

A NEW SPECIES OF *VERBESINA* (ASTERACEAE: HELIANTHEAE) FROM NUEVO LEON, MEXICO

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ABSTRACT

Verbesina tamaunuevana B.L. Turner, *spec. nov.*, is described from southern Nuevo León, México. It is closely related to the gypsophilic taxa, *V. aramberrana* B.L. Turner, *V. hintoniorum* B.L. Turner and *V. zaragosana* B.L. Turner, but is readily distinguished from all of these in having markedly bicolored leaves. Additionally, so far as known, it does not occur in gypseous soils. A key to these several taxa is provided, along with a photograph of the type.

KEY WORDS: *Verbesina*, Asteraceae, Heliantheae, México

Preparation of a taxonomic treatment of the Comps of México (Turner 1996, 1997) has occasioned the present paper.

Verbesina tamaunuevana B.L. Turner, *spec. nov.* Figure 1. TYPE: MEXICO, Nuevo León: Mpio. Dr. Arroyo, below San Josecito, roadside chaparral of oak, cedar and *Comarostaphylis*, 2000 m, 3 Oct 1998, *Hinton et al.* 27252 (HOLOTYPE: TEX; Isotype: private collection of Hinton family).

Similis *V. hintoniorum* B.L. Turner sed caulibus glandulosae pubescentibus et foliis valde bicoloribus.

Perennial rhizomatous herbs 30-40 cm high. Stems purplish, densely and minutely glandular-pubescent, the vestiture ca. 0.2 mm high, among this a smattering of much longer erect to recurved eglandular hairs 0.4-1.0 mm high. Leaves alternate



Fig.1 *Verbesina arroyoana*(holotype)

