# Two New Species of Jungia (Compositae) from Peru

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ABSTRACT. Two new species of *Jungia*, *J. schuerae* and *J. gracilis*, from the Peruvian Andes are described and illustrated, and their affinities are briefly discussed.

The genus Jungia L. f. (Compositae: Mutisieae: Nassauviinae) comprises 25–30 species, ranging from southern Mexico through Central America and following the South American Andes to northern Argentina; a couple of species are known from southeastern Brazil and Paraguay. In connection with my work on a monograph of the genus, I have found the following two species to be new to science.

Jungia schuerae Harling, sp. nov. TYPE: Peru. Lima: Prov. Huarochirí, Matucana, dry slope, 2,400 m, 26 May 1940, Asplund 11101 (holotype, S). Figure 1A.

Frutex a basi ramosus, erectus vel reclinatus, 1-1.5(-2.5) m altus, ramis sparse vel dense pubescentibus. Folia exstipulata, petiolata, laminis chartaceis, ambitu cordatosuborbicularibus, 3.5-5 cm longis, 3.5-6 cm latis in foliis superioribus, usque ad 10 cm longis, 11 cm latis in foliis inferioribus, 5-7-lobatis, lobis acutis vel obtusis vel rotundatis, indistincte serratis vel dentatis, supra sparse vel satis dense strigosis, subtus dense villosis; petiolus 1-3(-4.2) cm longus, dense pubescens. Synflorescentia dense paniculata, polycephala. Involucrum campanulatum, 6-7 mm longum, 7-8 mm latum, phyllariis circiter 12, oblongis vel lanceolatis, acuminatis, 5-6 mm longis, 1-1.2 mm latis, basi plusminusve callosis, dorsaliter tomentosis. Flores circiter 17-25, corolla sulphurea, tubo 4-5 mm longo, labio exteriore tridentato, in floribus marginalibus liguliformi, 3-3.5 mm longo, in floribus centralibus revoluto, 2.5-2.8 mm longo, labio interiore profunde bipartito, 1.6-2.3 mm longo, segmentis convolutis. Achenium subcylindricum vel fusiforme, erostratum, circiter 4 mm longum, sparse strigosum, pappi setis niveis, 30-35, circiter 6 mm longis, ciliatis vel breviter plumosis.

Erect or slightly reclinate shrub 1–1.5(–2.5) m high, branched from the base. Branches terete to slightly angular, light brown, sparsely to densely white-pubescent, in older stages glabrescent, often with dark brown to black lenticels, eglandular like the rest of the plant. Leaves exstipulate, petiolate; lamina chartaceous, suborbicular-cordate in outline, 3.5–5 cm long and 3.5–6 cm wide in upper leaves, to 10 cm long and 11 cm wide in lower leaves, 5–

7-lobed, lobes acute to obtuse or rounded, indistinctly serrate or dentate with mucronate, dark teeth, rarely slightly lobulate, sparsely to rather densely strigose above, moderately to very densely whitevillous beneath, rarely subglabrous on both sides, veinlet reticulum beneath dark-colored, usually with reddish brown thickenings; petiole 1-3(-4.2) cm long, slightly sheathing at base, densely white-pubescent. Synflorescence usually a very dense, occasionally ± open panicle; bracts similar to ordinary leaves but gradually smaller, seldom rounded and unlobed; peduncles 0.2-1.3(-3) cm long, white-pubescent, with 0-2 small, linear bracteoles. Involucre campanulate, 6-7 mm long, 7-8 mm wide; accessory bracteoles usually 3-6, 2-3 mm long, ca. 0.5 mm wide, linear to narrowly oblanceolate, whitepubescent; phyllaries (10-)12(-13), 5-6 mm long, 1-1.2 mm wide, oblong to lanceolate, acuminate, ± callose at base, moderately to densely whitetomentose dorsally, green, occasionally with purple tips; paleae similar to phyllaries but thinner and pubescent only apically and along midnerve. Florets 17-25, corolla pale yellow, often fading to white, tube 4-5 mm long, gradually widening toward mouth, outer lip tridentate, apically slightly pilose, in marginal florets liguliform, 3-3.5 mm long, straight to slightly revolute, in central florets 2.5–2.8 mm long, revolute, inner lip deeply bifid, 1.6-2.3 mm long, the segments curled. Achenes subcylindric to fusiform, without beak, ca. 4 mm long, 5-ribbed, dark between the ribs, with short, hyaline hairs; pappus white, bristles ca. 30-35, ca. 6 mm long, ciliate to short-plumose.

