## Vascular Plants of Williamson County Melothria pendula – MELONCITO, CREEPING CUCUMBER [Cucurbitaceae]

Melothria pendula L., MELONCITO, CREEPING CUCUMBER. Perennial herbaceous vine, tendril-bearing, several-stemmed at base, fibrous-rooted and often with short woody taproot, trailing to procumbent, in range shoots to 400 cm long; andromonoecious (bisexual flowers apparently with fertile anthers); shoots with only cauline leaves, stems initially puberulent aging glabrescent but blades remaining somewhat scabrous with hairs curved to somewhat hooked (uncinate); tendril next to petiole at node on upper side, on fertile shoot next to pistillate flower and later staminate raceme in axil, unbranched, herbaceous, cylindric,  $50 + \times 0.4$  mm, aging with 10+ coils, sparsely short-hairy aging glabrescent. Stems: 5-ridged with rounded ridges, to 2 mm diameter but swollen at nodes (petiole + tendril + inflorescence), weak and flexible, striped, internodes mostly 35-80 mm long, short-hairy aging glabrescent. Leaves: helically alternate, 3-lobed or 5-lobed, petiolate, without stipules; petiole 2-ridged with deep groove on upper side, petiole < blade, striped light green and dark green or reddish, often strongly bent at base and twisted, scabrous with short hairs, the hard hairs with persistent, wide bases; blade roundish to broadly ovate in outline,  $(20-)35-70 \times (20-)40-90$  mm, cordate to deeply cordate at base often with basal lobes somewhat overlapping, lateral lobes low, broadly low-dentate on margins, obtuse with wide, hard point at tips, palmately veined (3 or 5 principal veins at base) with veins initially sunken on upper surface and principal veins strongly raised on lower surface. upper surface uniformly short-hairy with stiff hairs, lower surface with longer stiff hairs along veins and hairs along veins mostly curved to somewhat hooked. Inflorescence: cyme, axillary, in range initially producing a terminal, solitary bisexual flower on a long pedicel (peduncle), at the base shortly forming a branch with (1-)2-8 staminate flowers on a peduncle, at each node with anthesis of the oldest staminate flower after pollination of the bisexual flower, inconspicuously bracteate, during early development with short, often uncinate nonglandular hairs; bractlet subtending pedicel of bisexual flowers minute, narrowly triangular, < 0.5 mm long, greenish; pedicel of bisexual flower elongating at base, slender and straight, at anthesis  $30-45 \times 0.3$  mm not increasing and downward-pointing in fruit, green, not striped, in fruit glabrescent, with abscission constriction at top; peduncle of staminate cyme short when buds initiated then gradually elongating from base (intercalary), slender like other cyme branch and at maturity < 20 mm long, with unequal pedicels forming upper portion of cyme branch; bractlet subtending each pedicel scalelike, inconspicuous, after abscissing leaving slight mound on axis; pedicels 2.5-6.5 mm long, with uncinate hairs. Staminate flower: radial, 4.5–6 mm across, abscised after pollen released; hypanthium (also treated as a corolla tube) above ovary, bell-shaped to somewhat narrowed at midpoint, ca.  $3 \times 2-2.5$  mm, green, puberulent on outer surface, lined with beadlike hairs and approaching rim with specialized glandular hairs; sepals 5, radiating from rim of hypanthium to slightly deflexed, subequal, narrowly triangular, ca.  $1 \times 0.3$  mm, pale light green, with several minute hairs on margins and sometimes on lower surface; corolla 5-lobed, fused only at base; tube indistinct from hypanthium, < 1 mm long, green with hairs as on hypanthium; lobes initially folded in bud (conduplicate), broadly ovate to obovate, 1.5–2.5 mm long, yellow with green at base, lower surface pubescent like hypanthium, upper surface with specialized glandular hairs to midpoint; stamens 3, attached near rim of hypanthium, subsessile; filaments flattened front-to-back, ca.  $0.5 \times 0.5$ 

mm, whitish; anthers dorsifixed, dithecal,  $\pm 1.5$  mm long, with wide, pale green connective with light orange hairs on sacs, longitudinally and sideways dehiscent; pollen whitish; pistil vestigial at base of flower; nectary disc in center at base of hypanthium, top-shaped, ca.  $1 \times 0.8$  mm, green, slightly depressed on top. **Bisexual flower:** radial, 6–10 mm across; hypanthium (also treated as a corolla tube) above ovary, bell-shaped appearing somewhat inflated,  $3 \times 2.5-3$  mm, green, puberulent on outer surface, lined with beadlike hairs and approaching rim with specialized glandular hairs; sepals 5, radiating from rim of hypanthium to slightly deflexed, subequal, narrowly triangular,  $1-1.3 \times 0.3$  mm, pale light green, with several minute hairs on margins and sometimes on lower surface; corolla 5lobed, fused only at base; tube indistinct from hypanthium, ca. 1 mm long, green with hairs as on hypanthium; lobes initially folded in bud (conduplicate), broadly oblong to obovate,  $2.5-4.5 \times 1.5-3$  mm long, yellow with green at base, lower surface pubescent like hypanthium, upper surface with specialized glandular hairs to midpoint; stamens 3-4, attached near rim of hypanthium, subsessile, in range appearing fertile; filaments flattened front-to-back, ca.  $0.5 \times 0.5$  mm, whitish; anthers dorsifixed, dithecal, 1–1.2 mm long, with wide, pale green connective with light orange hairs on sacs, tips of anthers sometimes slightly exserted, longitudinally and sideways dehiscent; pollen whitish; pistil 1; ovary inferior, conspicuous and puberulent in young bud, lower portion oblong-ellipsoid,  $4-5.5 \times$ 2-2.5 mm, somewhat glossy light green, textured with flattened mounds at bases of ephemeral minute hairs, 3-chambered, each chamber with a stack of < 10 seeds, upper portion (beneath hypanthium) necklike (contracted ovary) without chambers, ca.  $1.2 \times 0.8$ mm, green with several hairs; nectary disc at base of hypanthium surrounding style, dishlike with shallowly scalloped rim,  $1 \times 1.5$  mm, green, flaring from style; style + stigma somewhat club-shaped, ca. 3 mm long, axis green to midpoint, with broad lobes to stigmas, glabrous; stigmas initially free in bud becoming coherent 3-sided pyramidal and green aging darker to purplish red, papillate and sticky. Fruit: berry, solitary and pendent on slender, flexible pedicel from axil; berry not splitting open, to 24-seeded, in range ellipsoid, at maturity mostly  $15-20 \times 10.5-13$  mm, blotchy light green and whitish; exocarp thin, mesocarp at maturity fleshy, mildly suds-producing (sapogenic) when shaken with water. Seed: maturing in a liquid-filled, flattened ellipsoid sac slightly larger than seed, seed flattened ovate,  $5.2-5.7 \times 3.3-3.7$  mm, tannish. A. C. Gibson