

**A NEW SPECIES OF *MENTZELIA* (LOASACEAE) FROM
NORTHEASTERN MEXICO**

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ABSTRACT

Mentzelia pattersonii B. L. Turner, **sp. nov.**, is described from northeastern Mexico where it occurs in the states of Coahuila, Nuevo Leon, and Tamaulipas. It is closely related to the widespread *M. oligosperma* Nutt. ex Sims and the relatively localized *M. pachyrhiza* I. M. Johnst., but differs from both in having larger flowers and markedly pedicellate fruits. A map showing the distribution of these several species is provided.

KEY WORDS: Loasaceae, *Mentzelia*, Mexico, Coahuila, Nuevo Leon, Tamaulipas

A broad overview of the genus *Mentzelia* (Turner, in prep.), this prompted by the preliminary taxonomic studies of Hemphill (1995), has revealed the following novelty:

Mentzelia pattersonii* B. L. Turner, **sp. nov.*

Similis *M. oligospermae* sed floribus majoribus, et capsulis valde stipuliferis (vice capsularum sessilium).

Suffruticose much-branched tuberous herbs to 60 cm high. Stems moderately pubescent with stiff pilose hairs 0.8-1.0 mm high, beneath these an array of much shorter, more numerous hairs 0.1-0.2 mm high; with age the outer epidermal layers turning white and peeling. Mid-stem leaves ovate to somewhat deltoid in outline, 3-7 cm long, 1.0-3.5

