

Vascular Plants of Williamson County

Hymenopappus artemisiifolius var. *artemisiifolius* – RAGWEED WOOLLY-WHITE
[Asteraceae]

Hymenopappus artemisiifolius DC. var. *artemisiifolius*, RAGWEED WOOLLY-WHITE.
Biennial herb, thick-taprooted, rosetted, 1–5-stemmed at base, with ascending lateral branches forming from canopy downward, erect, in range 40–90 cm tall; shoots with many basal leaves and several–many cauline leaves, bicolored, cobwebby-woolly and with short-stalked glandular hairs hidden beneath wool. **Stems:** conspicuously ridged, to 10 mm diameter, with 3 or 5 ridges descending from each cauline leaf, tough and aging woody, often red-purple, gray-tomentose and with glandular hairs; solid. **Leaves:** helically alternate, deeply odd-1-pinnately lobed or on axillary shoots oblanceolate with few lobes to entire, basal leaves to 235 mm long and petiolate and cauline leaves shorter and sessile, without stipules; petiole ± flat on upper side and several-ridged on lower side, to 25 mm long, flared at base; blade ovate in outline with to 20 alternating lobes, of basal leaves mostly ovate in outline pinnately sublobed and teeth and terminal lobe ovate to 50 × 25 mm, of cauline leaves mostly oblong or obovate to broadly oblanceolate, < 12–30 × 4–16 mm, with longer trailing edge, margins of lobes mostly entire and slightly inrolled under, blunt acute at tip, pinnately veined with midrib somewhat raised to ridged on upper surface and principal veins raised and ridged on lower surface, channeled (upper side) and densely cobwebby-woolly along midrib, young leaves densely cobwebby-woolly aging less so on upper surface showing red-purple or green surface, lower surface gray with dense hairs. **Inflorescence:** heads, many in terminal, flat-topped cymelike arrays of principal shoots and later ascending axillary flowering shoots, cobwebby-woolly and with scattered short-stalked glandular hairs; axes ridged; bract subtending secondary and tertiary branches and branchlets ovate and sessile, the lowest most 7.5 × 3.5 mm decreasing upward, upper surface green and with widely scattered glandular hairs, lower surface with midvein raised, gray with shaggy, tomentose hairs and scattered glandular hairs; axes of branches and bractlets ridged with 1 ridge descending from each bract or phyllary of involucre, bract subtending peduncle petal-like, broadly elliptic to obovate, 4–10 mm long, green to midpoint and bright white above, green tissue short-hirsute and with glandular hairs; **involucre** ± hemispheroid, 3–4 mm across, phyllaries 8–9 in 2 series, showy ascending to erect, and petal-like, oval or obovate to ovate 4.5–6 × 2–3.6 mm, outer series > inner series (ovate), green at bases with short-hirsute and glandular hairs, bright white at least above midpoint and glabrous, the white limb flat, wavy, or with margins rolled outward, phyllaries persistent and ascending to spreading in fruit; receptacle flat, without bractlet subtending flower (paleae), glabrous. **Disc flower:** radial, 2 mm across; **calyx (pappus)** of 16–18 scales appearing in 1 series, at anthesis ca. 0.5 mm long increasing after anthesis, mature scales ascending to erect, fan-shaped or narrowly fan-shaped to obovate or oblong, 0.6–1.25 × 0.3–0.8 mm, scarious with midvein raised on outer (lower) surface, upper margin rounded and minutely jagged to shallowly cut, lacking terminally bristle, permanently attached; **corolla** 5-lobed, in bud to 2.5 mm long increasing at anthesis to 6 mm long; tube initially ca. 0.5 mm long and purple-red, elongating into cylinder ca. 3 × 0.3 mm and pale and having papillate hairs; throat initially cylindrical aging somewhat bell-shaped, to 1.3 mm long and 1.5 mm wide at orifice, colorless with 5 veins to sinuses; lobes

initially erect, triangular and ca. 1 mm long expanding to 1.3×1 mm, colorless but with glandular hairs near tip = yellowish color; **stamens** 5, attached to top of corolla tube, with anthers fully exerted from corolla throat; filaments ca. 1.5 mm long, pale pink becoming whitish; anthers fused into cylinder surrounding style, basifixed, dithecal, ca. 1.5 mm long including acute appendages at top, pink-rose, longitudinally dehiscent; pollen pinkish; **pistil** 1; ovary inferior, inversely pyramidal, ca. 0.6 mm long, at anthesis conspicuously 4–5-ribbed hidden by a dense cover of short-hirsute hairs, 1-chambered with 1 ovule; **nectary disc** = dome at top of ovary; style 2-branched, in bud relatively thick and ca. 1.5 mm long, the stigmatic branches flat on inner side and convex on outer side with conspicuously papillate hairs, elongating 3× with stigmatic branches at or somewhat exerted from anthers. **Fruits:** cypsela (achenes), disseminated with pappus scales and dried corolla, stamens, and style; cypselae obovoid, ca. 4×1.5 mm, in fresh condition bulging chamber red-purple tapered to a narrow white or gray base, drying dark blackish, with 4–5 conspicuous ribs and 1 or more on faces decurrent from pappus scales, ribs and faces with short-hirsute hairs, lower portion with some glandular hairs.

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