

## Vascular Plants of Williamson County

*Berberis trifoliolata* – AGARITO, Currant-of-Texas [Berberidaceae]

***Berberis trifoliolata*** Moric., AGARITO, Currant-of-Texas. Shrub, evergreen, sclerophyllous, spinescent, many-stemmed at base, terminal shoots often unbranched and flowering in year 2, with short shoots and short spur shoots with smaller leaves, in range 80–300 cm tall; shoots with leathery, bluish gray-green leaves having (0–2)3 or 5 lobes with sharp points (spinose margin), glabrous, glaucous on upper leaf surfaces. **Stems:** cylindric, young stems to 2.5 mm diameter, without spines, with persistent petioles, soon covered with splitting, gray to purplish gray periderm; long stems somewhat zigzagged, wood yellow. **Leaves:** helically alternate, pinnately compound in range with (1)3 leaflets (appearing palmately compound), the leaflets sessile and widespread from top of petiole, petiolate, with stipules; stipules 2 (not distinguishable), fused to flaring petiole base as narrow wings to 6 mm long with 1 short hard spine at top; petiole 6–65 mm long, base, flared, half-sheathing, and red, abscising above rim and persistent, above base cylindric, tough, and green not glaucous; rachis absent; petiolules absent; blades of leaflets subequal or terminal leaflet longer, narrowly ovate, narrowly elliptic, or lanceolate to narrowly diamond-shaped or wedge-shaped in outline, in range 12–53 × 4–26 mm, rigid, tapered and symmetric at base, lobes typical 5 or 3 with lateral lobes mostly paired and raising from blade plane, deltate to triangular, to 10 mm long, with curved sinuses to midpoint to midrib, having sharp spines to 2 mm long at tips, the edge pale green and translucent, pinnately veined with principal veins raised on lower surface, with netlike minor venation, upper surface glaucous, lower surface green and minutely papillate.

**Inflorescence:** umbels, appearing like flower clusters along long shoots, each cluster = several umbels per spur shoots arising on spring growth from dormant bud, axillary of bud scales (not terminal), each spur shoot often with 5–15+ flowers, umbel 1–5-flowered, bracteate; peduncle of umbel compressed front-to-back, < 2 mm long, whitish; bract subtending pedicel sheathing, ovate, ca. 1.5 mm long, whitish, persistent; pedicel cylindric, at anthesis 3–7 mm long, greenish, at top appressed to perianth or approaching top, bracteoles 2 (opposite) or 3 (whorled), triangular, 0.7–1.2 mm long, whitish, somewhat persistent after anthesis. **Flower:** bisexual, radial, 7–12 mm across, with a honeylike fragrance; **sepals** 9 in 3 whorls, unequal and heteromorphic, most sepals deciduous shortly after anthesis; outer 3 sepals appressed, obtuse-ovate, ca. 2 × 2 mm, whitish with reddish midline; middle 3 sepals cupped-elliptic, 3.5–4 × 2–2.5 mm, light yellow often tinged reddish, rounded at tip; inner 3 sepals obovate strongly cupped, 4.5–5 × 3 mm, light yellow often tinged reddish; **petals** 6 in 2 whorls, ascending, cupped-elliptic with stamens, in range 3.5–4 × 1.7–1.9 mm, light yellow, with 2 **nectaries** (mounds) on upper surface at base of each petal on each side of filament; **stamens** 6, opposite petals, ± free weakly attached to petal bases at nectary, in range 2.6–2.8 mm, sensitive to touch and moving toward stigma; filaments yellow, lacking 2 reflexed, 3-toothed to truncate appendages at midpoint; anther dithecal, ± 1 mm long, yellow, with anther sacs lateral and subterminal, yellow, opening by valves, the valves spreading to erect, roundish, ± 0.5 mm diameter; pollen pale yellow to whitish; **pistil** 1, 3 mm long; ovary superior, ellipsoid to somewhat bottle-shaped, 1.1–1.4 mm wide, pale green, glabrous, 1-chambered with ca. 12 ovules attached ± at basal (subbasal); style short with conspicuous, fleshy capitate-discoid with a

depressed center, disc touching tops of anthers, stigma 0.4–1.5 mm, green, with depressed center. **Fruit:** berry, dry at maturity, to 10-seeded, subspheroid, 6–11 mm, orangish red, with persistent, discoid stigma to 1.6 mm diameter; pulp absent at maturity; bracteoles persistent. **Seed:** obovoid (ellipsoid), 3–4.2 × 1.5–2.2 mm, dull light reddish brown, with oblique basal hilum, minutely textured cells (not smooth).

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