

Vascular Plants of Williamson County

Malvastrum aurantiacum – WRIGHT FALSE MALLOW [Malvaceae]

Malvastrum aurantiacum (Scheele) Walp., WRIGHT FALSE MALLOW. Perennial herb, taprooted, not rosetted, several-stemmed at base, branches procumbent or spreading to ascending, forming a new axillary shoot at node with a mature fruit, in range to 30 cm tall; shoots with basal leaves but at flowering with only cauline leaves, having 6-armed to 10-armed stellate hairs with arms mostly appressed to axes and flat surfaces, the hairs to 0.4 mm across. **Stems:** cylindric with short-projected leaf bases, to 2 mm diameter, tough, light yellow-green, with scattered, appressed stellate hairs, leaf scar smilelike with linear, lateral stipular scars; woody close to root. **Leaves:** helically alternate, simple, petiolate, with stipules; stipules 2, attached to flaring base of petiole, acute-lanceolate to oblong-lanceolate, 3.5–4 × 1–1.3 mm, green or aging dark purple-red, entire, stellate-puberulent mostly on lower (outfacing) surface, margins with some longer 1-armed hairs, not persistent; petiole shallowly channeled, < 8–35 mm long; blade ovate, < 11–50 × 7–40 mm, not asymmetric, subcordate at base, initially serrate with < 10 teeth per margin, maturing crenate-serrate on margins with minute callus at tips of teeth, obtuse = broad tooth at tip, palmately veined 5 or 7 principal veins at base sunken on upper surface and raised on lower surface, upper surface with widely spaced stellate hairs, lower surfaces paler with denser stellate hairs. **Inflorescence:** solitary axillary flower, buds not densely clustered at shoot tip or flat-topped with unexpanded subtending leaf (bractlet), bracteate, with appressed stellate hairs having 6–10 arms; pedicel compressed top-to-bottom somewhat flattened on 1 side, at anthesis ca. 5 mm long, densely stellate-hairy; bracteoles 3 attached to lower side of receptacle and surface of calyx to pedicel (epicalyx) opposite 3 sinuses, ascending, acute-ovate somewhat cupped along 3 edges of bud, 5–6 × 4 mm increasing slightly in fruit, green, often slightly asymmetric at base with decurrent paler tissue, rarely with 2 tips, arms of stellate hairs often not strongly appressed, persistent. **Flower:** bisexual, radial, 30–35 mm across; **calyx** 5-lobed, at anthesis ca. 12 mm long increasing and stretched tight in fruit with tube becoming hemispheroid and bulging to 10 mm across, bud appearing pleated and green but reddish along touching lobe margins, densely stellate-hairy; tube at anthesis bell-shaped, ca. 5 mm long increasing 2× in fruit, with many veins from base, inner surface glabrous and at anthesis lower portion glossy green (opposite nectary disc); lobes ± deltate, ca. 5 × 4 mm increasing in fruit, with ca. 7 principal veins at base, green but purple-red on margins, densely puberulent on upper surface; **petals** 5, overlapping in bud, fused to base of staminal tube, fan-shaped to shallowly 2-lobed with rounded lobes, 12–15 × 8–17 mm, of different widths in 1 flower, light orange-yellow and glossy on upper surface, with a conspicuous tuft of colorless, unbranched and dendritic hairs at bases of petals to 0.8 mm long; **stamens** ca. 40, monadelphous (all fused around ovary and above part of length) forming an erect column bearing a dense cluster of anthers, glabrous; tube cylindric, intact column, ca. 5 × 1 mm, filaments 2–3 mm long, column and filaments in bud whitish aging pale yellow-orange to light orange; anthers dorsifixed, monotheical, 0.8 mm long, light yellow-orange, longitudinally dehiscent; pollen light orange; **pistil** 1; ovary superior, hidden beneath staminal column, tire-shaped (oblate), on top shallowly indented and separable between locules, ± 2 × 4 mm, whitish at base and greenish above midpoint, with stiff hairs on top and puberulent hairs on side and between chambers, 13–17-chambered, each chamber with

1 ovule (below midpoint); style sea-anemonelike, columnar portion to midpoint, 13–15 mm long, whitish, in range with tentaclelike branches and twisted (1 per locule) pale yellow-orange; stigmas capitate. **Fruit:** schizocarp, breaking into 13–17 dry, 1-seeded, indehiscent segments (mericarps), partially concealed by an overarching, dry calyx and epicalyx; intact fruit tire-shaped, ca. 9 mm across with deep depression at center, exposed portion rose-red drying reddish brown; mericarps 1-seeded, transversely wedge-shaped weakly 2-lobed, radially somewhat kidney-shaped with straight inward-facing edge having a peglike projection 1 mm long (persistent lower style, beak), the lateral faces bulging from seed, mericarp body ca. $5 \times 3.5 \times 2$ mm, upper surface hirsute with radiating stiff hairs to 1 mm long leaning toward beak, the hairs often with enlarged, pigmented bases. **Seed:** kidney-shaped, ca. $3.5 \times 2.5 \times 2$ mm, fitting loosely within chamber, white aging dark brown and minutely textured (domed cells).

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