# A NEW SPECIES OF *ALEPIDOCLINE* (ASTERACEAE: HELIANTHEAE) FROM OAXACA, MEXICO

# BILLIE L. TURNER Plant Resources Center

The University of Texas Austin, Texas 78712

#### ABSTRACT

Alepidocline pochutlana B.L. Turner is described as a new species from Oaxaca, Mexico, and Alepidocline macrocephala (H. Rob.) B.L. Turner, comb. nov., is brought into the genus from *Galinsoga*. A key and distribution maps for the six species of the genus is provided. KEY WORDS: *Alepidocline*, *Galinsoga*, Heliantheae

The present treatment adds two species to the genus Alepidocline S.F. Blake, which now comprises six species, four of these occurring in Mexico and Central America, one in South America (Venezuela). Turner (1990) provided an overview of the genus in which four species were recognized, one of these (A. macdonaldii) described as new. The genus is typified by A. trifida, a relatively common species of Guatemala. Panero (2007) treated Alepidocline along with eight other genera as belonging to the subtribe Galinsoginae.

Alepidocline pochutlana B.L. Turner, sp. nov. Figs. 1, 2. TYPE: MEXICO. Oaxaca. Distrito Pochutla, Mpio San Miquel del Puerto, El Vijia, selva mediana subperennifolia. suelo Colorado, ca 1541 m, 16° 00' 17.7" N, 96° 06' 13.7" W, 5 Dec 2009, *J. Pascual 2305* (holotype: TEX).

Alepidocline breedlovei similis sed differt receptaculis ca. 2 mm altis glabris (vs ca. 3 mm altis valde pubescentibus), involucris ca. 12 mm latis (vs ca 6 mm), et flosculis radii 8 ligulis 5-6 mm longis (vs 11, ligulis 10-20 mm longis).

Annual herbs, 20–30 cm high. Mid stems sparsely pubescent with both glandular and non-glandular hairs. Leaves 3–6 cm long, 1.5–3.0 cm wide; petioles 1–10 mm long; blades ovate, 3-nervate from near the base, sparsely pubescent, mainly along the veins, the margins serrulate. Ultimate peduncles pubescent like the stems, 4–10 cm long. Heads 1–5, both axillary and terminal. Involucres hemispheric, 4–5 mm high, 6–8 mm across; bracts obovate, imbricate in 2–4 series, their apices broadly rounded, the innermost often 3-fid. Receptacles conical, ca 2 mm high, 1 mm across, glabrous or nearly so; palea linear-lanceolate, 1–2 mm long, readily deciduous, markedly ciliate. Ray florets 8, pistillate, fertile (rarely not); tubes ca 3 mm long, pubescent; ligules white, 4–5 mm long. Disc florets 40–50 per head; corollas yellow, ca 3 mm long; tube ca 1.5 mm long, pubescent; throat ca 1.5 mm long, 5-lobed. Achenes black, glabrous, ca 1 mm long, 0.6 mm wide; pappus of ca 10, readily deciduous ciliate bristles, 1.0–1.2 mm long.

The present novelty is very distinctive, easily recognized by its relatively small heads and small, glabrous receptacles with decidedly deciduous, linear-lanceolate pales. It is named for the Distrito Pochutla, where first collected.



Figure 1. Alepidocline macrocephala, holotype at TEX.

Alepidocline macrocephala (H. Rob.) B.L. Turner, comb. nov. Galinsoga macrocephala H. Rob., Phytologia 44: 429. 1979. TYPE: VENEZUELA. Merida. El Delgadito ad El Portochuelo, 2700 m, 18 Nov 1976, A. Charpin et al. 13531 (holotype: US).

According to Harold Robinson (pers. comm.) this taxon is known only by the type collection at US. Nor have I been able to locate specimens elsewhere. In my treatment of the genus for Mexico, I treated Galinsoga macrocephala as a synonym of A. annua, largely on the basis of its reduced ligules and the fact that at was known only by a single collection. Comparing the characters anew, with the descriptive parameters of Robinson in his original description, I now think the taxon worthy of recognition, at least until additional collections are assembled, hence its elevation here.

The following key should facilitate recognition of the taxa concerned, their distributions shown in Figure 2.

