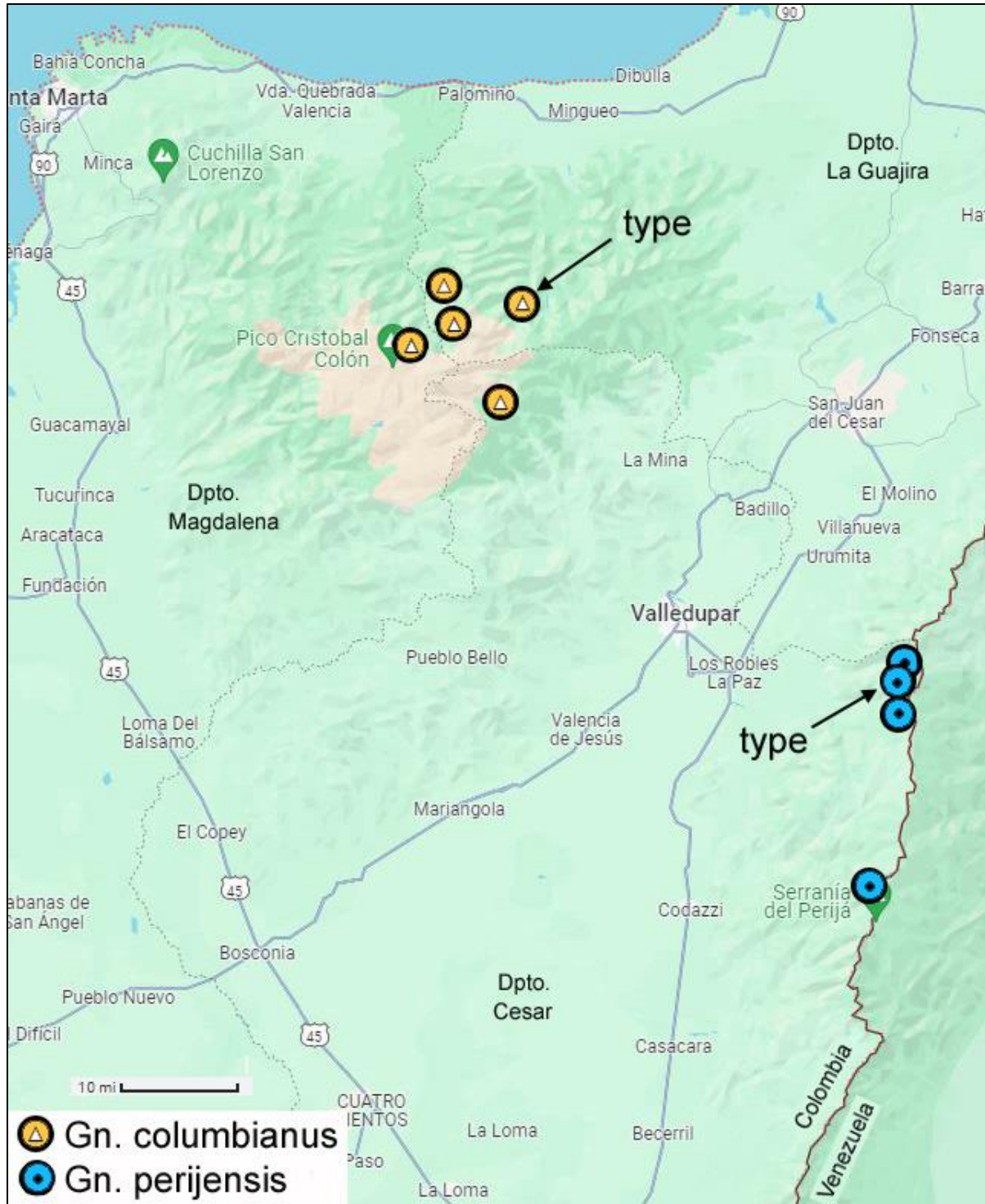
**ABSTRACT**

Identifications of *Gnaphaliothamnus columbianus* (the type from the Sierra de Santa Marta in Colombia) have included collections from the separate and more southern Sierra de Perijá, but these population systems represent two species. The latter are described here as ***Gnaphaliothamnus perijensis*** Nesom, **sp. nov.**

The Sierra de Santa Marta in northern Colombia has been an incubator for speciation in *Gnaphaliothamnus* (Nesom 2023, 2024) — four species are known from there, *G. barclayae*, *G. chrysocoma*, *G. columbianus*, and *G. filifolius*. In the original description of *Chionolaena columbiana* (Blake 1935) and in its transfer to *Parachionolaena* (Dillon and Sagástegui 1991), only the type collection was cited. Plants from the separate and slightly more southern Sierra de Perijá (Map 1) have been identified as *Chionolaena/Gnaphaliothamnus columbiana* by Freire (1993, explicitly) and by Nesom (2023, implicitly). Further study, however, indicates that these population systems represent two species (Map 2).



