

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

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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

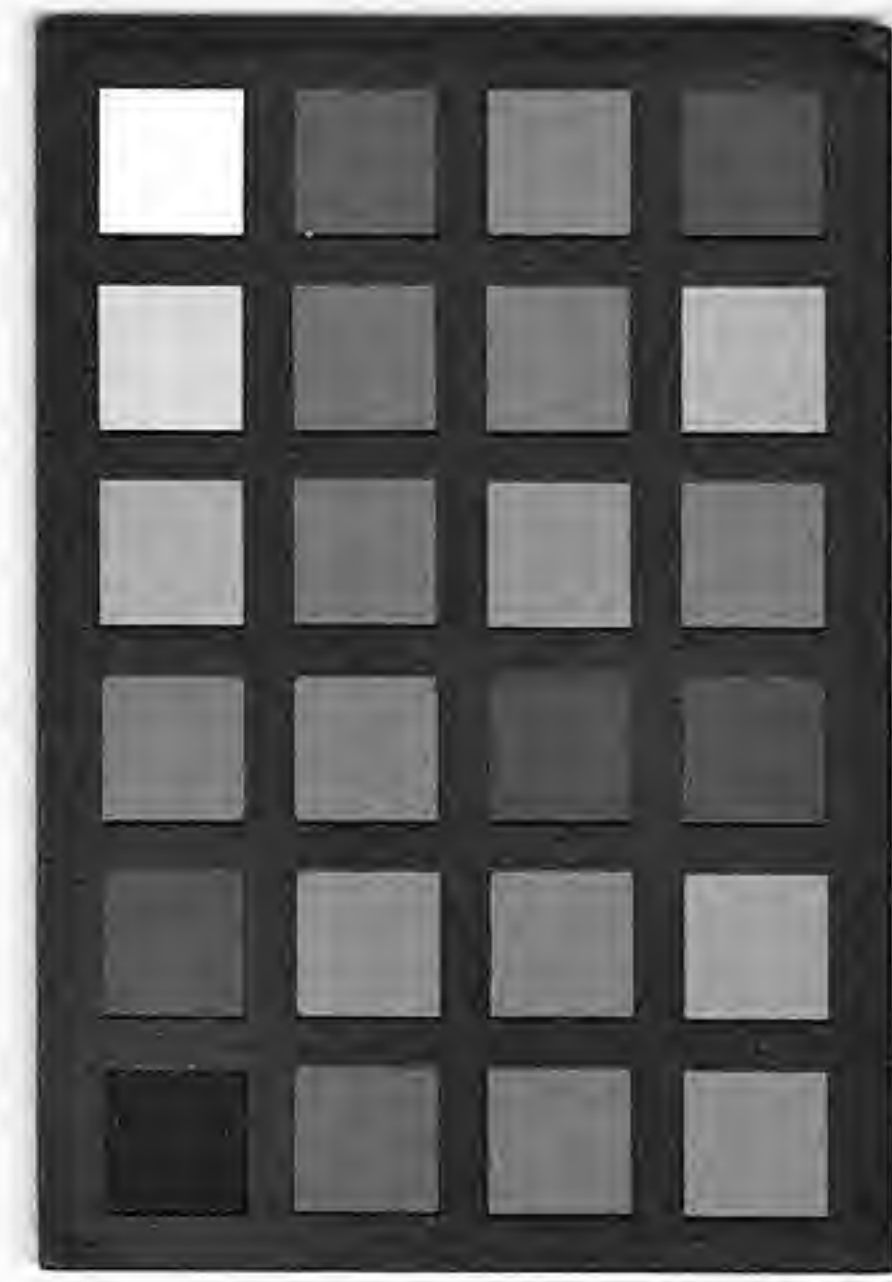
The present treatment adds two species to the genus *Alepidocline* S.F. Blake, which now comprises six species, four of these occurring in Mexico and Central America, one in South America (Venezuela). Turner (1990) provided an overview of the genus in which four species were recognized, one of these (*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 Miguel del Puerto, El Vija, 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.



HOLOTYPE OF: *Alepidocline pochuttana* B.H. Turner  
sp. nov.



SERBO, A.C.  
México, Oaxaca, Distrito: Pochutla, Municipio: San Miguel del Puerto.  
El Vija

Selva mediana subperennifolia.. suelo colorado.

16°0'17.7"N 96°6'13.7"W Altitud: 1541 msnm Fecha: 05/12/2009  
Epífita herbácea. de 20 cm, fl blanca.

