

TWO NEW SPECIES OF *POLIOMINTHA* (LAMIACEAE) FROM NORTHEASTERN MEXICO

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ABSTRACT

Two new species of *Poliomintha*, *P. bustamanta* B.L. Turner and *P. dendritica* B.L. Turner are described from Nuevo León and Coahuila, México, respectively. Both species belong to the sect. *Saturejoides* and both are closely related to *P. madreensis*. A key to the five species which compose the sect. *Saturejoides* is constructed, and their distributions in México are figured.

KEY WORDS: Lamiaceae, *Poliomintha*, México

Routine identification of plants from northern México has revealed the following novelties.

Poliomintha bustamanta B.L. Turner, *sp. nov.* TYPE: MEXICO. Nuevo León: Bustamante, along mountain road to caves outside of Bustamante, 23 Jul 1988, *Charles D. Peterson 1312* (HOLOTYPE: TEX).

Poliominthae madreensi Henr. similis sed paginis foliorum saepissime glabris (vs. glabrescentibus), calycibus 10.0-10.5 mm longis (vs. 12-14 mm), et calyce orificio annulo manifesto trichomatibus carenti (vs. annulus praesens) differt.

Brittle stemmed shrublets to 1 m (?) high. Stems tan, 4 sided, minutely reflexed hispidulous. Leaves ovate lanceolate to elliptic lanceolate, glabrous (except for occasional hispid hairs along the margins) mostly 10-14 mm long, 3-5 mm wide; petioles 2-3 mm long, tapering into the blade; blades very weakly pinnately nervate, if at all, densely glandular punctate on both surfaces, the margins entire. Flowers single in the upper leaf axils, the pedicels 1-3 mm long, minutely hispidulous. Calyx cylindric, 12-14 mm long, ca. 2 mm wide,

weakly 12-14 ribbed, glandular atomiferous throughout and very sparsely short pilose, the narrowly triangular lobes convergent, 2-3 mm long, pilose within, $\pm$ alike, the hairs appressed and not forming a distinct annulus (a ring of concentrated hairs at the orifice of the calyx). Corollas zygomorphic, 3-4 cm long, puberulent throughout, pale lavender (?), the upper lip ca. 2 mm long, the lower lip trilobed, ca. 4 mm long; fruit immature.

Irving (1972) recognized four species in his revision of *Poliomintha*: *P. longiflora* A. Gray and *P. glabrescens* A. Gray, belonging to the sect. *Saturejoides*; and *P. conjunctrix* Epling & Wiggins and *P. incana* (Torr.) A. Gray, belonging to the sect. *Poliomintha*. Henrickson (1979) added a fifth species, *P. madrensis* Henr., closely related to *P. longiflora*. The present species is closely related to *P. madrensis* but is readily distinguished by its glabrous leaves (from the start, not at all having young leaves with branched hairs), with longer petioles (ca. 1 mm long vs. 2-3 mm), longer calyces (12-14 mm long vs. 10.0-10.5 mm) with the annulus indistinct or absent.

Poliomintha dendritica B.L. Turner, *sp. nov.* TYPE: MEXICO. Coahuila: 1.5 km NE Rancho de San Marcos, western edge of the Sierra de San Marcos (26° 49'N, 102° 07'-08'W), 750-1400 m, occurring on limestone with *Agave lecheguilla*, etc., 12 Jun 1972, F. Chiang, T. Wendt, & M.C. Johnston 7676 (HOLOTYPE: TEX!).

Poliominthae madrensi Henr. similis sed foliis persistente sigillatim pubescentibus trichomatibus ramosis (vs. glabris), calycibus 6-7 mm longis annulo carentibus (vs. 10.0-10.5 mm longis annulo instructis, et corollis ca. 14 mm longis lavandulis (vs. 30-35 mm longis purpureis) differt.

Much branched brittle stemmed shrublet to 1 m (?) high. Stems 4 sided, tan, markedly pubescent with mostly dendritic hairs. Leaves mostly 7-12 mm long, 3.5-5.0 mm wide; petioles ca. 1 mm long; blades elliptic, widest at or about the middle, glandular punctate, persistently pubescent on both surfaces with mostly dendritic hairs, the margins entire. Flowers single and axillary along the upper branches. Calyces cylindric, 6-7 mm long, 12-14 ribbed, glandular punctate, pubescent throughout with branched hairs, the narrowly triangular lobes ca. 2 mm long, convergent, pilose within, $\pm$ alike, the hairs not forming a distinct annulus. Corollas ca. 14 mm long, strongly zygomorphic, the tube ca. 8 mm long, pilose, pale lavender (?), the upper lip bilobed, ca. 2 mm long, the lower lip ca. 3 mm long, markedly trilobed, purple maculate along the lower throat. Anthers ca. 1 mm long, deep pink, widely divaricate. Fruits immature.

