

## Vascular Plants of Williamson County

*Sesbania herbacea* – COFFEE BEAN, COLORADO RIVER-HEMP, SESBANE, BEQUILLA  
[Fabaceae]

*Sesbania herbacea* (Miller) McVaugh, COFFEE BEAN, COLORADO RIVER-HEMP, SESBANE, BEQUILLA. Robust annual, taprooted in permanently wet substrate, 1-stemmed at base, with spreading-ascending lateral branches often with terminal inflorescence, erect, 50–400 cm tall; shoots with only cauline leaves, leaflets having sleep movements, glabrous and glaucous, not gland-dotted, having a somewhat unlikable odor when wounded. **Stems:** cylindrical, to 40 mm diameter at base, axes  $\pm$  straight, internodes 10–40 mm long, with persistent leaf bases ca. 2 mm long, grayish green nearly to plant base or with some periderm formation, old stems woody and with tough fibers in outer stem (phloem fibers). **Leaves:** helically alternate, even-1-pinnately compound with to 107 lateral leaflets mostly in pairs (extremely long leaves with alternate leaflets below pairs and alternate leaflets above pairs), petiolate with pulvinus, with stipules; stipules 2, attached to projecting leaf base below pulvinus, ascending to spreading, long-acuminate to linear-lanceolate,  $7\text{--}12 \times 1$  mm, gray-green and glaucous, early-deciduous; petiole having pulvinus at base, ca. 5 mm long, yellow-green; commonly with leaflets arising at base of rachis directly above pulvinus on upper side of rachis; rachis to 460 mm long, strongly 2-ridged and channeled, pairs + 7 mm apart, with short extension beyond the uppermost pair of leaflets; stipels 2 attached to base of petiolule, clawlike, 0.7–0.9 mm long (–2 mm long on the lowest pair), yellow-green; petiolule with pulvinus cylindrical,  $\pm 1$  mm long; blade oblong to oblanceolate, 150–465 mm long; blades of leaflets  $\perp$  rachis, symmetric, oblong to oblanceolate,  $18\text{--}35(\text{--}50) \times 2.2\text{--}9.3$  mm,  $\pm$  rounded at base, entire,  $\pm$  rounded with point to 0.5 mm long at tip, pinnately veined with midrib raised on lower surface. **Inflorescence:** raceme, axillary, 2–6-flowered, bracteate, glabrous; peduncle at anthesis to 10 mm long increasing 2–3 $\times$  in fruit; bractlet subtending pedicel, awl-shaped flared at persistent base,  $5\text{--}6 \times 1$  mm, partially sheathing; pedicels to 3.5 mm long increasing 2 $\times$  in fruit, with 2 opposite bracteoles at top subtending flower, bracteoles awl-shaped ca.  $3 \times 0.4$  mm, abscising before anthesis leaving persistent bases in fruit. **Flower:** bisexual, bilateral, modified pealike (papilionaceous), ca. 8 mm across and tall; **calyx** 5-lobed, somewhat glaucous; tube asymmetrically bell-shaped, ca.  $5 \times 6$  mm; lobes  $\pm$  deltate (in bud narrowly triangular), ca. 2 mm, light green, short-tomentose on inner surface of lobes and on margins; **petals** 5, clawed; banner claw about 3 mm long, greenish; limb somewhat heart-shaped notched at top and tapered at base, ca.  $12 \times 16$  mm, faded light yellow with darker spreading veins; wings 2, claws linear,  $\pm 4$  mm long, yellowish, limbs obovate, ca.  $12 \times 5$  mm, ca. 2.2 mm wide at base above short lobe, light yellow; keel of 2 petals fused ca. 4 mm on outer edge approaching tip, claws ca. 6 mm long, limbs broadly crescent-shaped,  $7 \times 4$  mm, faded light yellow tinged purplish above midpoint, sharply bent, with dentate tooth on upper side, tops free; **nectary** surrounding stalk and base of ovary, vase-shaped,  $1.5 \times 1.5$  mm, green, fleshy, 5-lobed on inner side, producing some nectar in bud; **stamens** 10, diadelphous (9 fused and 1 free), included (not visible); filaments strongly bent a.  $135^\circ$  appearing 12 mm long, sheet  $\pm 9$  mm long and free portions equal alternating 5 and 6 mm long, white; anthers dorsifixed, dithecal, 1–1.3 mm long, pale yellow, longitudinally dehiscent; pollen whitish, sticky; **pistil** 1, 18–19 mm long, short-stalked (stipe)  $< 1$  mm

long; ovary superior, ± cylindric with sides somewhat flattened, green, glabrous, 1-chambered with 30+ ovules attached to upper side; style curving from end of ovary and bent 90 °, pale green; stigma terminal. **Fruit:** pod (legume), dry, dehiscent along both sides, typically 30–35-seeded, ± drooping, slender and ± cylindric straight or slightly curved upward, 150–210+ × 3.3–3.8 × 2–2.3 mm, with seeds regularly spaced and slightly bulging, brown with darker streaks, with beak < 10 mm long, glabrous; on stalk < 4 mm long. **Seed:** ± broadly ellipsoid to oblong compressed side-to-side with truncate to rounded ends, 2.6–4.2 × 1.7–2.4 × 1.2–1.5 mm, dull brown mottled with black spots, smooth, with indented, circular hilum slightly off center.

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