

A NEW RADIATE HYMENOPAPPUS FROM MEXICO

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WHILE on a collecting trip in August, 1956, which, in Mexico, extended from Ciudad Juarez to Durango to Mazatlán to Nogales, a species of *Hymenopappus* was found in grassland 11 miles west of Durango. It is a quite distinct species comparable only with *H. biennis* Turner,¹ of southern New Mexico and the adjacent Guadalupe Mountains of Texas, and with *H. radiatus* Rose, an endemic of southern Arizona.

The receptacle is naked. There are 15–25 white rays, 5–8 mm. long and 3–4 mm. wide, whereas *H. biennis*, its nearest relative, has 8 rays ca. 15 mm. long and 6–7 mm. wide, and *H. radiatus* has 8 rays which are ca. 15 mm. long and 5–10 mm. wide. The new species has 130–150 disc flowers which are about 3 mm. long, with a glabrous tube ca. 1.2 mm. long, a funnellform throat ca. 1 mm. long, and lobes ca. 0.8 mm. long, with glabrous, 4-sided achenes (which may have a few appressed or ascending hairs on the margins) 2.5–3 mm. long, and with pappus-scales 0.6–1.0 mm. long, oblong or oblong-spathulate, blunt and incurved at their apices. Contrastingly, *H. biennis* has 40–60 disc flowers, 3–3.5 mm. long, a densely glandular tube 1.5 mm. long, and a campanulate throat 1.5–2 mm. long, achenes 4 mm. long, and pappus obsolete to 0.2 mm. long. *H. radiatus* has a similar number of disc flowers with a campanulate throat, and pappus-scales 0.4–0.6 mm. long. The principal involucre bracts of the new species are 3–4 mm. long, lanceolate-ovate with attenuate tips; the heads are on peduncles 0.5–1 cm. long. In *H. biennis* the involucre bracts are 5–8 mm. long with heads on peduncles 1–6 cm. long, while in *H. radiatus* the bracts are 7–8 mm. long with heads on peduncles 6–8 cm. long. The stem is branched above, the branches being 10–20 cm. long, rebranched 2 or 3 times near their apices, with each of these branchlets bearing 3–5 heads. The stems and branches are leafy, the leaves somewhat reduced upward and bipinnately divided into oblongish segments. The plants are covered to a varying extent with short curled or curved hairs, in addition

¹ Turner, Billie L. *A Cytotaxonomic Study of the Genus Hymenopappus*. RHODORA 58. 1956.

to which there are prominent stipitate-glandular (knobbed) hairs. The latter are least evident on the older parts, and most prominent on the younger parts of the stems, on the leaves and on the involucre bracts. On some of the leaf segments only the glandular hairs are evident. Since the stipitate glands are not characteristic of any other species of this genus, the following name is given.

Hymenopappus glandulopubescens Waterfall, sp. nov. Planta 75–90 cm. alta, stipitato-glandulosa; caulibus foliatis, ramosis; foliis bipinnatis, segmentis oblongo-ovatis vel linearibus, stipitato-glandulosis; pedunculis 5–10 mm. longis; capitulis radiatis; involucri squamis 3–4 mm. longis, lanceolato-ovatis, attenuatis; ligulis 15–25, albis, 5–8 mm. longis, 3–4 mm. latis; floribus disci 130–150, infundibuliformibus, 3 mm. longis; acheniis glabris, 4-angulatis, 2.5–3 mm. longis; pappi paleis 8, oblongis vel spathulato-oblongis, 0.6–1 mm. longis.

The TYPE of *H. glandulopubescens* is *Waterfall 12576*, grassy flat, 11 miles west of Durango, Durango, Mexico, Aug. 10, 1956 in the Herbarium of Okla. A. & M. College. An ISOTYPE is in the Gray Herbarium of Harvard University.

This is the only radiate species of *Hymenopappus* known from Mexico. It is widely separated from its nearest radiate relative, *H. biennis* Turner, of the mountains of southern New Mexico and adjacent southwestern Texas. It is the only species of the genus known from Durango, the nearest ones being *H. flavomarginatus* Johnston from Coahuila, Nuevo León and San Luis Potosí, and representatives of *H. mexicanus* Gray from San Luis Potosí, or, about equidistant northward, the same species from northern Chihuahua (*ibid.*: 212). This brings to a total of 6 the number of species known from Mexico, the others being *H. scabiosaeus* var. *corymbosus* (T. & G.) Turner and *H. flavescens* var. *cano-tomentosus* Gray, both of northern Chihuahua with their principal area of distribution to the northward (*ibid.*: 298), and *H. filifolius* var. *lugens* (Greene) Jepson from northern Baja California (*ibid.*: 231).—DEPT. OF BOTANY AND THE RESEARCH FOUNDATION, OKLAHOMA A. & M. COLLEGE, STILLWATER, OKLAHOMA.



Waterfall, U. T. 1957. "A NEW RADIATE HYMENOPAPPUS FROM MEXICO."
Rhodora 59, 96–97.

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