

TWO NEW SPECIES OF *VERBESINA* SECT. *PLATYPTERIS* (ASTERACEAE) FROM JALISCO, MÉXICO

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ABSTRACT

Two new species belonging to the genus *Verbesina* sect. *Platypteris*, *V. vallartana* and *V. lottiana*, are described from Jalisco, México. According to characters of the involucre, the former is presumably related to *V. fraseri*, the latter to *V. crocata*. Illustrations of the new taxa are provided.

The present authors, working independently, brought to the fore two previously undetected species of *Verbesina* section *Platypteris*, a group of usually clambering shrubs with eradiate orange heads, confined to the subtropical and tropical regions of México and Central America. McVaugh (1984) possessed specimens of the taxa proposed here, including these in his concept of *Verbesina crocata* (Cav.) DC. The latter taxon is readily distinguished from both of those proposed here by its much larger heads with closely appressed graduate involucre bracts; it is also largely confined to the trans-volcanic regions of south-central México, occurring at higher elevations. McVaugh, nevertheless, was well aware of the anomalous nature of the collections upon which our new taxa are based, as noted below.

A revisional treatment of sect. *Platypteris* has been completed by the junior author (Olsen 1988); in this, additional documentation for the species described here will be presented.

VERBESINA *vallartana* B. Turner & J. Olsen, sp. nov. Fig. 1.

Verbesina fraseri aemulans, differt foliis profundis 5-lobis capitulis parvioribus magis numerosus bracteis multo brevioribus et flosculis parvioribus dense pubescentibus.

Clambering (?) shrub 1.5–2.0 m high. Stems terete, 4-winged, moderately hispid. Leaves opposite throughout, 10–25 cm long, 8–13 cm wide, pinnately (5)7-lobed, the lobes 3–7 cm long, 2–5 cm wide, hispid above and below with broad-based incurved hairs; petioles 3–6 cm long, broadly winged. Heads 8–15, eradiate, arranged in a terminal open panicle ca 18 cm high and 18 cm wide. Involucres hemispheric, ca 6 mm

