## **Vascular Plants of Williamson County**

*Cnidoscolus texanus* – TEXAS BULL NETTLE, MALA MUJER [Euphorbiaceae]

Cnidoscolus texanus (Müller-Arg.) Small, TEXAS BULL NETTLE, MALA MUJER. Perennial herb, spinescent of horrific stinging hairs, with massive root, not rosetted, several-stemmed at base, 30–115 cm tall; monoecious; shoots with only cauline leaves, extremely painful to touch, having long, straight stinging hairs with bulbous white bases (pustulate) with white bases elongate to the axis, mixed with shorter, finer, hirsute and short-hirsute hairs; latex white and copious; root with 2+ erect shoots arising from root crown ca. 50 mm belowground; erect underground stem rhizomelike, yellowish, the scales dentatesemicircular, to  $5 \times 10$  mm, white, lacking adventitious roots. **Stems:** cylindric, to 11 mm diameter, stiff and tough, green. Leaves: helically alternate, palmately (3)5-lobed, longpetiolate, with stipules; stipules 2, attached at base of petiole on upper side, palmatelypinnately lobed, 3.5–5 mm long, lateral lobes often nectar-producing, early-deciduous; petiole cylindric, to 145 mm long, green, with dense, radiating stinging hairs, at top at junction with blade upper side with a cluster of 12+ conic to oblong food bodies to 1 mm long and pale green; blades roughly circular in outline,  $60-180 \times 60-200$  mm, cordate at base, lobes ovate to somewhat diamond-shaped, to 120 × 80 mm, broadly dentate and several triangular sublobes, acute at tips, palmately veined and lobes pinnately veined, with principal veins raised on upper surface and principal and many minor veins raised to strongly raised on lower surface, the largest stinging hairs along veins. Inflorescence: cymes in compound structure, terminal, at principal fork or also second fork having a subsessile pistillate flower surrounded by 3–4 branchlets, conspicuously proterogynous with pistillate flower open before anthesis of the earliest staminate flower, each branchlet with a terminal cyme of showy staminate flowers, staminate flowers to 20, bracteate, with stinging and nonstinging hairs on green tissues; peduncle ascending, straight, < 90–130+ mm long, densely covered with stinging hairs of variable lengths and short-hairy; bract subtending each branch or branchlet, lower part collarlike, ca. 1 mm long, having several food bodies on margin at attachment with axis, upper portion acuminate, the lowest bract ca. 7 mm long decreasing upward at every new axis; staminate flowers sessile; pedicel of pistillate flower stout, funnel-shaped, ca.  $3 \times 5$  mm, green, short-hairy, with few stinging hairs, abscising close to axis. **Staminate flower:** radial, 20–40 mm across, trumpetshaped; sweetly fragrant like jasmine (Jasminum); calyx corollalike, 5-lobed; tube narrowly funnel-shaped 10-ribbed at least to midpoint,  $10-25 \times 4-6.5$  mm, green at bellshaped base and white above, with several stinging hairs and weak, nonglandular short hairs; lobes widely spreading, ovate to broadly elliptic or obovate,  $11-16.5 \times 7-10.5$  mm, pure white, overlapped at base or pairs somewhat fused at base; corolla absent; nectary **disc** around stalked base of stamens, conspicuously 5-lobed,  $1 \times 1.8-2.2$  mm, yellow, each lobe wide and shallowly notched; stamens 10 in 2 whorls, monadelphous (fused into a column), column to 18 mm long, cream-colored; filaments of outer whorl diverging from 5-sided tube 2–2.5 mm above nectary and included in calyx tube, origins of filaments hidden by dense, villous hairs on column and bases of outer filaments, filaments unequal, 8–13 mm long, white; filaments of inner whorl with 2 anthers included at top of calyx tube and 3 anthers  $\pm$  exserted, with 1 filament diverging about 12 mm from nectary and the others at top of column, the inner filaments 5–6 mm long, white, anthers dorsifixed,

dithecal, 1.5 mm long, cream-colored; pollen cream-colored; pistil absent. Pistillate **flower:** radial, sweetly fragrant; **calyx** 5-lobed; tube collarlike with 5 undulations bearing early-deciduous lobes, ca.  $3 \times 5$  mm long, thick-walled, green, with several stinging hairs along collar; lobes ascending, oblanceolate,  $18-22 \times 4.8-7$  mm, pure white (greenish at base), early-abscising drying cream-colored, lower surface with to 20 stinging hairs to 7 mm long and short-hairy; corolla absent; stamens absent; nectary disc within calyx tube surrounding base of ovary, 5-lobed, ca. 1 mm long, 3.5 mm across, yellow-orange, along top with a ring of ca. 10 hairs (2 per corolla lobe), hairs to 1 mm long with swollen base, white aging reddish; **pistil** 1, ca. 12 mm long, short-stalked with stalk 3 mm long; ovary superior, 3-sided and 3-angled, obovoid, at anthesis ca.  $4-4.5 \times 3.5$  mm increasing rapidly in size, green with different shades, angles rounded, faces soon with low midridge, stinging hairs mostly above midpoint along angles, short-hairy, 3-chambered, each chamber with 1 large ovule; style base persistent, short, chimneylike, and 5-ridged, 0.5–1 mm long, greenish, the deciduous portion cylinder ca. 1.5 mm long with 3 ascending stigmatic lobes, the stigmatic lobes fan-shaped with several forks with 9-12 fleshy, fingerlike sublobes, ca.  $4 \times 3$  mm, white, the sublobes widely spreading, 1–1.5 mm long, wet and sticky on upper side. Fruit: schizocarpic capsule, septicidal, spinescent, 3-seeded, broadly obovoid 3lobed, at maturity 19–22 mm diameter (excluding stinging hairs), brown, each chamber 1valved with 1 seed dispersed with valve, stinging hairs at least persistent above midpoint, with base of style (beak) ca. 1.5 mm long in depression at top, with stinging hairs of various lengths and short hairs. Seed: arillate, when enclosed in hard inner fruit wall elliptic in outline  $\pm$  flat on inner surface,  $17-19 \times 10-11.5 \times 6$  mm, with postlike projection  $2 \times 3 \times 3$  mm, naked seed  $13-15 \times 9 \times 5$  mm, brownish white, rounded on back with partial keel, inner face with midline, lower end oblique truncate, upper end having a pair of depressions covered by fleshy caruncle, the caruncle broadly 2-lobed, when fresh  $4 \times 7$ mm, translucent white; seed coat hard.

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