## Vascular Plants of Central Texas Conoclinium dissectum – PALM-LEAF MISTFLOWER, GREGG'S MISTFLOWER [Asteraceae]

Conoclinium dissectum A. Gray (syn. Eupatorium greggii), PALM-LEAF MISTFLOWER, GREGG'S MISTFLOWER. Perennial herb, rhizomatous, fibrous-rooted, many-stemmed at base,  $\pm$  erect, each branch initially unbranched to inflorescence later forming ascending lateral axillary shoots downward from canopy, in range to 55 cm tall; shoots with only paired cauline leaves, short-hairy with upward-arched nonglandular hairs and both shortstalked and sessile glandular hairs, foliage faintly aromatic; buried stems rhizomelike and horizontal with adventitious roots forming at nodes and internodes, whitish, old portion forming thin periderm. Stems: cylindric, to 5 mm diameter, tough, internodes to 85 mm long, short-hairy with some stalked glandular hairs; pith of internodes narrowly hollow. Leaves: opposite decussate, simple dissected to 1/2 to midrib, petiolate (lower leaves) to sessile (canopy leaves) with pair connected as narrow ledges across node, without stipules; petiole concave on upper surface and with 3 raised veins on lower side (± crescent-shaped in x-section), to 20 mm long decreasing upward, indistinct from blade, upper surface appearing glabrous along whitish veins, lower surface short-hairy with upward-arched hairs; blade triangular to deltate or ovate,  $< 25-65 \times 20-50$  mm, broadly tapered at base, lobes and sublobes with ascending, narrow sinuses, sublobes and teeth acute with callous at tip, acute at tip, 3-veined from base and pinnately veined above slightly raised on upper surfaced and raised on lower surface, upper surface sparsely short-hairy along principal veins, lower surface short-hairy along principal and uniformly gland-dotted with conspicuous sessile glandular hairs in pits (ca. 40 glands/mm<sup>2</sup>. Inflorescence: heads, in terminal and axillary, cymelike, initially hemispheroid aging flat-topped (domed) arrays, array with 50+ heads, on closely spaced, opposite decussate branchlets, branchlets with 5+ heads at top, head discoid, to 10 mm across, commonly 60+-flowered, flowers bisexual, bracteate, short-hairy with upward-curved hairs and stalked glandular hairs; axes densely puberulent and short-hairy of upward-arched hairs; bracts subtending the lowest branchlets 1-dissected, ca. 10 mm long, of subsequent branchlets changing to linear, 1-veined, and decreasing to 4 mm long, short-hairy; peduncle at first anthesis short increasing to 10 mm long during flowering, densely puberulent and short-hairy of upward-arched hairs + inconspicuous glandular hairs; involucre bell-shaped to hemispheroid, 3.5-4.5 mm diameter, phyllaries ca. 30 in several series, the outermost 5 phyllaries linear, 3–3.5 mm long, green, 1-veined bracketed by a pair of whitish tissue, rounded on back, short-hairy with upward-curved hairs, other phyllaries linear-narrowly lanceolate,  $4-5 \times 0.5-0.65$  mm, green often with red-purplish tip, 3-veined often appearing green and whitish striped (whitish stripe between veins), the middle phyllaries rounded on back with upward-curved hairs and scattered glandular hairs with heads aging reddish, inner phyllaries flat and glabrous or sparsely short-ciliate; receptacle domelike, < 1 mm tall, lacking bractlets (paleae), glabrous. **Disc flower:** bisexual, radial,  $\pm 1.5$  mm across (corolla); calvx (pappus) of ca. 30 capillary bristles in 1 whorl, 3-4 mm long, colorless; corolla 5-lobed, (2.5–) 3.5 mm long; tube cylindric,  $\pm 1.7 \times 0.3$  mm, colorless (white), white, inconspicuously 5-veined; throat  $\pm$  cylindric, ca.  $1.2 \times 0.7$  mm, colorless at base to pale violet approaching lobes; lobes spreading, acute,  $0.45-0.5 \times 0.35-0.4$  mm, pale violet to blue-violet, surface with domed cells; stamens 5, attached at top of corolla tube; filaments 0.5 mm long, colorless to white; anthers fused as cylinder surrounding style, basifixed,

dithecal, included, 1.5 mm long, white, longitudinally dehiscent; pollen colorless (white); **nectary disc** surrounding base of style, 0.15 mm tall, colorless; **pistil** 1; ovary inferior, narrowly wedge-shaped,  $1 \times 0.4$  mm, white, 5-sided, with minute nonglandular hairs and short-stalked glandular hairs having colorless spheric heads; style exserted, 5–5.5 mm long, 2-branched, lower portion colorless, the stigmatic branches 2–2.5 mm long, pale light blue-violet, with flat inner side. **Fruits:** cypselae, with pappus, prismatic, 1.8–2.5 mm long, satiny brown, conspicuously 5-ribbed, with white callus at base, sparsely minutely hispid and sparse glandular hairs; pappus fused in ring at base, of ca. 30 widely spreading capillary bristles, subequal, (3–)3.5–4 mm long, tannish. A. C. Gibson