

## Vascular Plants of Williamson County

*Celtis laevigata* var. *laevigata* – SUGARBERRY, SUGAR HACKBERRY  
[Cannabaceae/Ulmaceae]

*Celtis laevigata* Willd. var. *laevigata*, SUGARBERRY, SUGAR HACKBERRY. Tree, fall-deciduous, mostly with 1 trunk, in range 4–14 m tall; polygamo-monoecious; shoots with only cauline leaves and somewhat 2-dimensional (plagiotropic), new growth with abundant subsessile glandular hairs. **Stems:** initially 3-ridged with ridges descending from leaf, soon cylindrical, somewhat zigzagged, initially with sparse, short hairs and glandular hairs; twigs ± glabrous; dormant bud deltate, initially puberulent aging glabrescent. **Leaves:** helically alternate, simple, petiolate, with stipules; stipules 2, lanceolate, ca. 5 mm long, green with colorless membranous margins, short-ciliate on margins, with midvein raised on lower surface, early-deciduous; petiole cylindrical to narrowly channeled above midpoint, 5–12.5 mm long, glabrous to glabrate with some puberulent hairs on upper side; blade in range asymmetric-ovate to nearly symmetric, (26–)50–118 × (14–)20–48 mm, oblique and tapered to broadly tapered at base, entire or with only a few indistinct teeth and short-ciliate on margins, acuminate to acute at tip, pinnately veined with 3(5) veins at base having principal and minor veins sunken on upper surface and conspicuously raised on lower surface, surfaces initially glandular-hairy, upper surface aging relatively flat, ± glabrous (short-pilose), and somewhat glossy and not scabrous, lower surface dull bright green with short hairs along principal veins and having tufts of hairs in vein axils of principal veins. **Inflorescence:** of axillary clusters of 3 staminate flowers from dormant buds (staminate), then 2 staminate flowers per cluster sequentially on later new growth having 1–2 nodes with bisexual flowers and then 1–3 nodes with pistil flowers, staminate flowers 3 side-by-side, buds asymmetric, of 2-flowered cluster rarely 2-forked, lacking bractlets, lacking nonglandular hairs and having minute glandular hairs; peduncle obscure; pedicel of staminate flowers to 9 mm long, pedicel (peduncle) of bisexual and pistillate flower to 7 mm long increasing in fruit at least 2×. **Staminate flower:** radial, ca. 5 mm across; **sepals** 5, spreading, boat-shaped cupped around stamen, ca. 2.5 mm long, greenish with colorless margins, short-ciliate on margins, with short hairs on lower surface; **petals** absent; **stamens** 5, free; filaments strongly bent inward (looped in bud), 1.6–2 mm long, channeled on inner (upper) side, tapered at top, with short, colorless hairs at base and glabrous above; anthers dorsifixed, dithecal, 1.8–2 mm long, pale yellow, longitudinally dehiscent; pollen white; **pistil** absent. **Bisexual flower:** radial, ca. 5 mm across; receptacle pubescent; **sepals** 3–5, spreading, boat-shaped cupped around stamen, ca. 2.5 mm long, greenish with colorless margins, short-ciliate on margins, with short hairs on lower surface; **petals** absent; **stamens** 3–5 (= sepals), free; filaments strongly bent inward, < 1.6 mm long, channeled on inner (upper) side, tapered at top, with short, colorless hairs at base and glabrous above; anthers dorsifixed, dithecal, 1.8–2 mm long, pale yellow, longitudinally dehiscent; pollen white; **pistil** 1; ovary superior, ovoid, ca. 1.3 × 0.8 mm, green, glabrous, 1-chambered with 1 ovule; styles 2 (or 2-branched), curled to coiled compressed top-to-bottom, 2.5–3 × 0.4 mm, green and pale green. **Pistillate flower:** radial, ca. 5 mm across; receptacle pubescent; **sepals** 3–5, spreading, boat-shaped cupped around stamen, ca. 2.5 mm long, greenish with colorless margins, short-ciliate on margins, with short hairs on lower surface; **petals** absent; **stamens** absent; **pistil** 1; ovary superior,

ovoid, ca.  $2 \times 1.2$  mm,  $\pm$  glossy green, glabrous, 1-chambered with 1 ovule; styles 2 (or 2-branched), curled to coiled compressed top-to-bottom,  $3-3.8 \times 0.5$  mm, green and pale green. **Fruit:** drupe, solitary and axillary on  $\pm$  straight pedicel, obovoid-subspheroid to spheric,  $6.5-7 \times 5.5-6$  mm, when immature green and minutely pitted aging purplish red to brown and when drying collapsing into broad, polygonal pits, glabrous, at base with a whorl of perianth scar and a dense ring of short hairs; fleshy pulp (mesocarp) ca. 0.3 mm thick; pulp ca. 1 mm thick; stone (endocarp) spheroid to spheric, 3.5–4.5 mm, pale tan, relatively thin walled and easily broken; pedicel mostly ascending, typically 9–18 mm long, ca. 0.6 mm diameter at midpoint, initially green and lacking hairs, at top with several sepal scars and at base of fruit a ring of short hairs (receptacle). **Seed:** plump comma-shaped, ca. 2.5 mm long, tannish, hilum at narrow end.

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