

LECTOTYPIFICATION OF *MENTZELIA TEXANA* AND *M. LINDHEIMERI* (LOASACEAE) WITH AN ASSESSMENT OF THEIR BIOLOGICAL STATUS

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In their monograph of the family Loasaceae, Urban and Gilg (1900) treated the genus *Mentzelia* as having 36 taxa, two of these, *M. lindheimeri* and *M. texana*, proposed as new. The purpose of the present paper is to typify each and provide an evaluation of their biologic status.

Mentzelia lindheimeri Urban & Gilg, Monogr. Loas. 54. 1900. TYPE: U.S.A. TEXAS: UVALDE CO.: Jun 1885, *Reverchon 1650* (LECTOTYPE, here designated: MO!; ISOLECTOTYPE: US!).

Urban and Gilg in their protologue of this species cited five specimens gathered by five different collectors, three of these from Texas, two from northern Mexico. All of the specimens cited by these two authors were said to be from European herbaria, namely "Berol., Boisser-Barbey, Canby, Lips., Paris., J.D. Smith, Vindobon." I have examined duplicates of all of the sheets concerned and select the following from among these as adequate lectotypes: U.S.A. Texas: Uvalde Co.: Jun 1885, *Reverchon 1650* (lectotype: MO!; isolectotype: US!). Darlington (1934) also listed this collection as belonging to his concept of *M. lindheimeri*. Urban and Gilg listed the locality of *Reverchon 1650* as "in planitiebus arenosus montis Upper Guadalupe" but the locality on the lectotype is that given here.

Ideally, a lectotype should be selected from among the specimens examined by its original author or authors, but the European collections cited by Urban and Gilg, who worked out of the herbarium at Berlin (B), were unavailable to me. Because of this, I find it appropriate (as permissible under Art 9.10 of the current Code), to designate lectotypes from American syntypes. I have also applied this same reasoning in the typification of the following taxon.

Mentzelia texana Urban & Gilg, Monogr. Loas. 52. 1900. Without specific locality, May–Oct, 1849, *Wright 210* (LECTOTYPE, here designated: GH; ISOLECTOTYPES: GH, US).

In the protologue of this taxon, which I consider to be a synonym of *M. lindheimeri*, Urban and Gilg noted that, so far as known, it was confined to

Texas, citing three specimens: *Drummond 91* (from sandy soils between Victoria and Gonzales, Texas; *Trecul 1220* (dry sites between Turkey Creek and the San Pedro [Devils River]; and *Wright 210* (in part, mixed with *M. oligosperma* Nutt.). They also noted that material of their new species, presumably those cited, were based upon specimens “in herb. Berol., Boisser-Barbey, Candolle, Delessert, Kew, Paris., Vindobon.”

Darlington (1934) retained the species, citing two of the above mentioned type elements (*Drummond 202* and *Wright 202*). She also cited three additional specimens from the state of Pueblo, Mexico. I take the latter to be misidentifications of the more southern *M. hispida* Willd., or some close relative having relatively short petals. Correll and Johnston (1970), following Darlington, retained *M. texana* in their treatment of *Mentzelia* for the flora of Texas.

In a recent study of *Mentzelia* for Texas I have examined duplicates of two of the three collections cited by Urban and Gilg in their protologue (*Drummond 91* and *Wright 210*) and have selected *Wright 210* as an appropriate element for lectotypification, largely because duplicate specimens of this collection are currently housed at GH! and US!

The type locality of *M. texana* is moot. According to label data on *Wright 210* (US!) the specimen concerned was collected “May–Oct, 1849.” But other than this time span, no other information relating to its collection is given. According to Johnston (1940), on June 28, 1849, Charles Wright collected an unnamed species of *Mentzelia* (Wright’s field number 541) on the hills of Turkey Creek in western Uvalde County. Since Gray often renumbered and/or combined Wright’s collections (cf. Johnston 1940), it is likely that *Wright 210* is the number assigned by Gray to Wright’s field collection 541; at least I encountered no Wright collection so numbered in the present study.

The positioning of *M. texana* in synonymy with the simultaneously published *M. lindheimeri* is based upon the study of numerous specimens from ten or more herbaria, and field work over a number of years in the areas concerned. Urban and Gilg, in their key to species, distinguished *M. texana* from *M. lindheimeri* by its shorter petals (7–9 mm vs. 12–14 mm) and sessile or shortly pedicellate fruits (vs always clearly pedicellate). I find these two quantitative characters to be quite variable within the *M. lindheimeri* complex and have little hesitancy in reducing *M. texana* to synonymy. Finally, it should be noted that Darlington (1934) listed the lectotype of *M. texana* (*Wright 210*) among his “Specimens examined:” as a sheet of *M. lindheimeri*, which agrees with the present authors disposition.

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