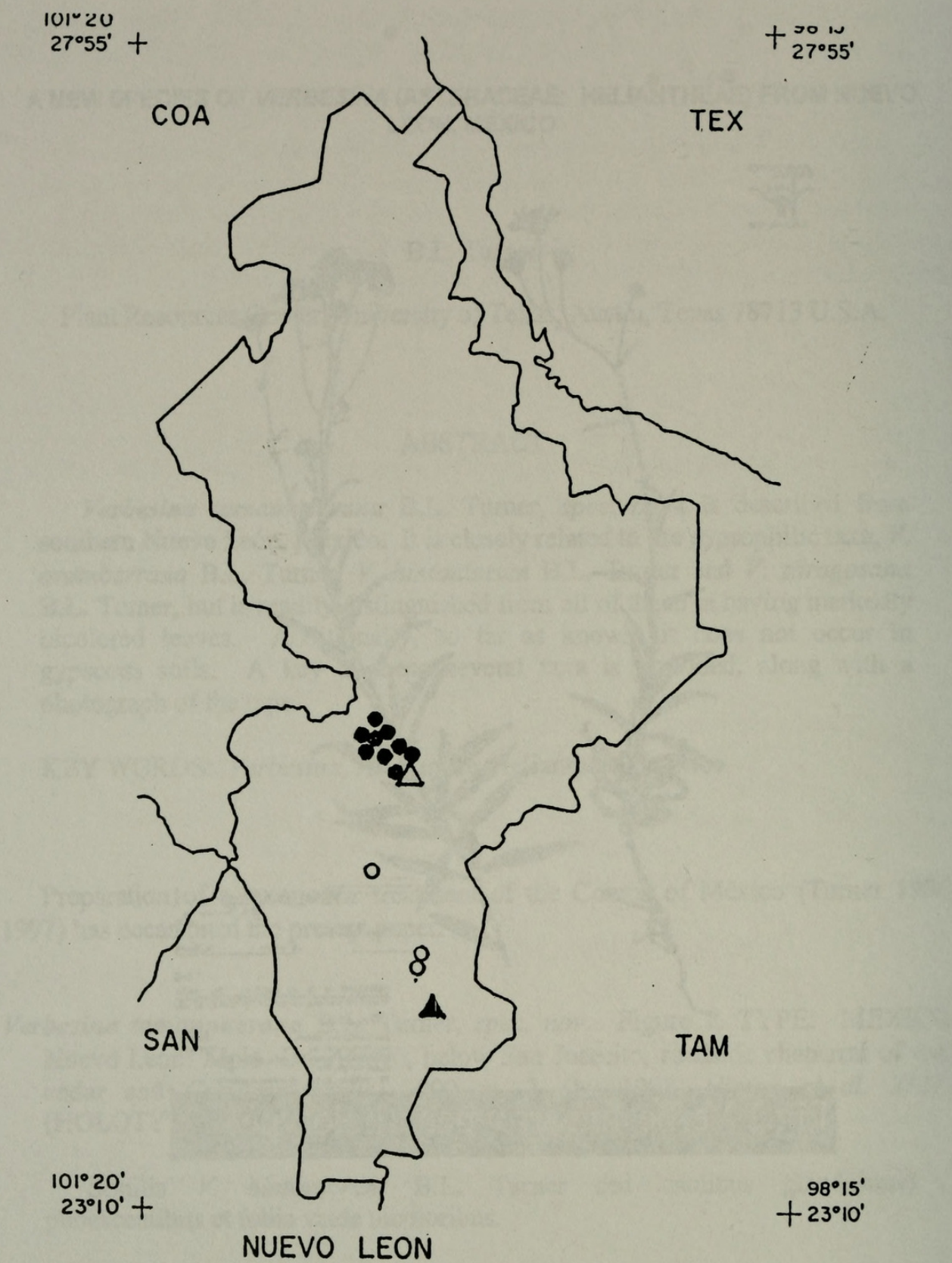


Figure 2. Distribution of *Verbesina tamaunuevana* and cohorts (*V. hintoniorum* closed circle; *V. zaragosana* (open circle); *V. aramberrana* (closed triangle); *V. tamaunuevana* (open triangle).

throughout, lanceolate, markedly bicolored, sessile or nearly so, gradually reduced upwards, the larger blades 3.5-5.0 cm long, 0.5-0.7 cm wide; lower surfaces densely pubescent with a tangle of ashy-white hairs; upper surfaces dark green, markedly rugose, evenly pubescent with stiff, broad-based, erect to incurved hairs 0.5-1.0 mm long. Ultimate peduncles of the mature heads 3-6 cm long, pubescent like the stems. Involucres campanulate, ca. 6 mm high, 10-12 mm across, the bracts 2-3 seriate, linear, subequal. Receptacle conical, bracteate, ca. 3 mm high, 1.5 mm across, the bracts lanceolate, 5-6 mm long, glabrous or nearly so. Ray florets ca. 13, pistillate, fertile; ligules yellow, 6-8 nervate, 8-11 mm long, 4-6 mm wide. Disk florets numerous (80 or more); corollas yellow, 5-lobed, ca. 3.5 mm long; tube ca. 1.5 mm long, sparsely hirsute; throat ca. 2 mm long; lobes deltoid, ca. 0.7 mm long. Achenes ca. 5 mm long, 3 mm wide (at apex), markedly winged; pappus of 2 fragile scales, each ca. 2 mm long.

Verbesina tamaunuevana is clearly related to the recently described *V. aramberrana* B.L. Turner and cohorts (Figure 2), as noted in the above abstract, all of these occurring in the state of Nuevo León. The following key will serve to distinguish among these:

1. Leaves markedly bicolored; occurring on non-gypseous substrates. *V. tamaunuevana*
1. Leaves not at all bicolored; occurring on gypseous substrates..... (2)
 2. Leaves densely and softly white-tomentose on both surfaces; upper midstem leaves mostly broadly lanceolate, 10-20 mm wide. *V. zaragosana*
 2. Leaves not or but moderately white-tomentose; upper midstem leaves mostly narrowly lanceolate, 4-9 mm wide. (3)
3. Robust stiffly erect herbs 0.6-1.5 m high; vestiture of leaves, at least in part, of appressed soft hairs; Mpio. Galeana. *V. hintoniorum*
3. Smaller, mostly clumped herbs 0.5-0.6 m high; vestiture of leaves sparse, the hairs coarsely hispid; Mpio. Aramberra. *V. aramberrana*

Verbesina hintoniorum is known only from the northern parts of Mpio. Galeana (sixteen collections at LL-TEX, all from gypseous substrates); *V. zaragosana* is known only from Mpio. Zaragosana (eight collections, all from gypseous substrates, LL-TEX), except for a single collection (*Hinton et al.* 18093 [TEX]) from the southeasternmost part of Mpio. Galeana (above El Nogal, ca. Lat 24° 50' N, Long. 100° 05' W); *V. aramberrana* is known by five collections (LL-TEX) all from Mpio. Aramberra in gypseous substrates. It should be noted that at least a few collections of *V. hintoniorum* (*Hinton et al.* 25645 [TEX]; *Hinton et al.* 25686 [TEX]; *Panero*

6867 [TEX]) have a vestiture that of *V. zaragosana*, but in leaf shape, habit, and features of the capitulescence, such plants clearly belong to the former. So far as known, *V. hintoniorum* and *V. zaragosana* do not grow together, but the vestiture characters emphasized in my original description of the latter do appear to vary more than was stated at the time.

The species is named for the two states of México, Tamaulipas and Nuevo León, to which it is likely confined.

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