# TWO NEW SPECIES OF LAMOUROUXIA (SCROPHULARIACEAE) FROM MEXICO

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#### ABSTRACT

Two new species of Lamourouxia are described from México: L. paneroi B.L. Turner, from Cerro Grande (Quiexobra), Oaxaca and L. zimapana B.L. Turner, from near Zimapan, Hidalgo. Both are closely related to L. pringlei B.L. Robins. & Greenm., but each differs by a number of characters, most notably vestiture. A key to the several taxa is devised.

KEY WORDS: Scrophulariaceae, Lamourouxia, México

Identification of miscellaneous species from México has brought to the fore the following new species of Lamourouxia. This was made easier by the excellent treatment accorded the genus by Ernst (1972). Since both of the new taxa are closely related to L. pringlei, I have provided the following key to distinguish between them.

Lamourouxia paneroi B.L. Turner, sp. nov. TYPE: MEXICO. Oaxaca: 7 km E of the turnoff to Santo Domingo Ozolotepec on road to San Juan Ozolotepec. Rocky exposed area near summit of Cerro Grande (Quiexobra), dominated by Ericaceae shrubs, Nolina and pines, occasional, 3700 m, 11 Dec 1992, José L. Panero 3078, with Youngdong Kim, & Elizabeth Manrique (HOLOTYPE: MEXU; Isotypes: TEX!, to be distributed).

Lamourouxiae pringlei B.L. Robins. & Greenm. similis sed floribus in pedicellis longioribus et vestimento caulium ac calycum dense brevi-pilosulo (vs. glandulosi-pilosulo) differt.

Compact shrubs to 1.5 m high. Stems terete, purplish, densely white-pilosulous, the vestiture ca. 0.25 mm high. Leaves short and numerous, reflexed or spreading, thick, longer than the internodes, mostly 7-10 mm long, 2-3 mm wide; petioles 0.5-1.0 mm long; blades narrowly elliptic to elliptic-oblanceolate, pinnately nervate beneath, minutely hispidulous on both surfaces, the margins crenulate to nearly entire. Flowers 5-11, arranged in ascending secund or subsecund spikes at the apices of terminal or lateral branches, the ultimate pedicels 1-3 mm long. Fruiting calyx 9-10 mm long, 4-5 mm wide, minutely pilosulous throughout, eglandular, the lobes 2-4 mm long, acute, corollas 4-5 cm long, 1.0-1.2 cm wide (pressed), deep red, the upper lip 12-15 mm long, the lower lip 9-12 mm long, 3-lobed. Stamens 4, equal, exserted for 1-3 mm at maturity. Style hispidulous throughout, ca. as long as the corollas, the stigma capitate. Capsule (immature) globoid, glabrous.

Cerro Quiexobra is an isolated massif approximately 3800 m high located in southcentral Oaxaca at about  $96^{\circ}15'W \times 16^{\circ}13'N$ . It has only recently received botanical exploration, most notably by Dr. Andrew McDonald who collected numerous new taxa along its upper slopes (e.g., Turner 1990).

Lamourouxia paneroi is clearly quite closely related to L. pringlei B.L. Robins. & Greenm. It differs from the latter in having shorter internodes, flowers on shorter pedicels, and eglandular vestiture, otherwise they are quite similar. So far as known L. pringlei is confined to southern Puebla and closely adjacent Oaxaca.

It is a pleasure to name this strikingly beautiful species for its principal collector, Dr. José Panero, postdoctoral botanist at TEX working in the DNA-oriented laboratory of Dr. R. Jansen.

Lamourouxia zimapana B.L. Turner, sp. nov. TYPE: MEXICO. Hidalgo: Barranca de San Vicente, near km 238 on highway between Zimapan and Jacala, rich soil on open limestone ledges and streamside thickets, 1800-2000 m, 9 Aug 1948, H.E. Moore, Jr. 4429, with C.E. Wood, Jr. (HOLOTYPE: TEX!; Isotype: BH!).

Lamourouxiae pringlei B.L. Robins. & Greenm. similis sed caulibus, calycibus, ac pedicellis omnino brevi-pilosulis (vs. glandulosi-pubescentibus) et foliis tenuibus oblanceolatisque in paginis inferioribus pinnatinervibus (vs. crassis plerumque ellipticis vel ellipticilanceolatisque nervatura vix vibili in paginis inferioribus) differt.

Rather weak-stemmed suffruticose herbs or shrublets to 80 cm high. Stems terete, reddish, densely short pilosulous with eglandular hairs. Leaves relatively thin, mostly 15-25 mm long, 5-7 mm wide; petioles mostly 0.5-2.0 mm long; blades elliptic-oblanceolate, 3-5 dentate on each side, or nearly entire, weakly pinnately nervate, moderately pubescent on both surfaces, the apices rounded. Flowers 10-20, erect, arranged in elongate leafy terminal racemes, the ultimate pedicels mostly 4-6 mm long. Calyx 10-12 mm long, 4-5 mm wide, pilosulous throughout, eglandular, the lobes 3-5 mm long, mostly with obtuse or rounded apices. Corollas "orange to red," ca. 4 cm long, 0.8-1.0 cm wide (pressed), the upper lip ca. 12 mm long, the lower ca. 10 mm long, 3-lobed. Stamens 4, subequal, scarcely exserted. Style ca. as long as the corolla, minutely hispidulous throughout. Capsule (immature) ovate, glabrous.

Ernst annotated type material of the present taxon as Lamourouxia pringlei. The latter taxon possesses a densely glandular-puberulous vestiture on the stems, pedicels and calyces, whilst L. zimapana has a strictly short-pilosulous vestiture. Ernst (1972) failed to include the latter character in his description of L. pringlei, although he notes that L. pringlei had two centers of distribution, a Hidalgo center and that of southern Puebla and adjacent Oaxaca, from whence the type. Ernst did call attention to several leaf characters which he thought might distinguish the Hidalgo populations from those of Oaxaca, namely thinner, more oblanceolate, leaves with margins mostly dentate (vs. thicker, more elliptical leaves with margins entire to merely crenate).

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