TWO NEW UMBELLIFERAE OF THE CHIHUAHUAHAN DESERT

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Mathias, Mildred E. (Botanical Gardens–Herbarium, University of California, Los Angeles, CA 90024) and Lincoln Constance (Department of Botany, University of California, Berkeley, CA 94720). Two new Umbelliferae of the Chihuahuan Desert. Brittonia 33: 342–346. 1981.—Two apparently calcicolous species of apioid Umbelliferae, Aletes calcicola and Donnellsmithia coahuilensis, are described from the Chihuahuan Desert of Coahuila, Mexico.

We have encountered material of two hitherto undescribed taxa in responding to an invitation to prepare a taxonomic treatment of Umbelliferae (Apiaceae) for Marshall C. Johnston’s Flora of the Chihuahuan Desert. In both instances, the available material is so limited that we would have preferred to await the procurement of more representative specimens. However, one of the taxa has been collected only once and the other not at all in seven years, so we believe we may hasten their rediscovery by focusing attention on their existence.

Aletes calcicola Mathias & Constance, sp. nov. (Fig. 1)

Plants apparently cespitose from a branching root crown bearing old leaf sheaths, acaulescent or with 1 or 2 stem leaves, 1–4 dm tall, slightly scaberulous on foliage and inflorescence, or glabrate; leaves petiolate, ovate to ovate-lanceolate, the blades 3–12 cm long, 3–15 cm broad, ternate-pinnately compound, the leaflets ovate to lanceolate, 0.5–4 cm long, 0.2–4 cm broad, usually pinnately lobed to pinnatifid with oblong to lanceolate, mucronulate ultimate divisions, scaberulous on veins beneath; petioles 3–15 cm long, scarious-sheathing at base; peduncles 6–15 cm long, longer than leaves, scaberulous at base of umbel; involucre usually 0; rays 4–7, unequal, 1.5–3 cm long, spreading-ascending, scaberulous; bractlets of involucre 2–8, linear-acuminate, scarious- and scaberulous-margined, free to slightly connate at base; pedicels 10–20, 3–5 mm long, unequal; calyx lobes evident, triangular-ovate; petals greenish-white, narrowly ovate with a narrower inflexed apex; styles very slender, ca 2 mm long, flexuous; stylodium 0; carpophore parted to the base, divergent in upper ⅓; fruits in each umbellet 2–6, oblong to oblong-oval, 6 mm long, 3 mm broad, the ribs subequally prominent and coryx, but unwinged; vittae rather small, mostly 3 in intervals, 2 on commissure, and 1 in apex of each rib; seed subterete in transection, the face plane.


Habitat: Steep, gravelly limestone slopes in pine-oak woodland and chaparral, 1250–3000 m altitude.

Specimens examined: MEXICO. COAHUILA: NE-facing slope, Cuatro Ciénegas Basin, Sierra de San Marcos, opposite Los Fresnos, 4–5 Apr 1969, Pinkava et al. 6117 (ASU, UC); ca 6 km S of Ejido.

La Noria, E slope Sierra de San Marcos, 26°28′30″–26°26′N, 101°35′W, 20 Mar 1973, Johnston et al. 10,305a (TEX); middle and upper reaches of Cañón de la Hacienda, Sierra de la Madera, 27°02′30″–27°03′30″N, 102°26′30″W, 10 May 1973, Johnston et al. 10,952a (TEX); Cañón de la Hacienda, Sierra de la Madera, NW of Cuatro Ciénegas, 23 Jun 1976, Pinkava et al. 13,638 (ASU, UC); Cañón de la Gavia above (S of) Rancho de la Gavia, 26°18′30″–26°20′N, 101°15′–101°18′W, 2–3 Aug 1973, Johnston et al. 12.059a (TEX).