- 1. Ultimate peduncles of heads 1 cm long or less; subalpine meadows, south-central Oaxaca
  - ...... Alepidocline macdonaldii
- Ultimate peduncles of heads 1–10 cm long; mostly non-alpine sites.
  - Ligules of ray florets 1–2 mm long.
    - 3. Achenes ca 2.7 mm long; disc florets ca 25; plants of South America (Venezuela)
    - 3. Achenes ca 1.5 mm long; disc florets numerous; plants of North America (Mexico and
  - 2. Ligules of ray florets 5-20 mm long.
    - 4. Involucres hemispheric, the bracts subequal; leaves lanceolate, widest near the middle;
    - 4. Involucres campanulate, the bracts markedly gradate; leaves ovate, widest near the base
      - 5. Involucres 10-15 mm across; receptacles 3-4 mm high, densely pubescent; palea trifid or
      - 5. Involucres 5-9 mm across; receptacles ca 2 mm high, glabrous or nearly so; palea linear-

#### ACKNOWLEDGEMENTS

Dr. Guy Nesom provided the Latin diagnosis and reviewed and edited the manuscript. Distribution maps are based upon specimens on file at LL-TEX. Special thanks are extended to Harold Robinson for discussion (by phone) of the possible validity of A. macrocephala.

#### LITERATURE CITED

- Panero, J.L. 2007. Galinsoginae. In J.W. Kadereit and C. Jeffrey (eds.). The Families and Genera of Vascular Plants 8: 483-486.
- Strother, J.L. 1999. Alepidocline. Pp. 17-18, in Flora of Chiapas, Part 5: Compositae Heliantheae s.l. California Academy of Sciences, San Francisco.
- Turner, B.L. 1990. A reevaluation of the genus Alepidocline (Asteraceae, Heliantheae, Galinsoginae) and description of a new species from Oaxaca, Mexico. Phytologia 69: 387-392.

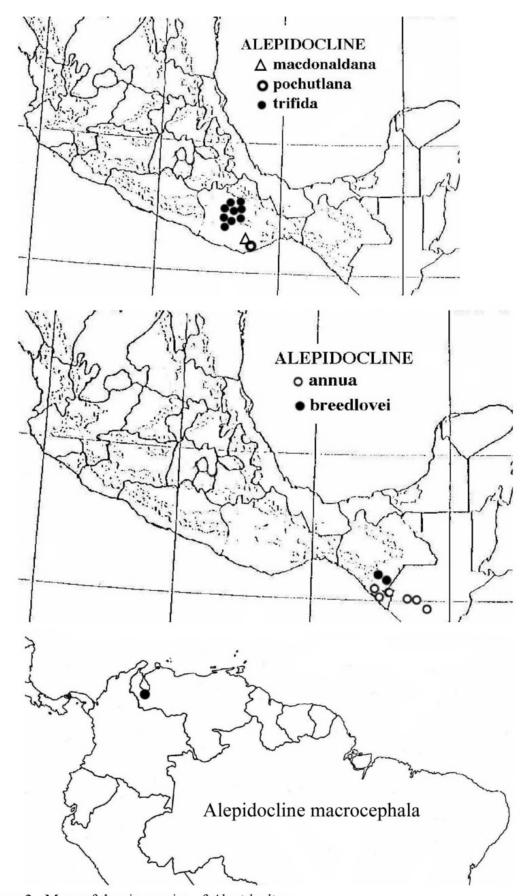


Figure 2. Maps of the six species of Alepidocline.



Turner, B. L. 2011. "A new species of Alepidocline (Asteraceae: Heliantheae) from Oaxaca, Mexico." *Phytoneuron* 2011-44, 1–4.

View This Item Online: <a href="https://www.biodiversitylibrary.org/item/125814">https://www.biodiversitylibrary.org/item/125814</a>

Permalink: <a href="https://www.biodiversitylibrary.org/partpdf/174855">https://www.biodiversitylibrary.org/partpdf/174855</a>

## **Holding Institution**

Missouri Botanical Garden, Peter H. Raven Library

# Sponsored by

Missouri Botanical Garden

### **Copyright & Reuse**

Copyright Status: Permission to digitize granted by rights holder

Rights: <a href="https://www.biodiversitylibrary.org/permissions">https://www.biodiversitylibrary.org/permissions</a>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <a href="https://www.biodiversitylibrary.org">https://www.biodiversitylibrary.org</a>.