

Vascular Plants of Williamson County

Cocculus carolinus – CORAL VINE, RED-BERRIED MOONSEED, MARGIL, HIERBA DE OJO
[Menispermaceae]

Cocculus carolinus (L.) DC., CORAL VINE, RED-BERRIED MOONSEED, MARGIL, HIERBA DE OJO. Perennial vine, twining and clammering, rhizomatous, fibrous-rooted, several-stemmed at base, long branches often unbranched, growing on shrubs and neighboring plants (not trailing on bare ground); dioecious; shoots with only cauline leaves, flexible-stemmed, ± villous and foliage somewhat velveteen on lower surfaces. **Stems:** cylindric, not noticeably zigzagged, tough. **Leaves:** helically alternate, simple and often broadly 3-lobed or 5-lobed, petiolate, without stipules; petiole with pulvinus at base and cylindric above, 7–45 mm long, < blade, tough, sparsely short-villous; blade broadly ovate or inversely heart-shaped to ± deltate or kidney-shaped, 20–115 × 25–115 mm, flexible (not leathery), subcordate to truncate at base (broadly tapered), entire or with shallow, gently rounded lobes, rounded to slightly notched with or without a short point at tip, palmately veined with 5 principal veins at base and also thickened margins with principals veins raised on lower surface, upper surface with tannish veins around green blade tissue and aging sparsely hairy, lower surface soft-hairy. **Inflorescences:** paniclelike arrays having short, dense lateral cymes of unisexual flowers, terminal and axillary, bracteate, ; on staminate plant typically with 1 principal axis, overall cylindric, to 160 mm long when blooming 4–10 mm diameter; on pistillate plant (mostly axillary) with a major axis + a shorter axis arising in axil between major axis and petiole; lateral cymes (several–)12– < 20-flowered (on pistillate inflorescence sometimes the last-formed cymes having 1–3 flowers), cymes alternate along rachis spaced by internodes < 10 mm long (interrupted), staminate cymes < 6 mm long, axes inconspicuously glaucous and ± short-tomentose (not pilose); bract subtending cyme leaflike with petiole, reduced upward to awl-shaped < 4 mm long and not expanding, pistillate inflorescence with 2 bracts in the axil; principal axes of cyme in staminate inflorescence constricted just above base, with downward-pointing short hairs; bract subtending each cyme branchlet and bractlet subtending pedicel triangular to ovate or obovate, < 1 mm long, light green to pale green, with upward-pointing hairs; pedicel to 1.7 mm long, > bractlet, glaucous, having 2 subopposite bracteoles approaching flower, bracteoles awl-shaped, < 1 mm long, minutely toothed. **Staminate flower:** radial, 3(–4) mm across, with pale yellow petals in bud; **sepals** 6–9 in 3 whorls, heteromorphic and unequal, outer < middle < inner, cream-colored, outer sepals 0–2(–3), roundish to somewhat rhombic, ca. 0.8 × 0.8 mm, sparsely short-hairy, middle sepals 3, roundish to broadly obovate, ca. 1.5 × 1.3 mm, sparsely short-hairy, inner sepals obovate, ca. 2.2 × 1.5 mm, glabrous to glabrate and with margin somewhat jagged; **petals** 6, cupped-ovate, ± 1 mm long, yellowish, with thickish basal lobes enclosing filament and holding copious nectar; **stamens** 6 in 2 whorls and each associated with a petal, club-shaped, in range to 1.5 mm long; filament curved and leaning inward (inflexed), 1 mm long, pale green; anthers same diameter as filament, basifixed, subspheroid, 0.4 mm long, green to light yellow, appearing 4-lobed, dehiscent with slits across top; pollen yellow; **pistils** vestigial in center of flower, < 0.5 mm long. **Pistillate flower:** radial, ca. 3 mm across; receptacle with a constriction beneath zone of pistils, glabrous; **sepals** 6–9 in 3 whorls, heteromorphic and unequal, outer < middle < inner, cream-colored, outer sepals 0–2(–3), roundish to somewhat rhombic, ca. 0.8 × 0.8 mm, sparsely short-hairy, middle

sepals 3, roundish to broadly obovate, ca. 1.5×1.3 mm, sparsely short-hairy, inner sepals obovate, ca. 2.2×1.5 mm, glabrous to glabrate and with margin somewhat jagged; **petals** 6, cupped-ovate, ± 1 mm long, yellowish, with thickish basal lobes enclosing filament; **stamens** absent or with vestigial, diminutive staminodes; **pistils** 6 in 2 whorls, on polygonal receptacle and having each ovary surrounded by a low rim; ovaries superior, asymmetrically pouchlike, in range ± 1 mm long, with narrow base, no obvious style, and a terminal, diagonal, reddish stigma. **Fruits:** drupes, 1–6 per flower of 2 whorls on a muffin-shaped receptacle (torus) ca. 1.8 mm across, each drupe short-stalked (stipe) and with 1 stone, stipe (carpophore) ca. 1 mm long; drupe body at maturity spheric, $6\text{--}7 \times 5.8\text{--}7$ mm, orange-red to red, glabrous; pulp (mesocarp), juicy and yellowish; fruit body when immature green, compressed side-to-side, and somewhat asymmetric in outline, before ripening $5\text{--}5.5 \times 6\text{--}6.5 \times 4\text{--}4.5$ mm, with style to 0.4 mm long on the lower face 1.5 mm from stalk, at maturity style abscised leaving minute scar; stone (endocarp) hard, 1-seeded, disclike with deeply depressed, having heart-shaped center on both faces surrounded by a strongly curved embryo (nautiluslike), ca. $5.5 \times 4.5 \times 2.5$ mm, light yellow, bony, backbone around stone with central ridge flanked on each side by 2 rows of warts and short ridges.

A. C. Gibson