This taxon, because of its branched (dendritic) hairs, is presumably related to *Poliomintha madrensis*. Unlike the latter, however, the hairs are more

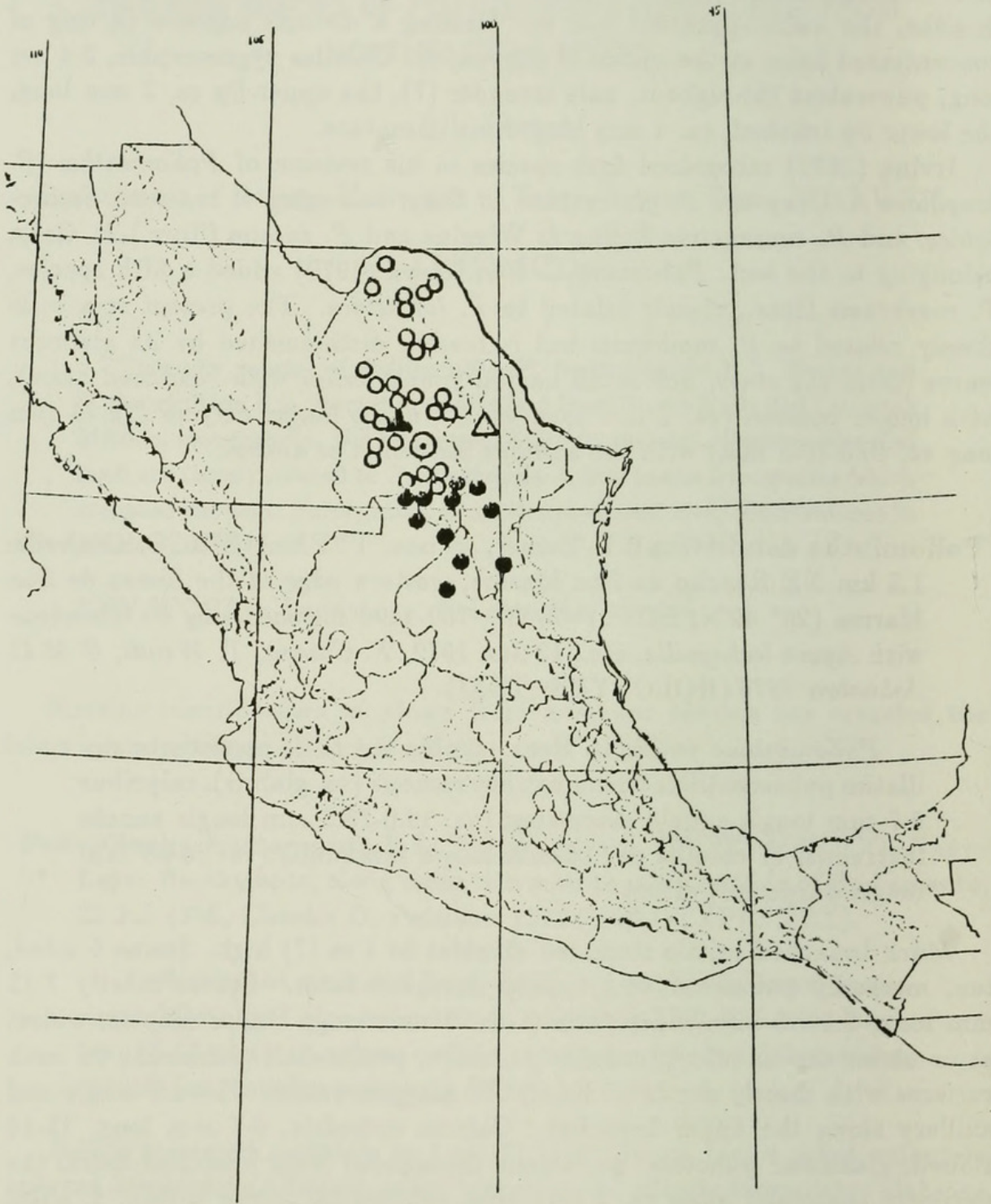


Figure 1. Distribution of *Poliomintha* sect. *Saturejoides* in México: *P. bustamanta* (open triangle), *P. dendritica* (target), *P. glabrescens* (open circles), *P. madreensis* (closed triangle), *P. longiflora* (closed circle).

numerous and persistent, the calyces smaller (6-7 mm long vs. 10.0-10.5 mm) and without a well defined annulus, the corollas pale lavender and only ca. 14 mm long (vs. purple and 30-35 mm long).

The five species belonging to the sect. *Saturejoides* can be readily identified by the following couplets:

1. Flowers arranged in axillary, 6 flowered cymes; corollas 13-15 mm long. .
 *P. glabrescens*
1. Flowers solitary in the leaf axils; corollas 15-40 mm long. (2)
 2. Young leaves glabrous from the start (except for a few minute marginal hispid hairs); calyces 12-14 mm long; annulus not developed. *P. bustamanta*
 2. Young leaves pubescent across their faces from the start; calyces 7-12 mm long; annulus well developed or absent. (3)
3. Annulus well developed; leaves glabrescent; corollas purple. *P. madrensis*
3. Annulus poorly defined or absent; leaves persistently pubescent; corollas pale lavender or orange red. (4)
 4. Foliage with dendritic hairs; corollas ca. 15 mm long. *P. dendritica*
 4. Foliage with appressed simple hairs; corollas 30-40 mm long.
 *P. longiflora*

Distributions of the above taxa are shown in Figure 1. These are based upon records given by Irving (1972) and collections at LL, TEX assembled since.

ACKNOWLEDGMENTS

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LITERATURE CITED

- Irving, R. 1972. A revision of the genus *Poliomintha*. Sida 5:8-22.
- Henrickson, J. 1982. A new species of *Poliomintha* (Lamiaceae) from the Chihuahuan Desert Region. Sida 9:290-292.



Turner, B. L. 1993. "Two new species of *Poliomintha* (Lamiaceae) from northeastern Mexico." *Phytologia* 74, 164–167.

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