

## Vascular Plants of Williamson County

*Prosopis glandulosa* var. *glandulosa* – HONEY MESQUITE [Fabaceae]

*Prosopis glandulosa* Torrey var. *glandulosa*, HONEY MESQUITE. Small tree or shrub, winter-deciduous, spinescent, deep-rooted, 1–several-stemmed at base, in range to 6 m tall; shoots with only compound cauline leaves, leaves mostly drooping to pendent on flexible petioles, appearing glabrous but immature parts sparsely puberulent with short-lived hairs; spine solitary (never in pairs), = determinate short shoot and stem spine, formed on vigorous long shoot from axillary bud, stem spine formed without leaves, to 40 mm long, aging woody and sharp-tipped. **Stems:** cylindrical, zigzagged. **Leaves:** helically alternate, even 2-pinnately compound with 1 pair of primary leaflets to 140 mm long with 8–10 pairs of leaflet blades spaced to 10 mm apart, petiolate with pulvinus, with stipules; stipules 2, attached to leaf base below pulvinus, acuminate, 2.5–3 mm long; petiole pulvinus, to 3 mm long, above pulvinus channeled, to 50 mm long, flexible, lacking hairs at maturity, at top between primary leaflets with extrafloral nectary on upper side, 1 mm diameter, green, flat-topped later depressed; extension beyond primary leaflets on lower side, acuminate, 2–4 mm long; petiolule of primary leaflet to 20 mm long, pulvinus, ca. 3 mm long, green and often wrinkled, rachis narrowly channeled and somewhat 4-sided; rachis 3-sided with central ridge on upper side, to 80 mm long, above and below secondary petiolule with orangish, papillate patches; stipel subtending secondary petiolule on lower side, to 0.25 mm long, early-abscised; secondary petiolule = pulvinus, 1.5 mm long, green, soon glabrous, at base, at base with minute food bodies; blades of secondary leaflets widely spreading, linear-oblong to linear-elliptic, (< 15–) 25–40 × 3–4.5(–10.5) mm, slightly oblique at base, entire, acute at tip, 1-veined at base with midrib somewhat raised on both surfaces, venation asymmetric with midrib closer to leading edge, when immature puberulent-ciliate on margins. **Inflorescence:** raceme, several racemes clustered arising from axillary, unexpanded short shoot along twigs, raceme 100+-flowered, cylindrical, mostly 65–70 × 13–14 mm, flowered alternate, not evenly spaced, tightly packed and radiating from rachis, opening at the same time, bracteate, essentially glabrous; bract at base of peduncle 3-parted including 2 stipules and diminutive blade on fleshy base, stipules acute-triangular, to 1.5 mm long, short-ciliate on margins; peduncle short with flowers nearly to base; rachis cylindrical, glabrous; bractlet subtending pedicel awl-shaped and cupped, 0.5–1 mm long, membranous with green midvein, with raised base subtending pedicel, short-ciliate on margins, having minute food bodies at base, early-deciduous; pedicel cylindrical, 1–1.3 mm long, ≥ bractlet, with short pulvinus at base, light green. **Flower:** bisexual, radial, ca. 5 mm across (stamens); proterogynous with stigma exerted in bud; receptacle with **nectary disc** surrounding stalk of ovary and inside bases of stamens, nectary disc 5-lobed, 0.2 mm long, **calyx** 5-lobed, ± 1.5 mm long; tube bell-shaped, colorless with 5 yellow-green veins to lobes; lobes triangular, ca. 0.4 mm long, short-ciliate on margins; **petals** 5, ascending to suberect, oblanceolate, ± 3 × 0.9–1 mm, colorless to midpoint with 1 yellow-green vein, greenish above midpoint, upper surface white-tomentose above midpoint, lower surface in bud with some short hairs approaching tip; **stamens** 10, free, ascending; filaments cylindrical, 5.5–6 mm long, green in bud aging cream-colored; anthers dorsifixed, dithecal-versatile, 0.7–0.8 mm long, cream-colored and aging reddish between sacs, longitudinally dehiscent, in bud anther at top having a short-stalked food body, subspheroid, 0.15–0.2 mm, whitish and minutely bumpy, abscised

before anthesis; pollen yellowish; **pistil** 1, ca. 6 mm long, stalked (stipe), stalk cylindric, < 1 mm long, cream-colored, glabrous; ovary superior, cylindric, 1 mm long, green, densely white-villous, 1-chambered with 15+ ovules attached to upper side; style exerted ca. 3.5 mm, curved, white aging cream-colored, with short hairs to midpoint; stigma terminal, recessed ca. 0.25 mm. **Fruit:** pod (legume), stalked (stipe) with stalk to 8 mm long, indehiscent, 9–15-seeded, broadly linear straight to slightly curved, mostly bulging at seeds or slightly constricted on edges, mostly 100–160 × ca. 8 × 4 mm including beak (style), when dry yellowish brown, solid (lacking air chambers) with seeds embedded in sweet pulp, sides somewhat glossy with wavy, lengthwise veins and minute whitish specks. **Seed:** oblong-ellipsoid to somewhat ovoid, 6–7 × 5–6 mm, light brown, with hard seed coat.

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