

## Vascular Plants of Williamson County

*Fatoua villosa* – MULBERRYWEED, HAIRY CRABWEED [Moraceae]

*Fatoua villosa* (Thunb.) Nakai, MULBERRYWEED, HAIRY CRABWEED. Annual, taprooted, not rosetted, 1-stemmed at base, typically unbranched, in range to 35 cm tall; monoecious; shoots with only cauline leaves and most subtending an inflorescence, lacking stinging hairs, axes and foliage short-hirsute with nonglandular hairs having bulbous bases and with stalked glandular hairs. **Stem:** cylindrical, to 2 mm diameter, with short nonglandular hairs and many glandular hairs, the lowermost stem peeling (exfoliating). **Leaves:** helically alternate, simple, petiolate, with stipules; stipules 2, attached at node at base of petiole, linear to awl-shaped, 1–3 mm long, green, 1-veined, sparsely short-hairy, persistent; petiole narrowly channeled, slender, to 43 mm long, with curved nonglandular hairs especially along channel; blade ovate, in range to 52 × 40 mm, ± = petiole, broadly tapered to subtruncate at base, crenate on margins with narrow sinuses, somewhat elongated at tip but not acuminate, pinnately veined with 3 unequal veins at base, having principal veins sunken on upper surface and raised on lower surface, young blades with abundant stalked glandular hairs. **Inflorescence:** compact cyme, axillary 1–3 per node, hemispheroid, together to 15 mm across and units 4–8 mm across, many-flowered with flowers produced and oriented on upper side, bracteate, with nonglandular hairs and stalked glandular hairs; peduncle 4–7 mm long, greenish to off-white, pubescent; bracts at base of flowers narrowly oblong, to 3 × 0.5 mm, green, short-hairy; bractlet subtending pedicel of staminate flower narrowly ovate, 1 × 0.35 mm, pedicel of staminate and pistillate flower < 0.5 mm long. **Staminate flower:** radial, ca. 2.5 mm across; **calyx** 4-lobed, fused at base < 0.4 mm; lobes cupped-broadly ovate, ca. 1 × 0.7 mm, green at base and red-purple above with narrow whitish to purplish margins, 90° angle at tip, outer (lower) surface having stalked glandular hairs; **corolla** absent; **stamens** 4, free; filaments in bud looped at anthesis widely spreading, ca. 1.6 mm long, translucent, with thickenings mid-filament; anther in bud cupped by sepal, dorsifixed, dithecal, 0.5 × 0.7 mm, white, longitudinally dehiscent; pollen white; **pistil** absent = low mound with short hairs. **Pistillate flower:** essentially closed, ± bilateral with style long-exserted off-center, 0.5 mm across; **calyx** 4-lobed, ca. 0.6 mm long and appearing boat-shaped on outer side increasing and expanding in fruit, with triangular lobes initially adherent by short hairs around style maturing with lobes deltate ca. 0.5 mm, green, with short hairs; **corolla** absent; **stamens** absent; **pistil** 1, ca. 2 mm long; ovary superior, biconvex, ca. 0.3 mm, glabrous, 1-chambered with 1 ovule; style 1 mostly exserted from calyx + diminutive short style at base, attached laterally on edge of ovary, exserted stigmatic portion aging rose with radiating papillate hairs. **Fruits:** multiple fruit (syncarp) of achenelike structures on a highly condensed cyme, having many pistillate flowers (+ staminate flowers), bracts and bractlets persistent on base, each achene initially fleshy, somewhat V-shaped opening above midpoint at maturity to expel seed when dry, ca. 1.6 × 1.2 mm, white, with minute horizontal ridges, before mature appearing to have 2 dimples each with a papery appendage at each dimple, lower style thicker, green, smooth, and persistent, stigmatic upper portion eventually breaking. **Seed:** polygonal (4 faces) appearing trigonous, 0.9–1 × 0.6–0.7 mm, off-white with almond-white bumps and short projections (tuberculate) faces, edges sharply defined, rounded at top.

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