Jungia schuerae is a rather uniform and easily recognized species, distantly related to J. paniculata (DC.) Gray. It seems to be locally common in Cajamarca, La Libertad, Ancash, Huánuco, and Lima. The habitat is, according to the collectors, dry, gravelly, or stony open slopes or dry thickets at 2,200–3,600(–4,000) m elevation. Currently about 50 collections, most of them from Ancash and Lima, are known to me. A complete list will be published in my forthcoming monograph of the genus.

Cerrate (1951), who treated the Peruvian species of *Jungia*, confused this species with *J. paniculata*.

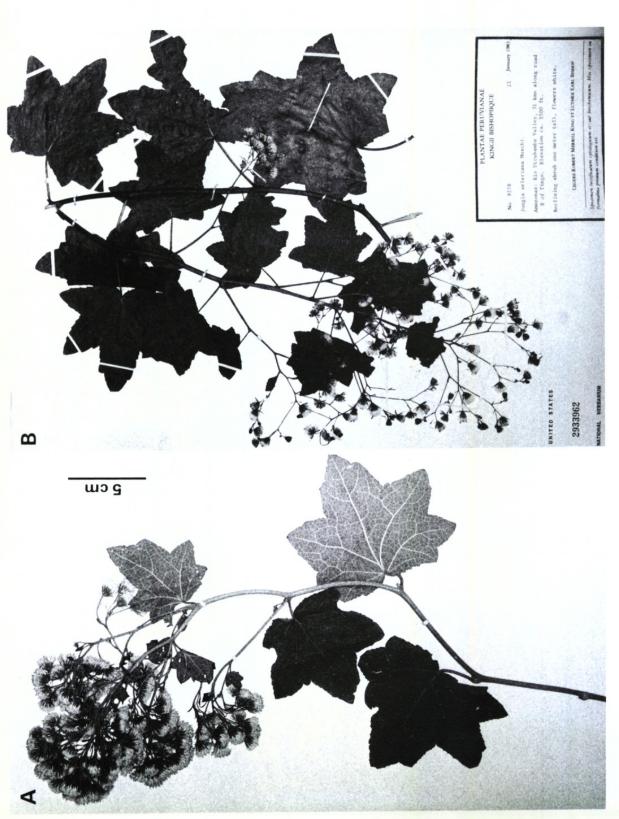


Figure 1. Holotypes of Jungia schuerae Harling (A) and Jungia gracilis Harling (B).

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The latter species is, however, an entirely different plant with stipulate leaves, open synflorescences, usually glandular peduncles and phyllaries, white florets, and a distinctly plumose pappus. The true

florets, and a distinctly plumose pappus. The true *J. paniculata* is common in Ecuador and Colombia, but seems to be rare in Peru. Apart from the type, I have so far seen only three collections, all from Cajamarca.

It is with great pleasure that I name this species in honor of Mrs. Gudrun Nilsson, née Schuer, who during her careful, but unfortunately unpublished, studies of the genus pointed it out as new (Schuer, in sched.).

Jungia gracilis Harling, sp. nov. TYPE: Peru. Amazonas: Prov. Chachapoyas, Río Utcubamba Valley, 31 km along road S of Tingo, ca. 1,700 m, 21 Jan. 1983, King & Bishop 9278 (holotype, US; isotypes, G, K, MO). Figure 1B.

