

Vascular Plants of Williamson County
Liatris glandulosa – STICKY GAYFEATHER [Asteraceae]

Liatris glandulosa G. L. Nesom & R. J. O’Kennon, STICKY GAYFEATHER. Perennial herb, corm-bearing, fibrous-rooted, 1–2(–several)-stemmed at base from top of corm, principal stems ascending to suberect, in flower (20–)24–40(–60) cm tall; shoots with basal leaves and closely spaced cauline leaves but longer basal leaves absent at flowering, cauline leaves mostly spreading to ascending, slender and ± stiff, young growth with scattered stalked glandular hairs containing resin, lacking nonglandular hairs; corm oblate-spheroid to subspheroid, old corm in range ca. 25 mm across, with 1–2(–4), short, belowground, chimneylike, shoot-forming stems covered by flaky periderm, flesh brownish and gray-black; adventitious roots arising at base of corm. **Stems:** ± cylindrical, current season stem to 5 mm diameter, green, with linear leaf scars, internodes unequal, 3–20+ mm long weakly ribbed and with flat face descending from leaf, tough, initially puberulent with minute stalked glandular hairs. **Leaves:** helically alternate, simple and ± sessile, without stipules; petiole cupped at base, < 2 mm long, indistinct from blade, with midvein wide at base; blade linear, in range < 40–130 × < 2–4.1 mm, entire, blunt-acute at tip, parallel-veined, 5-veined (–9-veined; the widest leaves) or 3-veined to appearing 1-veined (the narrowest leaves) with the only midrib conspicuous channeled on both surfaces, glandular hairs along margins appearing short-ciliate after losing heads. **Inflorescence:** heads, in a terminal, leafy, spikelike array of many ascending heads, 1 axillary head per leaflike bract sometimes with diminutive leaflike bracts subtending head, head discoid, in range 3–5-flowered, bracteate, of heads exposed tissues conspicuously gland-dotted with dense, short-stalked glandular hairs with resin; axis somewhat exposed, stemlike with ca. 4 nodes/10 mm, slightly ridged, green, glandular-hairy; bracts at top of peduncle acuminate-linear and 1-veined, < 15 × 0.5–1 mm; **involucre** inverted shell-shaped (turbinate) in outline, in range 9–11 × 3.5–4.5 mm, phyllaries 8–11 in 3(–4) series, unequal, outer phyllaries ovate, the lowest ca. 2.5 mm long increasing upward, most phyllaries acuminate-lanceolate to oblong-lanceolate approaching tip spreading, to 11 × 2.4 mm, parallel-veined and the innermost phyllaries 7-veined (13-veined), green or involucre above midpoint red-purple, exposed outer and inner surfaces densely covered with stalked glandular hairs (heads smaller on inner surface), midvein somewhat raised on larger phyllaries, margins neither membranous (hyaline) nor ciliate, having a hard, short point at tip; receptacle narrow, lacking bractlets (paleae), each ovary in pit surrounded by a fleshy rim ca. 0.25 mm long, glabrous; pedicel beneath ovary tough, short, sometimes having a series of diminutive leaves (bracts) approaching involucre. **Flower:** bisexual, radial, ca. 7 mm across (+ spreading style branches); **calyx (pappus)** feathery capillary bristles (plumose), in range ca. 25 in 1 series, ± equal fused at base, 7.5–8 mm long, axis often rose to purple-red, firmly attached and persistent, branches (barbels) fine, < 0.5–1.0 mm long; **corolla** 5-lobed, 9.5–10 mm long; tube 3 × 1 mm, enlarged at base around nectary disc, yellowish, with minute glandular hairs having minute heads; throat narrowly funnel-shaped, 3 mm long, pale pink, inner surface glabrous; lobes acute-narrowly triangular, 4 × 0.75–0.9 mm, light pink-purple, throat and lower surfaces of lobes conspicuously gland-dotted; **stamens** 5, attached to top of corolla tube; filaments ca. 1.5 × 0.2 mm, whitish, short-hairy base-to-tip; anthers fused into cylinder surrounding style, essentially included, ca. 4 mm long

including appendages and tails, sacs and tails brownish red, appendages ovate and pale, longitudinally dehiscent; pollen white; **pistil** 1; ovary inferior, narrowly inversely pyramidal to carrot-shaped, 4–5 × 1.5–1.7 mm, dull purple-red at top to paler at midpoint changing to pale green at base, ca. 10-ribbed, with ascending short-hirsute hairs along raised ribs and dense hairs at top, furrows gland-dotted with stalked glandular hairs having small heads, 1-chambered with 1 ovule; **nectary disc** surrounding style base, ca. 0.3 mm long and 0.7 mm across, orange; style long-exserted to 10 mm above corolla and head), 2-branched, ca. 14–16 mm long, translucent at base to light pink-purple at and above fork (fork at ca. 5 mm), the branches narrowly straplike, 10+ mm long, with conspicuous, sessile glandular hairs having large heads on upper side. **Fruits:** cypselae (achenes), in set of 3–5 per head, typically all fertile, with persistent, firmly attached pappus; fruit body inversely narrowly prismatic (obpyramidal) somewhat angled, in range 4–5 × ± 1.5 mm, 9–11-ribbed, dark brown to blackish with paler ribs, ribs short-hirsute with ascending hairs, faces especially above midpoint with minute stalked glandular hairs; pappus capillary bristles in range ca. 25 in 1 series fused at base, ascending to spreading, conspicuously feathery (plumose), in range 7.5–8 mm long, white to tawny (main axis purplish when immature), fine branches (barbels) ascending-spreading, < 0.5–1 mm long.

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