

A NEW SPECIES OF *PEDICULARIS* FROM JALISCO, MEXICO

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In 1975 a paper on the Mexican species of *Pedicularis* (Scrophulariaceae) with "pinnately parted or dissected leaves" appeared in these Contributions (McVaugh & Mellichamp, 1975). As that paper was going through the press it was discovered that a distinctively different, and apparently undescribed, species was represented among a series of collections made in January, 1975 in the little-known part of the Sierra Madre Occidental that parallels the Río de Bolaños on the west, not far from the old mining settlement of Bolaños in northern Jalisco. This particular mountain-range was visited by Hartweg in the fall of 1837, and by J. N. Rose in the fall of 1897, but never before, as far as we are aware, by any botanist in the winter.

The mountains comprise a series of ridges trending generally north and south, and reaching an elevation of more than 2500 m in this area. There are no large streams. The hills support a dry pine-oak forest with some Rocky Mountain affinities (e.g. the pines are heavily parasitized by *Arceuthobium*, a genus otherwise little known in Jalisco). In Hartweg's time access to the Sierra was by what is now called the "Camino Viejo," a road built by the mining company in Bolaños to facilitate the transportation of timber to the mines from the high mountains. Traces of the old road, some paved with cut stone and wide enough for modern lumber-trucks, still persist on the rolling summits, but apparently have all been eroded away on the steep lower slopes.

The *Pedicularis* occurred in abundance in one seemingly restricted locality, in open sunny grassy spots under large pines, in loose gravelly soils. On January 21 at the height of the dry season not many other species were in full flower; some of those flowering, mostly Ericaceae and Compositae, were *Aster moranensis* H.B.K., *Baccharis squarrosa* H.B.K., *Brickellia jaliscensis* McVaugh, *Eupatorium longipes* A. Gray and *E. blepharilepis* Sch. Bip., *Gnaphalium salicifolium* (Bertol.) Sch. Bip., *Arbutus glandulosa* Mart. & Gal., *Arctostaphylos pungens* H.B.K., *Vaccinium stenophyllum* Steud., and *Lamourouxia longiflora* Benth. Of these *Eupatorium blepharilepis* and *Lamourouxia longiflora* apparently are near their southern limits here.

Pedicularis gordonii McVaugh & Koptur, sp. nov.

Fig. 1

Herba perennis 2-7 cm alta, glabra, caudicē lignoso crasso 5-10 mm diametro, foliis rosulatis bipinnatis caulibus, infimis squamiformibus scariosis, floribus e foliorum vix reductorum axillis ortis; folia subroseo-purpurea, ambitu lanceolata vel oblonga, (3-) 7-11 cm longa apice acuta, (0.5-) 1.5-2.5 cm lata basi truncata, pinnis 12-18 obovatis saepe dentatis, a laminae medio ad apicem decrescentes, dentibus (pinnulis) 0.3-2.5 mm longis, aliqui eborino-mucronatis; petioli (1-) 4-6 cm longi, marginati, ciliati; flores (5-) 12-16 in axillis superioribus, pedicellis 4-6 mm longis appressis; calyx zygomorphus, campanulatus, 7-9 mm longus, tubo 4-5 mm longo, lobis 5 acuminatis, abaxiali longiore 3-3.5 mm longo, lateralibus binis, sinu acuto separatis;