Suffrutex sparse ramosus, erectus vel reclinatus, raro subscandens, 1-1.5 m altus, ramis lentis, glabris. Folia exstipulata, petiolata, laminis membranaceis, ambitu cordato-suborbicularibus, 4-9.5 cm longis, 4.5-10 cm latis, 5-7-lobatis, lobis acutis, indistincte serratis vel dentatis, supra glabris, subtus sparse vel mediocriter villosis; petiolus 1.5-5(-7) cm longus, glaber vel sparse puberulus. Synflorescentia laxissime paniculata, polycephala, ambitu ad 25 × 30 cm. Involucrum turbinatum, 4-5 mm longum, 4-5.5 mm latum, phyllariis circiter 12, oblongis vel oblanceolatis, acuminatis, 4.5-5 mm longis, 1-1.2 mm latis, basi distincte callosis, dorsaliter glabris vel sparse puberulis apice penicillatis. Flores 16-20(-23), homomorphi, corolla nivea, tubo 2.6-3 mm longo, labio exteriore tridentato, 1-1.3 mm longo, revoluto, labio interiore profunde bipartito, 0.5-0.8 mm longo, segmentis convolutis. Achenium subcylindricum vel ampullaceum, erostratum, 3.5-4 mm longum, sparse strigosum, pappi setis niveis, circiter 30, 4.5-5 mm longis, ciliatis.

Erect or reclinate, seldom clambering subshrub 1–1.5 m high. Stem and branches terete, slightly fluted, rather weak, reddish brown, glabrous, eglandular like the rest of the plant. Leaves exstipulate, petiolate; lamina membranaceous, suborbicular-cordate in outline, 4–9.5 cm long, 4.5–10 cm wide, 5–7-lobed, lobes acute, indistinctly serrate or dentate with mucronate, dark teeth, glabrous to subglabrous above, sparsely to moderately villous beneath, veinlet reticulum beneath dark-colored with partial thickenings; petiole 1.5–5(–7) cm long, slightly sheathing at base, glabrous to minutely pu-

berulous. Synflorescence an open, many-headed (heads up to 200 or more) panicle, up to  $25 \times 30$ cm in extent; branches numerous, thin, slightly pubescent; lower bracts similar to ordinary leaves but gradually smaller, upper bracts ovate to elliptic, 1-3 cm long, 0.6-1.4 cm wide, pubescent, margin entire or slightly serrate; peduncles (1-)2-3.6 cm long, slightly pubescent. Involucre turbinate, 4-5 mm long, 4-5.5 mm wide, accessory bracteoles 2-3(-4), narrrowly linear, 2-3 mm long, ciliate at margin; phyllaries ca. 12, 4.5-5 mm long, 1-1.2 mm wide, oblong to oblanceolate, acuminate, distinctly callose at base, glabrous to sparsely pubescent dorsally, pilose apically, green with reddish nerves; paleae similar to phyllaries but thinner, glabrous except pilose apex. Florets 16-20(-23), homomorphous, corolla white, tube 2.6-3 mm long, gradually widening toward mouth, outer lip tridentate, 1-1.3 mm long, revolute, inner lip deeply bifid, 0.5-0.8 mm long, the segments curled, both lips slightly pilose apically. Achenes subcylindric to slightly ampullaceous but without distinct beak, 3.5-4 mm long, 5-ribbed, light brown, with short hyaline hairs; pappus white, bristles ca. 30, 4.5–5 mm long, ciliate.

Jungia gracilis is endemic to the Chachapoyas area in Amazonas. It has been collected in rather dry and open vegetation at 1,600-2,000 m elevation. In all, six collections are known at present.

The closest relative of *J. gracilis* is probably *J. spectabilis* D. Don, known from Ecuador and northern Peru. Both species are exstipulate, eglandular subshrubs; they also have in common the leaf shape, the scarce indumentum, and the conspicuously callose-based phyllaries. But *J. gracilis* is smaller and more slender in all parts, has an extremely widely spaced synflorescence (vs. dense and partially clustered), and the veinlet reticulum beneath is entirely dark-colored (vs. light-colored with black dots).

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