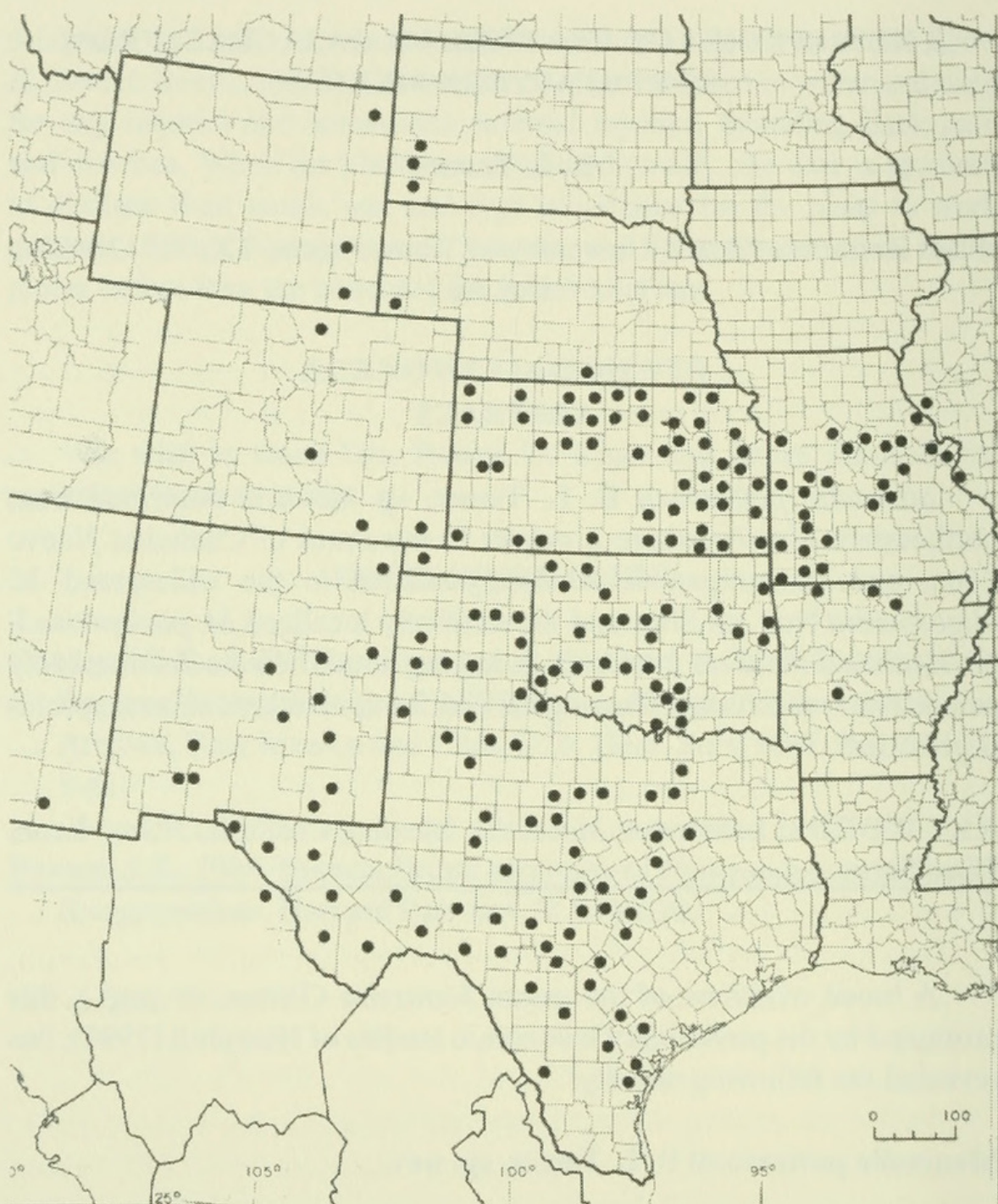


Fig. 1. Distribution of *Mentzelia oligosperma*.

cm wide, their margins irregularly lobed and/or dentate; petioles 3-10 mm long. Flowers pedicellate, axillary; sepals linear-lanceolate, 10-12 mm long, ca. 1 mm wide at the base; petals orange, oblanceolate, 15-20 mm long, 8-10 mm wide; stamens numerous, the outer whorl of ca. 10 stamens up to 18 mm long, those of the inner whorls mostly 8-12