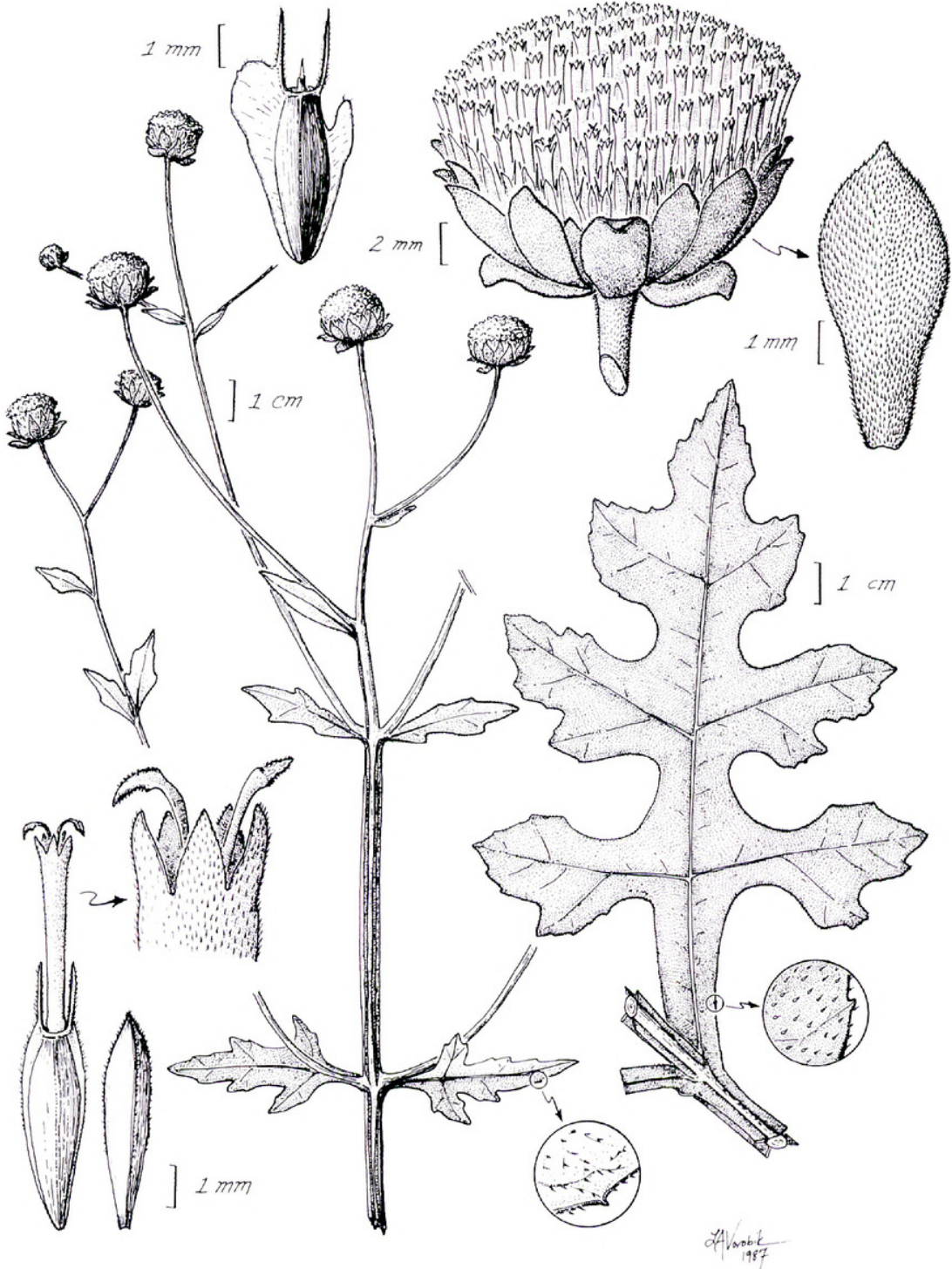


FIG. 1. *Verbesina vallartana*, from holotype.

high, 10–14 mm wide (pressed); involucre bracts 30–40, 3–4 seriate, subimbricate, obovate to spatulate, densely soft-pubescent. Receptacle convex, 5–6 mm across; receptacular bracts linear-lanceolate, acute, puberulent apically. Disk florets numerous (100+); corollas tubular, “deep orange” (label data), very densely hispid, 5–6 mm long, the tubes 1–2 mm long, the lobes ca 0.75 mm long. Achenes 5–6 mm long, the body glabrous, obovate, 4.0–4.5 mm long, ca 1.5 mm wide, prominently winged; pappus of 2 unequal hispid awns 1.5–2.0 mm long.

TYPE: MÉXICO. JALISCO: ca 10 km NE of Puerto Vallarta, near the village of Milagro, on the road to Mascota, tropical deciduous forest with *Brosimum*, 100 m, 15 Nov 1963, Charles Feddema 2584 (HOLOTYPE: TEX; ISOTYPES: ENCB, MICH, NY).

Additional Specimens Examined: MÉXICO. COLIMA: Mountain summits near pass ca 11 miles SSW of Colima on Manzanillo road, 400–500 m, 7–8 Dec 1959, McVaugh & Koelz 1548 (ENCB, LL, MICH). JALISCO: Quimixto, trail from San Pedro el Tuito, 60 m, 2 Dec 1926, *Mexia* 1236 (UC, US).

McVaugh (1984) treated the type collection of this taxon under *V. crocata*, but notes that Blake identified it as *Verbesina fraseri* Hemsl. The latter is known to us only from Central America. *Verbesina fraseri* is readily distinguished from *V. vallartana* by its simple, deltoid-ovate leaves and much larger heads, etc. We would also include in *V. vallartana* the collection, McVaugh & Koelz 1548 which McVaugh (1984, p.973) notes “may represent yet another species ... but better flowering material is needed.” In fact, we would place nearly all of the anomalous collections cited by McVaugh under *V. crocata* in our *V. vallartana*. These all have loose, oblanceolate outer involucre bracts and smaller heads with fewer florets than does *V. crocata*; in addition, they occur at lower elevations (100–500 m) along the Pacific-facing slopes of the Sierra Madre Occidental.

VERBESINA lottiana B. Turner & J. Olsen, sp. nov. Fig. 2.

Verbesina crocata aemulans, differt flosculis paucioribus parvioribus et capitulis parvioribus solitariis in pedunculis elongatis.

Clambering or arching shrub 1.4–4.0 m high. Stem terete, sparsely hispid to glabrate, 4-winged. Leaves opposite, 8–15 cm long, 4–12 cm wide, deeply pinnate (5)7-lobed, the lobes 3–7 cm long, 1–2 cm wide, irregularly serrate, hispid above and below, hairs less dense below; petiole 1–3 cm long, auriculate-based. Heads eradiate, mostly single on terminal or axillary peduncles 7–16 cm long. Involucre hemispheric, 3–4 seriate, subimbricate, 4–5 mm high, 8–12 mm across (pressed); involucre bracts ovate, 2–3 times as long as wide, appressed pubescent. Receptacle convex, ca 5 mm across; receptacular bracts linear-lanceolate, acute, 3–4 mm long, pubescent apically. Disk florets numerous (100+); corollas

