

## Vascular Plants of Williamson County

*Menodora heterophylla* – LOW MENODORA, TWINPOD [Oleaceae]

*Menodora heterophylla* Moric., LOW MENODORA, TWINPOD. Perennial herb (in range), taprooted, not rosetted, several–many-stemmed at base, decumbent, in range to 20 cm tall; shoots with pinnately to irregularly lobed cauline leaves to some unlobed upper cauline leaves (bractlets), glabrous or inconspicuously puberulent (lower plant); taproot not straight, with coarsely furrowed young bark. **Stems:** ± 6-sided (upper portion of each internode), green stems to 1.5 mm diameter, with 3 low ridges descending internode from each leaf, tough, lower internodes sometimes puberulent. **Leaves:** opposite decussate, mostly 2–7-lobed but not symmetric and in canopy some leaves (bractlets) unlobed, subsessile and pair appearing fused across node with a U-shaped connection, without stipules; petiole indistinct from blade, < 1 mm long, with whitish margins; blade oblanceolate (the lowest leaves) to oblong and lanceolate-oblong, in range 13–20+ × 3–5+ mm, dull dark green, tapered at base, entire with margins inrolled (blade appearing more narrow), acute with a callus tip, midrib only visible and conspicuously sunken on upper surface and raised on lower surface, upper surface short-hispid with ascending hairs, lower surface short-strigose or short-hispid. **Inflorescence:** leafy cyme, terminal on main and lateral stems, several-flowered, not 1–sided, buds and open flowers never coiled at tip, flowers at anthesis subsessile, with alternate leafy bractlets, short-strigose and short-hispid; bractlet subtending inflorescence = cauline leaf, oblong to narrowly lanceolate; peduncle cylindrical, densely short-strigose. **Flower:** bisexual, radial, 24–25 mm across; **calyx** 5-lobed, at anthesis with erect lobes becoming ascending to spreading; hispid and strigose with upward-pointing stiff hairs; tube cup-shaped, ca. 0.5 mm long increasing 2× in fruit; lobes unequal, narrowly lanceolate, 3.5–4.7 mm long increasing 2× in fruit, inner surface soft short-strigose base-to-tip; **corolla** 5-lobed, trumpet-shaped (salverform), visible portion white, outer surface strigose, in bud slightly bulging and yellowish on throat opposite calyx lobes; tube flared around ovary, to 1 mm long, white; throat 4–5 × 1 mm, lower throat purple and 1 mm long, midthroat yellowish, upper throat pure white, lacking appendages, lining of midthroat with 5 glutinous, vertical strips of whitish papillate hairs and stalked glandular hairs; lobes rounded, 11–13 mm long, overlapping at margins, sometimes upper surface with several appressed hairs; **stamens** 5, fused to corolla tube ca. 0.5 above base and at purple-red zone, included; filaments to 0.7 mm long, whitish; anthers dorsifixed, dithecal, 1.1–1.3 mm long, pale yellow often with colorless tip, longitudinally dehiscent; pollen white; **nectary disc** beneath ovary inconspicuous; **pistil** 1, included; ovary superior, deeply 4-lobed, ca. 0.5 mm long, lobes ovoid, green, lacking papillate at anthesis; style arising from center of ovary lobes, ca. 1 mm long, translucent, glabrous; stigma capitate, with 2 lateral and 2 terminal lobes, white. **Fruits:** capsules paired and separate (2 chambers from a deeply lobed ovary), typically 3–4, erect, triangular-ovoid, 2.5–2.8 × 1.7–1.9 mm, brown, lateral angles acute, outer face minutely bumpy (tuberculate) and with poorly defined short ridges, inner face keeled with groove ± closed; style ca. 1 mm long.

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