Vascular Plants of Williamson County Ptelea trifoliata var. mollis – HOPTREE, WAFER-ASH, SKUNKBUSH [Rutaceae]

Ptelea trifoliata L. var. mollis Torrey & A. Gray, HOPTREE, WAFER-ASH, SKUNKBUSH. Shrub, deciduous, 100–350+ cm tall; dioeceous (rarely bisexual flowers on pistillate plants); shoots mostly soft short-hairy, foliage velveteen (esp. when young), inconspicuously gland-dotted, strongly and pleasantly aromatic when crushed. Stems: ± cylindric, green with yellow, lens-shaped secretory glands in tissue usually visible between short hairs. Leaves: helically alternate, 3-foliolate with sessile leaflets, petiolate, without stipules; petiole inconspicuously, narrowly channeled, < 10-70 mm long, green, tough, densely pubescent; blade symmetric (terminal leaflet) and asymmetric (lateral leaflets), ovate to broadly elliptic, $(15-)35-130 \times (10-)27-85$ mm, terminal leaflet > to >> lateral leaflets, long-tapered at base (terminal leaflet) and tapered and oblique (lateral leaflet), subentire to inconspicuous broad and low teeth, acute at tip, pinnately veined with midrib slightly raised and lateral veins sunken on upper surface and principal veins raised on lower surface. Inflorescence: panicle, unisexual, terminal, domed, open, 30-60 mm across, of only alternate branches, often 4-orders of branching, axes ascending to spreading, lower axes densely soft short-hairy; bract subtending peduncle = 3-foliolate cauline leaf; peduncle to 10 mm long; bract subtending branches and branchlets and bractlet subtending pedicel absent: pedicel at anthesis 8–10 mm long (staminate) or ca. 6 mm long (pistillate), flexible, with pulvinus in axil, short-hairy but at top with inversely conic portion above abscission constriction glabrous or glabrate. Staminate flower: radial, 10-11 mm across, spicy fragrant; sepals 4(-5), ascending and appressed, deltate to triangular-ovate, 0.5–1 mm long, green, 1-veined, short-ciliate on margins, acute to obtuse at tip, with midvein raised on lower surface, persistent; petals 4(-5), widely spreading or bent backwards, elliptic with narrow base cupped upward from midvein, $4.5-5.8 \times ca.2$ mm, cream-colored with greenish midvein raised on lower surface, puberulent on lower surface; stamens 4(-5), free, opposite sepals; filaments suberect, tapered to top, 2.7–3.3 mm long, cream-colored, densely short-hairy to midpoint except at base; anthers dorsifixed later appearing versatile and horizontal, dithecal, ca. 1.3 mm long, dull to bright golden yellow, longitudinally dehiscent; pollen golden yellow; nectary beneath pistil, > pistil, dark green, nectar-producing; **pistil** 1, sterile, reduced without a well-defined style and stigmas, 1-chambered with 1 ovule. Pistillate flower: somewhat bilateral (corolla appearing Hshaped), 9–10 mm across; spicy fragrant; sepals (3–)4, ascending and appressed, deltate to triangular-ovate, 0.5-1 mm long, green, 1-veined, short-ciliate on margins, acute to obtuse at tip, with midvein raised on lower surface, persistent; petals (3–)4, widely spreading or bent backwards, elliptic with narrow base cupped upward from midvein, $3.8-4.3 \times 1.5-2$ mm, cream-colored with greenish midvein raised on lower surface, puberulent on lower surface: stamens (3–)4 staminodes, sterile (lacking fertile anthers); filaments ca. 1 mm long, conspicuously short-hairy; anther vestigial, thin and papery; nectary disc dark green swelling at base of ovary, nectar-producing; **pistil** 1; ovary flattened obovate in outline, ca. $2.2 \times 1.5 \times 0.6$ mm, with narrow wing also extending 0.2 mm along style, edges in line with opposite sepals, chambers spatulate, glossy green, glabrous, inconspicuously glanddotted; style erect, 0.4–0.5 mm long; stigma terminal, capitate, short 2-lobed. Fruit: samara, 2(4)-winged, with wide, papery wing nearly surrounding spatulate seed body

(except at base and top), mostly 1-seeded (1 ovule aborted); samara circular in outline, $15-18 \times 14-17$ mm, pale brown with veiny wing 3-3/5 mm wide, ± entire, truncate or rounded to slightly notched at top, wing ca. 0.3 mm thick, glabrous or sparsely hairy near top; seed body central portion 2-convex and elliptic with narrow extension to top and tubular connection to base; pedicel slender, 8-11.5 mm long, short-tomentose. Seed: narrowly D-shaped to narrowly ovoid compressed front-to-back, $5.5-6 \times 2-2.5 \times \pm 1.3$ mm, glossy black, ribs and valleys \perp long axis, not dehiscent from seed chamber. A. C. Gibson