Colector: José Pascual 2305 Dupl.= 4

Conservación de las selvas con café de la cuenca del río San Lorenzo  
Sociedad para el Estudio de los Recursos Bióticos de Oaxaca

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 it 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***
1. Ultimate peduncles of heads 1–10 cm long; mostly non-alpine sites.
  2. Ligules of ray florets 1–2 mm long.
    3. Achenes ca 2.7 mm long; disc florets ca 25; plants of South America (Venezuela) ..... ***Alepidocline macrocephala***
    3. Achenes ca 1.5 mm long; disc florets numerous; plants of North America (Mexico and Guatemala) ..... ***Alepidocline annua***
  2. Ligules of ray florets 5–20 mm long.
    4. Involucres hemispheric, the bracts subequal; leaves lanceolate, widest near the middle; Oaxaca ..... ***Alepidocline trifida***
    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 trifold or incised; Chiapas ..... ***Alepidocline breedlovei***
      5. Involucres 5–9 mm across; receptacles ca 2 mm high, glabrous or nearly so; palea linear-lanceolate; Oaxaca ..... ***Alepidocline pochutlana***

#### 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.

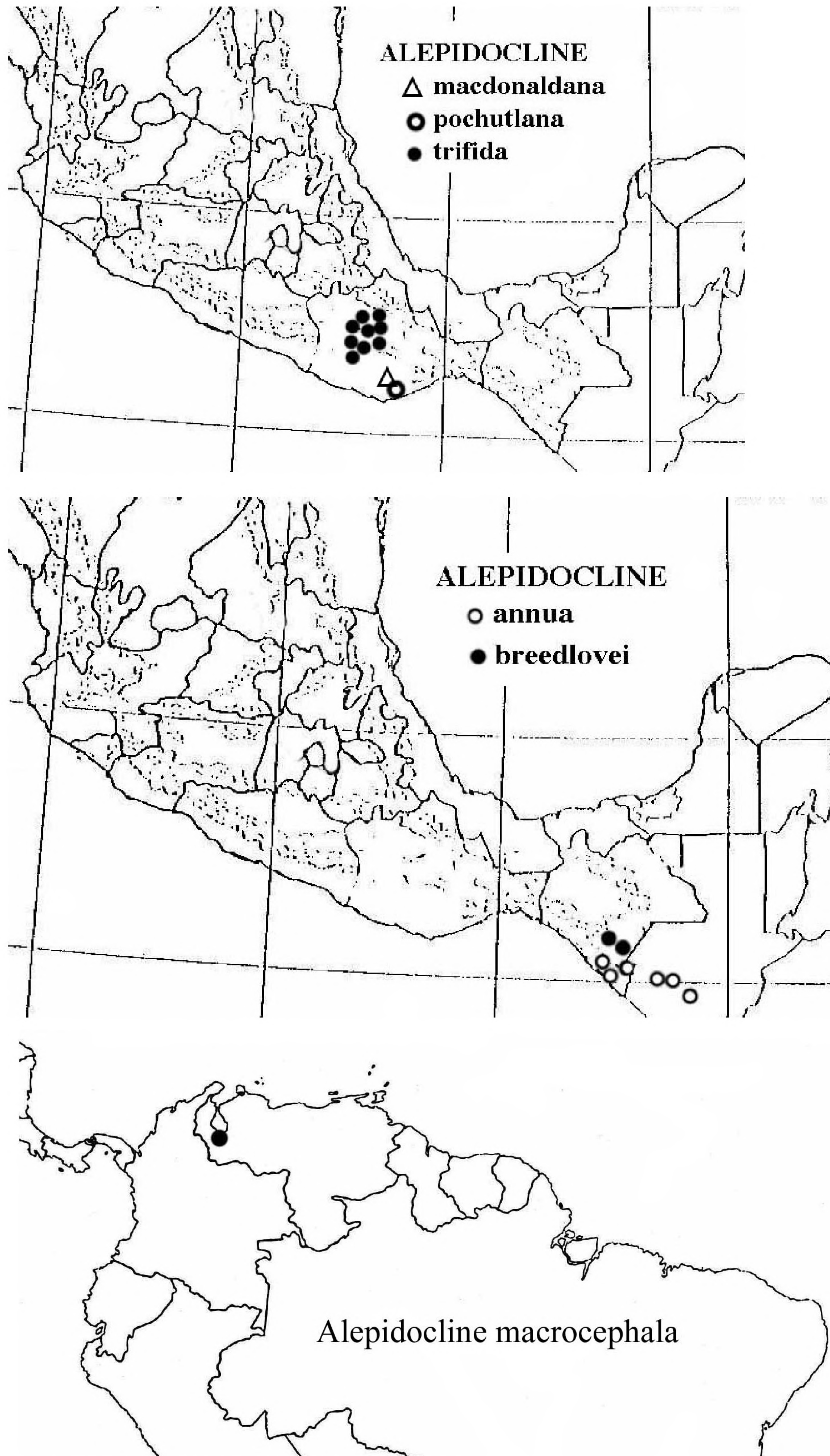


Figure 2. Maps of the six species of *Alepidocline*.