Vascular Plants of Williamson County

Conoclinium coelestinum – BLUE MISTFLOWER, PURPLE MISTFLOWER, BLUE BONESET [Asteraceae]

Conoclinium coelestinum (L.) DC., BLUE MISTFLOWER, PURPLE MISTFLOWER, BLUE BONESET. Perennial herb, rhizomatous, fibrous-rooted, several-stemmed at base, \pm erect with spreading to ascending branches but sometimes branches decumbent and when buried rooting at nodes, in range to 75 cm tall; shoots with paired cauline leaves, short-hairy with upward-curved hairs and both short-stalked and sessile glandular hairs, foliage not aromatic; buried stems rhizomelike with adventitious roots forming at nodes. Stems: inconspicuously 8-angled, to 4 mm diameter, tough, internodes to 90 mm long, short-hairy with some stalked glandular hairs; pith of internodes narrowly hollow. Leaves: opposite decussate, simple, petiolate with pair connected as ledges across node, without stipules; petiole deeply channeled base-to-top, to 15 mm long, short-hairy with stalked glandular hairs having yellowish heads; blade triangular to deltate, $15-73 \times 13-48$ mm, \pm truncate at base, serrate to serrate-dentate or shallowly lobed on margins, obtuse to broadly acute at tip, 3-veined from base and pinnately veined above with principal veins slightly sunken on upper surface and raised on lower surface, upper surface sparsely short-hairy along principal veins, lower surface short-hairy and with stalked glandular hairs along veins and uniformly gland-dotted with sessile glandular hairs in pits. Inflorescence: heads, in terminal and axillary, cymelike, flat-topped (domed) arrays, array with 10+ heads, on ascending lateral branches, head discoid, ca. 5 mm across, 70+-flowered, flowers bisexual, bracteate, short-hairy with upward-curved hairs and stalked glandular hairs; lower axis to 25 mm long; bract subtending lateral branch linear, to 5.5×0.5 mm decreasing upward, the lowest bract unlobed or minutely several-lobed, 1-veined, upper surface flattish and glabrous, lower surface rounded and short-hairy; peduncle at first anthesis 5-6 mm long increasing 2× during flowering, along axis having immature bracts of future branchlets; involucre bell-shaped, 3.5–4.5 mm diameter, phyllaries 20–35 in 2–3 series, narrowly lanceolate-linear, $2-3.7 \times 0.4$ mm, slightly ridged on back, with some short nonglandular hairs and scattered short-stalked glandular hairs having reddish heads; receptacle conic, lacking bractlets (paleae), glabrous. **Disc flower:** bisexual, radial, ± 5 mm across; calva (pappus) of ca. 20 capillary bristles in 1 whorl, 1.6–2.5 mm long, white; corolla 5-lobed, cylindric; tube 0.7–0.8 mm long, white, inconspicuously 5-veined; throat ca. 1×0.5 mm, pale violet, outer surface with scattered glandular hairs; lobes spreading, acute, $0.4 \times$ 0.3–0.35 mm, pale violet to blue-violet, surface with domed cells; stamens 5, attached at top of corolla tube; filaments threadlike, 0.7 mm long, white; anthers fused as cylinder surrounding style, basifixed, dithecal, included, 0.8 mm long, white, longitudinally dehiscent; pollen white; nectary disc at base of style, shallowly 5-lobed, 0.1–0.15 mm tall, purplish; **pistil** 1; ovary inferior, narrowly wedge-shaped, 1×0.4 mm, white, 5-sided, with short-stalked glandular hairs having colorless spheric heads; style exserted, ca. 2.5 mm long, 2-branched, lower portion 0.7–0.9 mm long, white, the branches with flat inner side, blue-violet. Fruits: cypselae, with pappus, prismatic, $1-1.5 \times 0.3$ mm, satiny brown, conspicuously 5-ribbed, with white callus at base, glabrous; pappus fused in ring at base, of ca. 20 widely spreading bristles, 1.7–2.9 mm long, tannish. A. C. Gibson