### TWO NEW SPECIES OF VERBESINA (ASTERACEAE) FROM

#### NORTHEASTERN MEXICO

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The following new species of <u>Verbesina</u> were encountered as a result of recent exploration of the more inaccessable regions of Nuevo Leon and Tamaulipas Mexico.

Verbesina langfordae B. L. Turner, sp. nov. Fig. 1

V. mollis accendens sed foliis latioribus nonauriculatis, capitulis minoribus, corollis radiatis brevioribus.

Perennial, greenish-gray herb, 30-75 cm tall. Stems finely and densely white-pubescent. Leaves ovate-deltoid, 4-6 cm long, 2-4 cm wide, white-tomentulose on both surfaces, but more densely so below; blades irregularly serrate, sessile, decurrent upon the stem, forming narrow, straight, or undulate wings 1-2 mm wide. Heads 2-6 in a terminal cymose capitulescence. Involucre 4-5 mm high, 5-7 mm across; bracts lanceolate, densely white appressed pubescent, in 2-4 series, equal or nearly so, 3-4 mm long, ca. 1 mm wide. Pales herbaceous, 3-4 mm long, pubescent, acute. Ray florets 11-13, yellow; tube ca. 1 mm long; ligule glabrous beneath, 6-8 mm long, ca. 2 mm wide. Disk florets, 50-75, yellow; tube ca. 0.75 mm long; throat cylindrical, ca. 3.0 mm long, abruptly flaring at the tube; lobes 5, acute, glabrous or nearly so, ca. 0.5 mm long. Fruit (immature) obovate, seemingly wingless, the body ca. 3 mm long, 1 mm wide, strongly ciliate, biaristate, the aristae 1.5-2.0 mm long.

TYPE: MEXICO. Nuevo Leon: Mamulique Microwave Station, 5 mi off highway 85, ca. 49 mi N of Monterrey. Limestone, rocky soils along east and north-facing slopes. Tamaulipan scrubland dominated by Leucophyllum frutescens, Acacia spp., Gochnatia hypoleuca, etc., 10 Nov 1976, J. M. Smith et al. 755 (Holotype LL; isotype MEXU). Additional collections: NUEVO LEON: Mamulique Pass, ca. 20 mi S of Sabinas Hidalgo, 16 Mar 1976, B. L. Turner s.n. (LL).

Verbesina langfordae is seemingly most closely related to V. mollis H.B.K. from which it differs in possessing broader leaves with a whiter, softer, appressed, pubescence, smaller heads on shorter peduncles, etc. I originally compared (in manuscript) V. langfordae to V. hypoleuca Gray (type from near San Luis Potosi) but I now believe that the latter is a synonym of V. mollis H.B.K., V. hypoleuca possessing nondecurrent leaves or wingless stems, V. mollis possessing winged stems. Otherwise there is little to distinguish between the two taxa.

It is a delight to name the plant for my wife Gayle whose maiden name is Langford. She has accompanied me several times to the type locality and provided the sketch presented here.

VERBESINA RICHARDSONII B. L. Turner, sp. nov.

<u>Verbesina</u> <u>oreophila</u> accedens sed capitulis minoribus, foliis longioribus ellipticis, pilis mollioribus adpressis.

TYPE: MEXICO. Tamaulipas: "above Olla de Nubes", Rancho del Cielo, Gomez Farias Area, ca 1800 m, 26 Nov 1968, Alfred Richardson 1029 (holotype TEX).

Erect shrub to 2 m high. Stems terete, striate, appressed pubescent. Leaves alternate, narrowly elliptical, 9-14 cm long, 2.5-3.5 cm wide, pinnately veined; petioles 3-8 mm long; blade evenly appressed, short-pubescent above and below, somewhat bicolored, the lower surface paler and atomiferous-glandular, the margins inconspicuously crenate-denticulate. Heads ca. 30 borne in a very lax open cymose panicle, the ultimate peduncle 2-5 cm long. Involucre appressed-pubescent, ca. 5 mm high, 3-4 seriate, the outer series somewhat foliaceous and about as long as the inner; bracts (outer) green, loose and often recurved, the inner bracts lanceolate, black, acute. Chaff similar to the inner bracts and ca 3/4 as long as the florets. Ray florets 5-8, neuter; tube 2-3 mm long; ligules yellow, 1.0-1.5 cm long, 4-5 mm wide, 4-8 nervate, glabrous above, pubescent beneath. Disk florets 20-30; corollas yellow, ca. 4.5 mm long, pubescent throughout; tube ca. 1 mm long; throat tubular, ca. 3 mm long, the lobes ca 0.8 mm long. Achenes (immature) winged, pubescent, ca. 2.5 mm long, ca. 1.5 mm wide, the margins ciliate; pappus of 2 fragile setae 2-3 mm long.

Verbesina richardsonii presumably belongs to the section Verbesinaria of Verbesina, as delimited by Robinson and Greenman (1899). It is perhaps most closely related to V. oreophila W. & S. which has similar heads, the outermost phyllaries being elongate and semi-foliaceous, and similar elongate neuter ray florets. V. richardsonii has smaller heads, very different leaves with a softer appressed pubescence.

It is a pleasure to name this species for Dr. Alfred Richardson of Southern-most College, Brownsville, Texas, who has made the most complete collection of plants from the area of Gomez Farias known to this author.

# LITERATURE CITED

Robinson, B. L. and J. M. Greenman. 1899. Synopsis of the genus Verbesina, with an analytical key to the species. Proc. Amer. Acad. Sci. 34: 536-566.

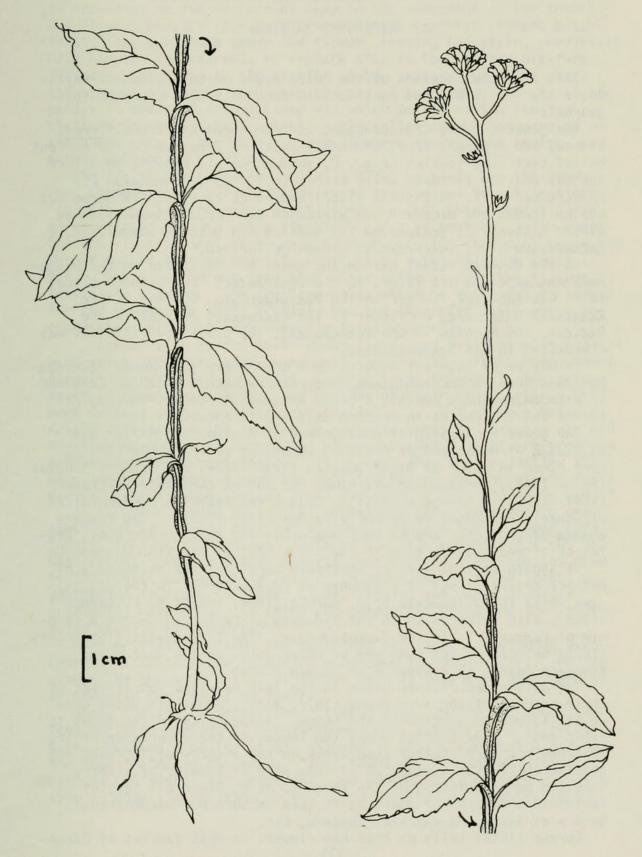


Fig. 1. VERBESINA LANGFORDAE (from holotype).



Turner, B. L. 1985. "Two new species of Verbesina (Asteraceae) from northeastern Mexico." *Phytologia* 57(5), 331–333.

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