

Vascular Plants of Williamson County

Heliotropium tenellum – PASTURE HELIOTROPE [Boraginaceae]

Heliotropium tenellum (Nutt.) Torrey, PASTURE HELIOTROPE. Annual, taprooted, 1-stemmed at base, not rosetted, erect with spreading branches from principal axis above midplant, in range to 30 cm tall; shoots with only cauline leaves, strigose and short-strigose with appressed, upward-pointing hairs. **Stems:** cylindric, to 2 mm diameter, tough and wiry, lower stem exfoliating surface with hairs. **Leaves:** helically alternate, simple, short-petiolate, without stipules; petiole to 2 mm long; blade linear, 10–25(–45) × 0.9–1.5(–5) mm, entire with inrolled margins (revolute), acute at tip, 1-veined with midrib sunken on upper surface and raised on lower surface, lower surface densely strigose with upward-pointing hairs. **Inflorescence:** cyme, racemelike, several-flowered, terminal, not bracteate, green tissue densely strigose with upward-pointing hairs; peduncle < 0.7 mm diameter; pedicel to 6 mm long. **Flower:** bisexual, radial, 9–9.5 mm across; **calyx** unequally 5-lobed, densely strigose with upward-pointing hairs; tube short; lobes scarcely fused at base, ascending, narrowly triangular, the longest lobe 5–7.3 × to 1.2 mm, the shortest lobes < 3 × 0.4 mm, dark green, 1-veined, not inrolled, strigose on both surfaces; **corolla** 5-lobed, trumpet-shaped (salverform), 8.6–9 mm long, ca. 4 mm green to green-yellow and short-hairy and white above, in bud exposed corolla cream-colored; tube cylindric, lower portion 0.4 × 0.7 mm, pale green and glabrous, upper portion 0.8 mm long, densely short-hairy; throat with lower portion expanded around anthers, above anthers narrowed and 5-ridged, flaring upper portion white, inside with a set of short hairs at the base of each stamen; lobes broadly elliptic to ovate, 3.1–4 × 2.2–2.3 mm, white, flaring upper throat and lobes with stripe of strigose hairs on lower surface; **stamens** 5, fused at top of corolla tube 1.2 mm from base, sessile; anthers basifixed, dithecal, 1 mm long, white, minutely hairy subterminal on inner side, longitudinally dehiscent; pollen white; **pistil** 1, 1.3–1.5 mm long; ovary superior, 4-lobed, ca. 0.5 × 0.5 mm, green, at anthesis without hairs (beaded above midpoint), 4-chambered, each chamber with 1 ovule; style 0.9 mm long, enlarged above base (to 0.4 mm diameter), 2-branched, green below fork, the branches erect, acute, 0.25 mm long, white, and stigmatic. **Fruit:** nutlets, 4, intact width > length, with erect style; nutlets 3-sided rounded on back, ± 1.5 mm long, gray-brown with darker ribs, densely short-hairy; calyx with unequal lobes, < 3–11 mm long.

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