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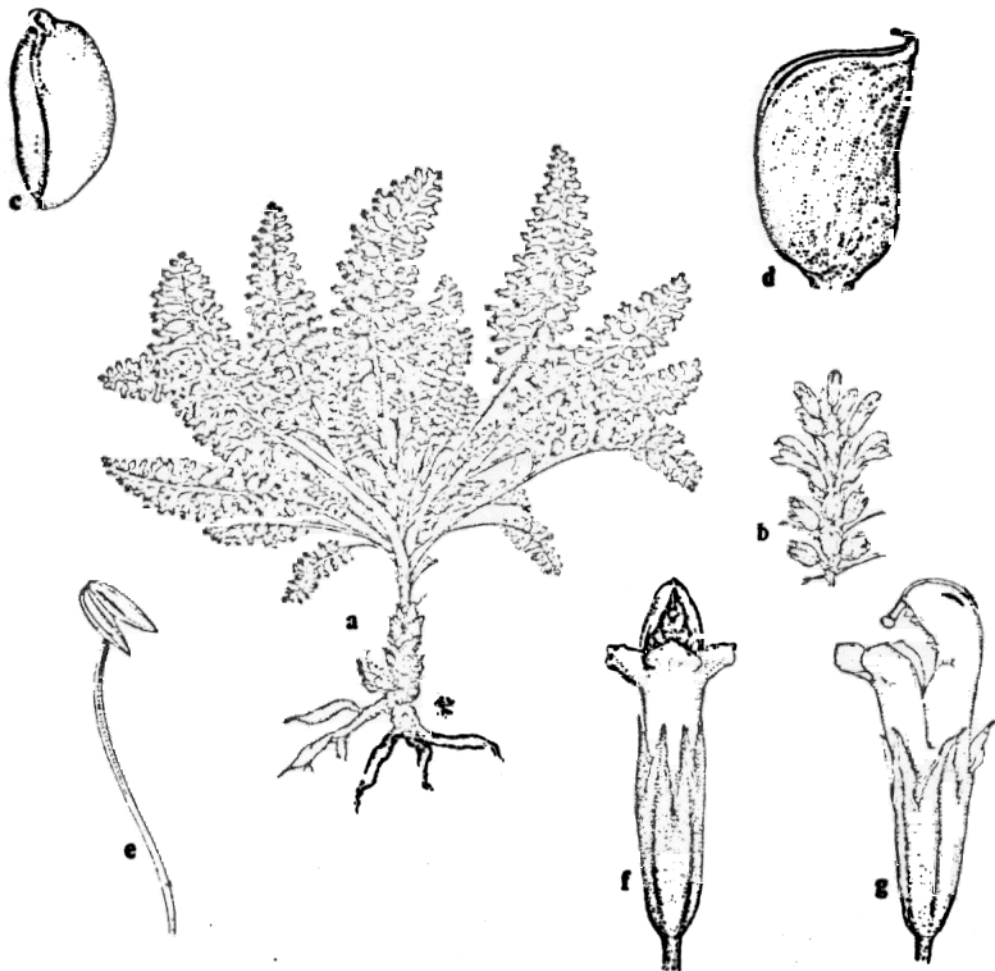


FIG. 1. *Pedicularis gordonii*, drawn from the type by Karin Douthit. a, habit $\times 0.5$; b, fruiting inflorescence $\times 0.5$; c, seed $\times 7.5$; d, capsule $\times 3.5$; e, stamen $\times 5$; f, g, flower, abaxial and lateral views $\times 2.5$.

corolla 13–15 mm longa, alba, apicem versus rosea; galea 6–8 mm longa, compressa, oblonga, 2.8–3.5 mm lata; margo superior (adaxialis) convexus, apice abrupte rotundatus recurvatusque, exappendiculatus; corollae labium inferius leviter deflexum, quam galea multo brevior, 3-lobum, lobis intus ad basin tomentosus; stamina 4, 10–12 mm longa didynama, ad faucem infra bases corollae loborum 3.2–3.9 mm adnata; staminodium nullum; antherae 2–2.5 mm longae, in galeam inclusae, loculis basi acutis; stylus 7–10 mm longus, apice recurvatus exsertus; ovula 10–20; capsula glabra, asymmetrica, 6–7 mm longa, 3–4 mm lata, margine abaxiali recta, adaxiali convexa; semina 2 mm longa, 1 mm lata, laeviuscula oblonga.

Species in honorem diximus Gordon Duane McPherson (1947–), amici et species hujus repertoris, qui plantas mexicanas plurimas collectavit.

The plants as seen in the field appear to be acaulescent, but the leaves are in fact cauline, the lowermost consisting of imbricated light brown papery scales 5–10 mm long and 2–5 mm wide; the petioles are usually more than half as long as the blades; the acute sinuses between the

lateral calyx-lobes are about 3 mm deep, and the abaxial sinus a little deeper; the seeds (slightly immature) are essentially smooth, apparently with a narrow unilateral crest.

Known only from the type-collection, from the Sierra Madre ca 12–15 km (airline) SW of Bolaños, Jalisco, near the summits along the "Camino Viejo" to Berbería, elevation 2400–2550 m, 21 January 1975, *McVaugh 25882* (Holotype and Isotype, MICH).

Apparently no similar species is known from Mexico. In habit and in many superficial characters, *P. gordonii* resembles *P. centranthera* A. Gray and *P. semibarbata* A. Gray, both of which are species of the southwestern United States. The former, in which both flowers and fruit are considerably larger than those of *P. gordonii*, has the anthers 4 mm long including the long caudate tips. In *P. semibarbata*, which is primarily Californian, the flowers are scarcely larger than those of *P. gordonii*, and the anthers lack the long tails of *P. centranthera* but the corolla is externally short-pilose, and inflorescence as a whole tends to be pilose.

LITERATURE CITED

- McVaugh, Rogers, & T. Lawrence Mellichamp. Mexican species of *Pedicularis* (Scrophulariaceae) hitherto confused with *P. tripinnata* Mart. & Gal. Contr. Univ. Michigan Herb. 11: 57–63. 1975.