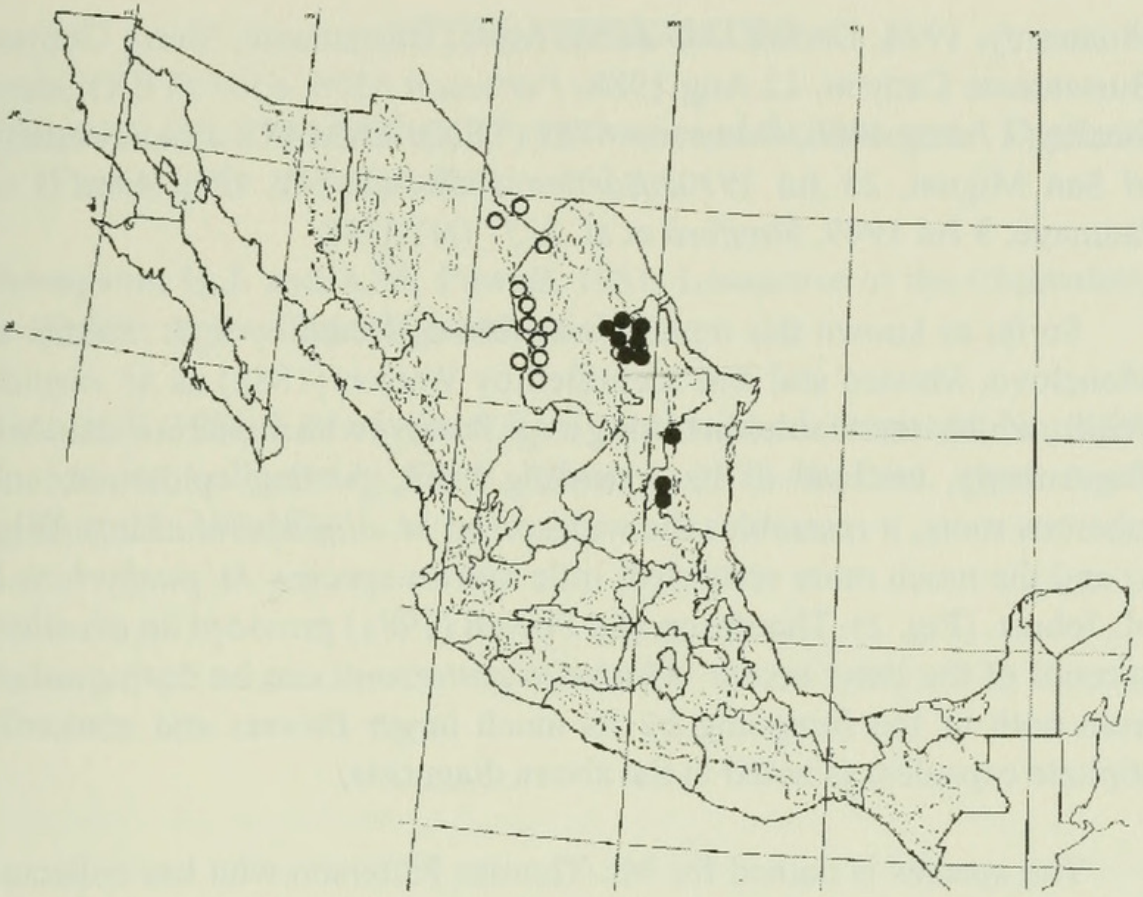


Fig. 2. Distribution of *Mentzelia pachyrrhiza* (circles) and *M. pattersonii* (dots).

mm long; anthers yellow, 0.5-0.8 mm long. Capsules mostly decidedly stipitate (rarely both sessile and pedicellate capsules on the same plant, the latter predominating), the stipes mostly 2-8 mm long; seeds and/or ovules 1-2 per capsule.

TYPE: **MEXICO. NUEVO LEON:** Mpio. Lampazos de Naranjo, Pichacho Carrizal, lower slopes near mines monzaite, 950-1250, 19 Aug 1988, *Patterson 6823* (Holotype: TEX).

ADDITIONAL SPECIMENS EXAMINED: **MEXICO. COAHUILA:** ca. 10 mi S of Sabinas Hidalgo, 5 Sep 1978, *D'Arcy 11764* (MO); Monclovo, 23-31 Aug 180, *Palmer 352* (NY); 70 mi N of Saltillo along hiway 57, 3 Jun 1966, *Wilson 11380* (TEX); between Hipolito and Sacramento along a dry creek bed in El Desierto de la Payla, 15 Jun 1936, *Wynd & Mueller 73* (ARIZ, GH, TEX). **NUEVO LEON:**

Monterrey, 1924, *Orcutt 1149* (US); Mpio. Bustamante, Sierra Gomaz, Bustamante Canyon, 12 Aug 1988, *Patterson 6506, 6507* (TEX); same locality, 17 Aug 1988, *Patterson 6789* (TEX). **TAMAULIPAS:** vicinity of San Miguel, 25 Jul 1930, *Bartlett 10584* (F, NY, US); 4 mi S of Jaumave, 3 Jul 1949, *Stanford et al. 2251* (NY,US).

So far as known this novelty was first collected by E. J. Palmer at Monclovo, Mexico and was identified by Watson (1882) as *M. hispida* Willd., which it resembles in having large flowers with numerous stamens. Vegetatively, because of its sprawling habit, peeling epidermis, and tuberous roots, it resembles the widespread *M. oligosperma* Sims. (Fig. 1) and the much more restricted, little known species, *M. pachyrhiza* I. M. Johnst. (Fig. 2). Thompson and Powell (1981) provided an excellent account of the latter taxon. *Mentzelia pattersonii* can be distinguished from both of the foregoing by its much larger flowers and markedly stipitate capsules, as noted in the above diagnosis.

The species is named for Mr. Thomas Patterson who has collected several sheets, including type material at my request. Tom obtained a M.S. degree under my supervision, having produced a revisionary study of the genus *Conoclinium* DC. (Asteraceae).

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