Vascular Plants of Williamson County

Abutilon fruticosum – TEXAS INDIAN MALLOW [Malvaceae]

Abutilon fruticosum Guill. & Perr. (syn. A. texense, not A. incanum), TEXAS INDIAN MALLOW. Perennial herb, with woody root, not rosetted, (1–)several-stemmed at base, with ascending to erect principal shoots, in range 15-110 cm tall; shoots (new plants) with basal leaves and otherwise only cauline leaves, foliage gray to gray-green or green, especially more gray on lower surfaces where densely covered with reflective, short stellate hairs, upper surface velveteen when spaced short-pilose hairs and having stellate hairs mostly along veins. **Stems:** initially somewhat ridged soon cylindric, to 6.5 mm diameter, with 3 broad ridges descending from leaf, ridges often concealed by dense stellate hairs, with projecting leaf bases at nodes. Leaves: helically alternate, simple (occasionally a large leaf weakly 3-lobed, sinuses < 2 mm deep), petiolate, with stipules; stipules 2, attached on node at base of petiole, linear, 2.3–4.5 mm, pale green, densely stellate-hairy, abscising very early; petiole cylindric and pulvinuslike at top, 6–77 mm long, tough, greenish white densely stellate-hairy; blade when initially folded upward from midrib (conduplicate) aging flat, inversely heart-shaped, $< 12-97 \times < 10-78$ mm, > petiole, deeply cordate at base, dentate on margins, acute to acuminate at tip, palmately veined with 5, 7, or 9 veins at base with principal veins raised on upper surface and slightly sunken other veins and veins raised on lower surface, on gray leaf surfaces with dense stellate hairs, on green upper surface with mostly short-pilose hairs. **Inflorescence:** solitary, axillary on straight stalk (looped and reflexed in early bud), not bracteate; peduncle (pedicel) at anthesis to 12 mm long increasing 2× in fruit, jointed approaching flower below flaring at top, stellate-hairy. **Flower:** bisexual, radial, 13–18 mm across, with 5 ribs; receptacle flared beneath pistil; calvx 4–5- lobed, 5–6 mm long increasing slightly and strongly reflexed in fruit, green, outer surface with scattered stellate hairs; tube bellshaped; lobes often unequal, triangular to acuminate-ovate, to 2.5 mm long, upper (inner) surface glabrous or puberulent with fine hair; **corolla** 5-lobed, 7–10 mm long, lobes strongly twisted in bud; tube = colorless tissue tightly appressed to ovary and fused to base of the staminal column; lobes widely spreading, fan-shaped, 6–7.5 mm wide, light yelloworange, with conspicuous veins, subtruncate, lower surface having many fine glandular hairs with tiny heads (appearing short-pilose), with a tuft of short hairs in each sinus; stamens 30–< 45, fused into column; filament column ca. 2 × 1 mm, colorless, with some stellate hairs on column, filaments free portion spreading to ascending, 1.5–2 mm long, yellowish, glabrous; anthers dorsifixed, monothecal, 0.4–0.45 mm long, light orangeyellow, sacs equal to unequal, longitudinally dehiscent; pollen light yellow-orange; **nectary disc** on bottom on ovary as base, 0.3 mm long, green, glabrous, producing thin nectar (collected within staminal column); pistil 1; ovary superior, appearing truncatebroadly ovoid, ca. 2 × 2.5 mm depressed in center, pale grayish green densely puberulent, somewhat 5-sided below midpoint, 6–10-chambered, each chamber with 3 ovules; styles 1 per chamber, ca. 4 mm long, fused 1 mm at base and yellowish, free portions surround by staminal column and spreading above column, 0.1 mm diameter, greenish; stigmas capitate, 0.25 mm across, colorless. **Fruit:** schizocarpic capsule, of 6–9(–10) upright chambers, when immature erect and green, ca. $8 \times 9 - 9.5$ mm, with crest on upper side, lacking awns, each chamber initially dehiscent starting on upper side eventually becoming

1/2 to 2/3 around each chamber, each chamber to 3-seeded, pursed chambers splitting apart (mericarps) with or without seeds within chamber; mericarp acute at tip, $8-8.5 \times 3-3.5 \times 2.5$ mm, brown, lateral wall with elliptic scar, exposed surfaces stellate-hairy. **Seed:** plump heartlike, 2-2.2 mm long, brown with blackish hilum in sinus, elaborately textured with short projections and puberulent patches. A. C. Gibson