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A NEW SPECIES OF MIMOSA (LEGUMINOSAE) FROM COAHUILA, MEXICO

Bruce D. Parfitt and Donald J. Pinkava

Parfitt, Bruce D. & Donald J. Pinkava (Department of Botany & Microbiology, Arizona State University, Tempe, AZ 85281). A new species of *Mimosa* (Leguminosae) from Coahuila, Mexico. Brittonia 30: 172–174. 1978.—**Mimosa unipinnata** from the Sierra de San Marcos in the Cuatro Ciénegas Basin of central Coahuila, Mexico, is described. It is unique among mimosas in having oncepinnate leaves.

Floristic studies by the junior author have revealed an unusual new *Mimosa* known only from the northern end of the Sierra de San Marcos which extends into the Cuatro Ciénegas Basin of central Coahuila, Mexico. As all previously known North American species of *Mimosa* have bipinnate leaves (Britton & Rose, 1928), we have chosen the epithet to emphasize the distinguishing character of the new species.

Mimosa unipinnata Parfitt & Pinkava, sp. nov. (Fig. 1)

Arbuscula fruticosa usque ad 1.2 m alta, paene glabra; ramuli stricti, rigidi acuminatique, flavidi et juventute leviter glauci, aetate fusci; aculei solitarii, 0–8 mm sub nodis affixi, recurvati ad fere stricti vel absentes. Folia in fasciculis axillaribus densis, unipinnata, glauca; petioli phyllodinei, 5–16 mm longi, 1 mm lati, in pagina adaxiale manifeste trinervati; raches 1–5 mm longae, 0.5 mm latae; foliola 2 juga, raro 1-juga, crassa, 2–6 mm longa, 0.75–2 mm lata, oblongo-elliptica, integra, apice obtusa ad parum mucronulata, basi obliqua, abaxialiter manifeste nervosa. Flores circa 20 in capitulis globosis axillaribus tenuipedunculatis, in alabastro rosei. Fructus oblongi stipitati rostrati, valde compressi, 35–75 mm longi, 8–10 mm lati; margines undulati ad constricti, armati vel inermes; valvae leviter glaucae, in segmenta monosperma secedentes.

Shrubby tree to 1.2 m tall, essentially glabrous; branchlets straight, yellowish and lightly glaucous when young, becoming gray and thorn-like with age; bark of older branches shredding into fine fibers; nodes (short shoots) enlarged, protruding from branches; prickles solitary, 0-8 mm below node, recurved to nearly straight or absent, 2-5 mm long, enlarged at base. Leaves in dense axillary fascicles, once-pinnate, glaucous; stipules brown, subulate-lanceolate, tomentulose, 0.5-1 mm long; petioles phyllodal, 5-16 mm long, 1 mm wide, prominently 3-ribbed on the ventral surface; rachis 1-5 mm long, 0.5 mm wide; leaflets 4 in 2 pairs, rarely 2, thick, 2-6 mm long, 0.75-2 mm wide, oblong-elliptic, entire, obtuse to slightly mucronulate, oblique at base, veins prominent beneath. Flowers ca 20 in axillary, globose heads, pinkish in bud; peduncle slender, glaucous, (7) 12-20 mm long; calyx campanulate, ca 0.75 mm long, ca 1 mm wide; corolla cylindroidal, 1.5-2 mm long; corolla lobes ca 0.5-0.75 mm long, ca 0.5 mm wide; stamens 8, to 7 mm long. Fruits oblong, stipitate, beaked, strongly compressed, 35-75 mm long, 8-10 mm wide; margins undulate to constricted, armed or not; valves membranous, light brown, lightly glaucous, breaking into one-seeded segments. Seeds dark brown, nearly orbicular, 4 mm in diameter.

Type: MEXICO. Coahuila: Cuatro Ciénegas Basin, Sierra de San Marcos opposite Laguna Grande, SW-facing slopes of lower canyons and bajadas, elev. 1000–1500 m, 14 Aug 1975, Reeves & Pinkava P13073 (HOLOTYPE: ASU; ISOTYPES: to be distributed).

PARATYPE: MEXICO. COAHUILA: Cuatro Ciénegas Basin, Sierra de San Marcos, NE-facing slope, 20 Aug 1968, *Minckley s.n.* (sterile specimen) (ASU).

Brittonia 30: 172-174. April-June, 1978.

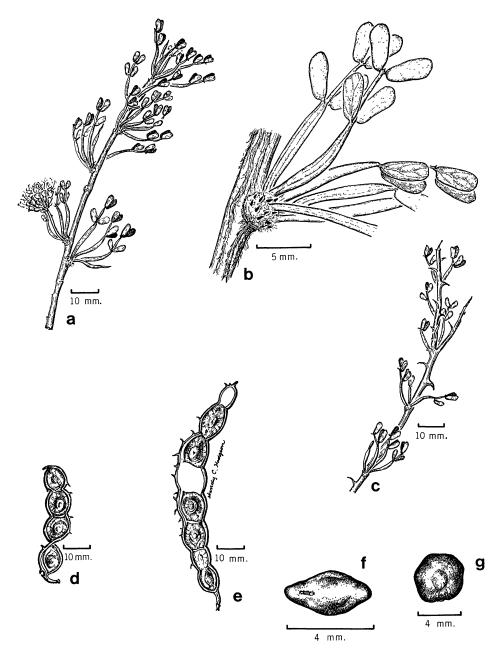


Fig. 1. Mimosa unipinnata. A. Branch with inflorescence. B. Node with leaves. C. Branch with prickles and thorn. D, E. Fruits. F. Seed, micropylar view. G. Seed, top view. Drawn from holotype.

Mimosa unipinnata is locally common on desert bajadas in association with Agave, Hechtia, Jatropha, Acacia, and Yucca.

Mimosa zygophylla Benth. in A. Gray, and Mimosa pringlei S. Wats. are superficially similar to M. unipinnata in that they have greatly reduced xeromorphic

leaves. However, they differ from M. unipinnata in having at least one pair of secondary pinnae and unsegmented fruits.

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LITERATURE CITED

Britton, N. L. & J. N. Rose. 1928. Mimosaceae. N. Amer. Fl. 23: 1-194.

BOOK REVIEW

California Toxic Fungi. Thomas J. Duffy and Paul P. Vergeer. 29 pp. Mycological Society of San Francisco, Inc., P.O. Box 904, San Francisco, CA 94101. 1977. \$3.50.

Because California leads the nation in deaths from mushroom poisonings, this booklet produced under the auspices of the Mycological Society of San Francisco is timely. Details on identification are sparse, mostly brief descriptions with colored photographs of eight of the common species. The intention of the booklet is to give supplementary information, particularly on the toxins, to poisonous mushrooms not found in common, available, mushroom books. Eight groups, according to the major toxins present, are recognized and discussed as to species containing the toxins, the kinds of toxins, clinical symptoms, and treatments. These include the amanitin group, ibotenic acid group, the muscarine group, the monomethylhydrazine group, the hallucinogenic indole group, the gastrointestinal irritants, and miscellaneous toxins.

Everyone interested in mushrooms should have this booklet.—Clark T. Rogerson, New York Botanical Garden, Bronx, New York 10458.