

A NEW SPECIES OF *Ageratina* (ASTERACEAE: EUPATORIEAE) FROM NORTHWESTERN OAXACA

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Abstract: Fieldwork in connection with the project to document the flora of the Mixteca Alta region of the state of Oaxaca has resulted in the discovery of a new species in the district of Juxtlahuaca, *Ageratina juxtlahuacensis*. Its distinctive morphological traits are discussed and compared to putative sister species.

Resumen: Labor de campo en conexión con el proyecto a documentar la flora de la Mixteca Alta del estado de Oaxaca ha resultado en el descubrimiento de una nueva especie en el distrito de Juxtlahuaca, *Ageratina juxtlahuacensis*. Se discuten los rasgos morfológicos que la distinguen de otras especies descritas así como su relación a otras especies del género.

Keywords: Asteraceae, Eupatorieae, *Ageratina*, Mexico, Oaxaca.

The genus *Ageratina* contains approximately 250 species distributed from Canada to Argentina with the highest concentration of species in Mexico, Central America and the Andes of South America (King and Robinson, 1987). According to them, the genus is characterized by a pappus of numerous barbellate bristles, epaleate receptacles, essentially glabrous style shafts, heads with five or more flowers and more than five involucre bracts, inner corolla lobes composed of papillose cells, flat receptacles, and conspicuous cypselae carpodia. They recognized five subgenera within the genus based mostly on habit, leaf venation patterns, presence of glandular trichomes on the leaves and rest of herbage, and corolla shape.

Routine identification of specimens in connection with the project to document the flora of western Oaxaca has resulted in the discovery of the following new species. The new species is described as outlined in Panero (1992).

Ageratina juxtlahuacensis Panero & Villaseñor sp. nov. Fig. 1.

TYPE: MEXICO. Oaxaca: Dist. Juxtlahuaca, km 15 de la carretera Tecomaxtlahuaca-Coicoyán de Las Flores, 17° 17' 54.5" N, 98° 06' 53.6" W, 17 Oct 1994, J. L. Panero, E. Manrique and I. Calzada 5102 (HOLOTYPE: MEXU!; ISOTYPES: TEXU!, 5 others to be distributed)

Differt ab *Ageratina collodes* habitu herbaceo, phyllariis adpressis, pedunculis ebracteatis, pappi albi et foliis sessilibus edentatis.

Perennial HERBS 0.8–1.2 m tall, stems terete, glabrous, dark green-purple. LEAVES opposite, triplinerved; petioles 2–3 mm long; blades 2.4–3.6 cm long, 1.1–2.2 cm wide, smaller distally, leaves associated with capitulescence 5–14 mm long, 2–6 mm wide, ovate to trullate, adaxial surface essentially glabrous, dark green or purple-



Fig 1. *Ageratina juxtlahuacensis*. A. Habit. B. Capitulum (from Panero et al. 5102).

green, abaxial surface glabrous, creamy green, veins clearly outlined as a reticulum against creamy green background, margins shallowly serrate. CAPITULESCENCE of 15–60+ heads arranged in a compact, corymbiform cyme; peduncles 3–8 mm long, essentially glabrous, green. HEADS homogamous, discoid, campanulate, ca. 7 mm high, ca. 6 mm wide; receptacle epaleate. PHYLLARIES 14–17 in 2 subequal series; phyllaries of first and second series 4.5–5.5 mm long, 0.1–1 mm wide, appressed, herbaceous, lanceolate, distal third sparsely strigose, margins of distal third of phyllaries ciliate, green-purple. DISK FLOWERS 18–22, corollas white, perfect; throats 1.5 mm long, 0.5–6 mm wide, campanulate, essentially glabrous; tube 1.7–2 mm long, essentially glabrous; lobes 0.6 mm long, moderately puberulent on outer surface, white; anthers 1 mm long, white, anther appendages ca. 0.2 mm long; style 3 mm long, white, the branches ca. 2.5 mm long, white. DISK CYPSELAE 1.5 mm long, cylindrical, essentially glabrous with a few trichomes at base and neck, shallowly ribbed, pappus of 19–22 bristles of equivalent length, bristles 3–3.3 mm long.

Ageratina juxtlahuacensis is an understory perennial herb of the seasonally dry pine-oak forest of the mountains flanking the valley of the Tecomaxtlahuaca river east of the town of Santiago Juxtlahuaca, Oaxaca. Other Asteraceae growing in the vicinity include *Tridax brachylepis* Hemsl., *Axiniphyllum corymbosum* Benth., *Roldana mixtecana* Panero & Villaseñor, *Psacaliopsis paneroi* (B. L. Turner) C. Jeffrey var. *juxtlahuacensis* Panero & Villaseñor, and *Fleischmannia holwayana* DC.

Ageratina juxtlahuacensis resembles *A.*

collodes in capitulescence morphology, head size, and leaf morphology. *Ageratina juxtlahuacensis*, however, can be readily separated from the latter, by its herbaceous habit (weak shrub in *A. collodes*), short-petiolate leaves (sessile in *A. collodes*), shallowly serrate leaf margins (conspicuously dentate margins in *A. collodes*), ebracteate peduncles (bracteate peduncles in *A. collodes*), and appressed phyllaries (distal apex of phyllary conspicuously reflexed in *A. collodes*). According to Turner (pers. comm.), *A. juxtlahuacensis* falls within his circumscription of *A. collodes* (Turner, 1997).

The species epithet refers to the Oaxacan district of Juxtlahuaca, in the Mixteca Alta region, where the type collection was gathered.

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