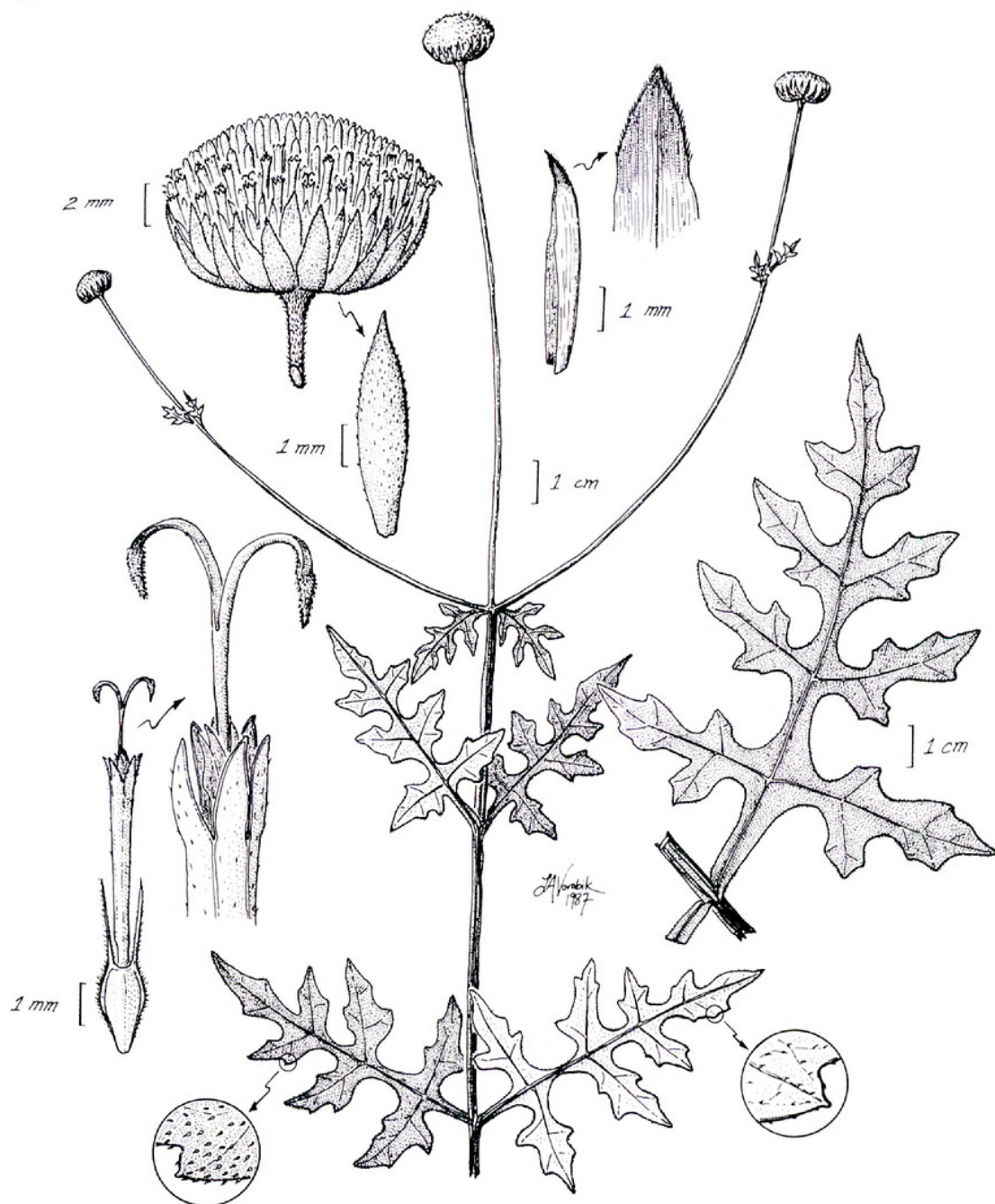


FIG. 2. *Verbesina lottiana*, from holotype.

tubular, 5–6 mm long, orange, sparsely hispid to nearly glabrous, the tubes ca 2 mm long, the lobes ca 1 mm long. Achenes 5–6 mm long, the body puberulent, obovate, ca 3.5 mm long, ca 1.5 mm wide, prominently winged; pappus of 2 subequal hispid awns 1.0–1.5 mm long.

TYPE: MÉXICO. JALISCO: Mpio. La Huerta, Estacion de Biología Chamela (UNAM), 19°30' x 105°03'. 12 Oct 1982, *Emily J. Lott 1474 & R. Hernandez M.* (HOLOTYPE: TEX; ISOTYPES: ENCB, UNAM).

Additional Specimens Examined: JALISCO: Estacion Biologia, Chamela, 200 m, 17 Jul 1976, *Delgado* 317 (MEXU); Estacion Biologia, Chamela, edge of Eje Central, 1 Feb 1983, *Bullock* 1300 (MEXU); Estacion Biologia Chamela, 3 Nov 1981, *Lott* 736 (MEXU, TEX); 8 km E Chamela, 30–50 m, 8–10 Dec 1970, *McVaugh* 25077 (ENBC, LL, MICH); Estacion Biologia Chamela, 14 Dec 1976, *Megallanes* 381 (MEXU, TEX).

The species is related to the more montane, interior, *V. crocata* but differs in its fewer, much smaller, heads with smaller florets which are borne singly on elongate peduncles. McVaugh (1984) listed his collection 25077 (cited above) as *V. crocata*, without comment.

It is a pleasure to name the taxon for Ms. Emily Lott, exceptional plant systematist, formerly working at the Chamela Biological Station (UNAM).

ACKNOWLEDGEMENTS

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