

Vascular Plants of Williamson County
Eupatorium compositifolium – YANKEEWEEED [Asteraceae]

Eupatorium compositifolium Walter, YANKEEWEEED. Perennial herb, taprooted with caudex, not rosetted, 1-stemmed at base, with ascending branches in canopy, often with unexpanded axillary shoots bearing 1–several leaves, erect to suberect, in range in flower 45–95 cm tall; shoots with only cauline leaves, dimorphic, on young shoot with feathery lower leaves in pairs and above all leaves alternate, foliage gland-dotted with glands sunken in blade tissue, aromatic when crushed, short-hairy. **Stems:** initially somewhat ridged, 1 ridge descending from each leaf, tough, often purple-red, short-tomentose and gland-dotted, branches and lower stem woody and covered with periderm. **Leaves:** opposite decussate and 3–4-odd-pinnately divided and petiolate at nodes along principal axis near the ground, helically alternate above and within flowering canopy with relatively mostly sessile to subsessile, slender, unlobed and entire leaves and some lobed leaves, without stipules; petiole crescent-shaped in \times -section, to 10 mm long, of canopy leaves indistinct from blade, gland-dotted especially along edges, short-hairy; blade of highly divided leaf pinnately lobed, ovate in outline, the largest blade with the lowest pair of primary leaflets opposite and often to 4-order segments, the second or third pair (opposite) often to 3-order segments, and the terminal segment 1-pinnate, the longest primary lobes to 20 mm long, the ultimate segments mostly 0.7–2 mm wide, acute at tip, pinnately veined with principal vein raised on lower surface, gland-dotted and with uniformly short-hairy; blade of unexpanded axillary shoots often 1-pinnately divided; blade in canopy approaching inflorescence linear, mostly $< 20 \times < 2$ mm decreasing upward. **Inflorescence:** heads, in leafy, paniclelike arrays terminal on each shoot branch and branchlet, often 15+ heads/array with the upper portion racemelike and the lower heads on short, cymelike branchlets, the longest branchlet with < 10 heads, having a bract at each fork, heads with short-stalk (peduncle), ascending to spreading (never drooping), head discoid, 2 mm across, of (4–)5 bisexual flowers, bracteate; bract subtending array and branchlets leaflike, linear, gland-dotted and with scattered short hairs, branchlet with several diminutive linear leaves; bract subtending peduncle (sessile head) appressed to peduncle, to 12×1.5 mm and $>$ head decreasing upward to \ll head, blunt acute at tip; peduncle ca. 0.5 mm long, mostly with several short hairs and glandular hairs; **involucre** narrowly bell-shaped, in range 4–4.5 mm long (healthy example), phyllaries 7–9 in 2 series, green with colorless margins and gland-dotted and sparsely short-hairy on green tissue, outer phyllaries 2–4, narrowly ovate, to 1.5 mm long, inner phyllaries 5, oblong to lanceolate, $3\text{--}3.5 \times 0.7\text{--}0.9$ mm, colorless margins stiff and winglike, mostly notched at tip with a spine (mucron) 0.3–0.8 mm long from sinus and white to reddish, persistent and widely spreading in fruit; receptacle flat, lacking bractlets (paleae), glabrous, with a short stalk beneath each ovary persistent in fruit. **Flower:** bisexual, radial, 0.8–1 mm across; calyx (pappus) of ca. 30–35 capillary bristles in 1 series, mostly subequal, (1–)3–3.5 mm long, whitish, fused in greenish ring at base, persistent and widely spreading in fruit; **corolla** 5-lobed, in range (2–)2.6–3.2 mm long, $<$ pappus, in bud with sessile glandular hairs on outer surface; tube cylindrical, to midpoint of corolla, ca. 0.2 mm diameter, conspicuously swollen at base surrounding nectary disc, with glandular above midpoint and persisting at tube-throat zone as a band of colorless heads; throat narrowly bell-shaped

to narrowly funnel-shaped, 0.45–0.65 mm wide at orifice, white (no purple), (4–)5-veined with a vein to each sinus; lobes widely spreading, deltate, ca. 0.3 mm, white, with several glandular heads on lower surface; **stamens** (4–)5, arising at top of corolla tube; filaments 0.5 mm long, colorless; anthers fused into cylinder surrounding style, included, basifixed, dithecal, ca. 1.2 mm long including triangular appendages, white, longitudinally and inwardly dehiscent; pollen white; **pistil** 1; ovary inferior, columnar 5-ribbed, ca. 1 mm long, light green, sometime with sessile glandular hairs, 1-chambered with 1 ovule; **nectary disc** surrounding base of style, ca. 0.2 mm long, light green; style 4–5 mm long, exerted from midpoint, colorless at base and exerted portion white, 2-branched below midpoint, the exerted stigmatic branches threadlike and typically curved or twisted above the head, style minutely papillate just above nectary. Fruits: cypselae (achenes) columnar 5-ribbed, mostly 1.5–1.8 mm long including stalk, glossy brown to dark brown, glabrous or with sessile glands along ribs and often a ring of glands at top (below pappus).

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