Map 1. Location of Sierra de Santa Marta (Colombia) and Sierra de Perijá (Colombia and Venezuela).



Map 2. Distribution of *Gnaphaliothamnus columbianus* (Sierra de Santa Marta) and *Gnaphaliothamnus perijanus* (Sierra de Perijá). The two population systems are separated by about 40-50 miles.

**GNAPHALIOTHAMNUS COLUMBIANUS** (Blake) Nesom, *Phytoneuron* 2023-50: 22. 2023. *Chionolaena columbiana* Blake, *J. Wash. Acad. Sci.* 25: 312. 1935. *Parachionolaena columbiana* (Blake) Dillon & Sagást., *Arnaldoa* 1: 44. 1991. **Type:** COLOMBIA. Dpto. La Guajira. Sierra Nevada de Santa Marta, ca. 30 mi inland from Dibulla, paramos, ca. 4390 m, Jul 1932, *W. Seifríz* 494 (holotype: US).

Seifríz did not give a precise locality (for this or other collections he made from the Santa Marta paramo), but as he began from Dibulla, it's assumed here that he was near the headwaters of Río Ancho on the northeastern flank of the sierra. A newspaper article apparently described his trip but I have not seen it — "19,000-Foot Snow-Capped Peak Goal of Expedition Hunting New Flora in South American Wilderness" (*Philadelphia Record*, 28 July 1932).

**Subshrubs** to 30 cm high. **Leaves** on congested nodes, linear-oblong to linear-obovate, 10–15 mm long, 2–2.5 mm wide, concolor, adaxially densely white-sericeous with parallel hairs, epidermis slightly visible, abaxially densely yellowish- to tawny-tomentose, epidermis not visible, margins flat, apex sharply acute, cauline reduced in length. **Inflorescence** a dense cluster 1.5–2 cm wide, of ca. 100+ heads, on a sparsely leafy "peduncular" stem above the densely leafy portion. **Involucres** 4 mm high; phyllary apices tawny to yellowish. **Pistillate florets** 6–8, corollas 1.5–1.6 mm long. **Bisexual florets** 6–7(–12), corollas 2–2.1 mm long. **Achenes** glabrous, 1 mm long; pappus bristles of bisexual florets apically dilated. Figures 1, 4-8.

**Additional collections.** COLOMBIA. **Sierra Nevada de Santa.** Dpto. Cesar. Southeastern slopes [of Sierra Santa Marta], hoyo del Río Dopnachui, Meollaca, rocky slopes of Chitebo, 3450-3550 m, 8 Oct 1959, *Cuatrecasas 24661* with Romero Castañeda (L, US). Dpto. La Guajira. Páramo de Macotama, alrededores de cabeceras de Río Ancho, rock outcrop of high ridge, SE of campsite at joining of two streams, Sta. 4, ca. 3840 m, 13 Feb 1959, *Barclay & Juajibioy 6927* (US); transecto del Buritaca (Filo La Cumbre), 3850 m, 19 Aug 1977, *Rangel & Cleef 988* (U, US). Dpto. Magdalena. 1 km S of Laguna Río Frío, ca. 10° 55' N, 73° 53' W, among rocks, 3800-3900 m, 30 Jul 1972, *Kirkbride & Forero 1803* (US).

**GNAPHALIOTHAMNUS PERIJENSIS** Nesom, **sp. nov.** **TYPE:** COLOMBIA. Dpto. Cesar, Sierra de Perijá, plain between Cerro Venado and Cerro Avión, páramo, 3270-3350 m, 8 Nov 1959, *J. Cuatrecasas 25115* with Romero-Castañeda (holotype: US 1733817; isotype: US 1733816)

**Similar** to *Gnaphaliothamnus columbianus* in its subshrubby habit, single terminal cluster of heads, narrowly oblong, densely tomentose, concolor leaves, the cauline at congested nodes, and glabrous achenes. **Different** in leaf size and vestiture inflorescence size and number of heads, involucre size and phyllary color, numbers of pistillate and bisexual florets, and pappus bristle apex.

**Subshrubs** 20–40 cm high, fibrous-rooted. **Leaves** on congested nodes, linear-oblong to linear-obovate, 15–28 mm long, 2-4 mm wide, concolor, densely silvery gray-tomentose with matted hairs on both surfaces, epidermis not visible, margins flat, apex sharply acute, cauline reduced in length. **Inflorescence** a dense cluster ca. 1 cm wide, of ca. 50 heads, on a sparsely leafy "peduncular" stem above the densely leafy portion. **Involucres** 3 mm high; phyllary apices white. **Pistillate florets** 23–29, corollas 1.8–2 mm long. **Bisexual florets** 4–6, corollas 2.2–2.5 mm long. **Achenes** glabrous, 1 mm long; pappus bristles of bisexual florets not apically dilated. Figures 1, 2-3, 9-12.

**Additional collections.** COLOMBIA. **Sierra de Perijá.** Dpto. Cesar. Tres Tetás (south peak), 3000 m, 28 Apr-4 May 1942, *Carriker 15* (US); Station 12, 12 km ENE of Manaure, 48 km E of Valdeupar, 1 km from the Venezuelan border, páramo, 3000 m, 5 Feb 1945, *Grant 10,864* (US); Mpio. La Paz, frontera colombo-venezolana, entre los cerro El Venado y El Avión, ca. 3200-3600 m, 3 Mar 1959, *Romero-Castañeda 7356* (US); Mpio. La Paz, frontera Colombo-Venezolana, cima del cerro El Avión, 3600 m, 3 Mar 1959, *Romero-Castañeda 7390* (US). **VENEZUELA.** Probably present along the Colombia border.

While *Gnaphaliothamnus perijensis* is not remarkably different in overall appearance from *G. columbianus*, the two population systems are allopatric and differ in significant details of morphology.

1. Leaves 10–15 mm long, adaxial vestiture densely sericeous; inflorescence ca. 1.5–2 cm wide, of ca. 100+ heads; involucre 4 mm high; phyllary apices tawny to yellowish; pistillate flowers 6–8; bisexual florets 6–7(–12), corollas 2–2.1 mm long; pappus bristles of bisexual florets apically dilated

..... **Gnaphaliothamnus columbianus**

1. Leaves 15–28 mm long, adaxial vestiture densely matted-tomentose; inflorescence ca. 1 cm wide, of ca. 50 heads; involucre 3 mm high; phyllary apices white; pistillate flowers 23–29; bisexual florets 4–6, corollas 2.2–2.5 mm long; pappus bristles of bisexual florets not apically dilated

..... **Gnaphaliothamnus perijensis**

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Figure 1. Heads of *Gnaphaliothamnus columbianus* (2 on left) and *Gnaphaliothamnus perijensis* (1 on right).





Figure 2. *Gnaphaliothamnus perijensis*. Stem tip before mature elongation of peduncular portion.



Figure 3. *Gnaphaliothamnus perijensis*. Densely matted vestiture of adaxial leaf surfaces.





Figure 4. *Gnaphaliothamnus columbianus*. Sericeous vestiture of adaxial leaf surfaces.



Figure 5. *Gnaphaliothamnus columbianus*. Holotype, Seifriz 494 (US).





Figure 6. *Gnaphaliothamnus columbianus*. Cuatrecasas & Castaneda 24661 (US)



Figure 7. *Gnaphaliothamnus columbianus*. Rangel 988 (US).



Figure 8. *Gnaphaliothamnus columbianus*. Rangel 988 (U).





Figure 9. *Gnaphaliothamnus perijensis*. Cuatrecasas & Castañeda 25115 (US).



Figure 10. *Gnaphaliothamnus perijensis*. Cuatrecasas & Castañeda 25115 (US).





Figure 11. *Gnaphaliothamnus perijensis*. Romero-Castañeda 7356 (US).





Figure 12. *Gnaphaliothamnus perijensis*. Carriker 15 (US).