

Vascular Plants of Travis County

Senna lindheimeriana – LINDHEIMER SENNA, VELVETLEAF SENNA, VELVETLEAF CASSIA
[Fabaceae]

Senna lindheimeriana (Scheele) H. S. Irwin & Barneby., LINDHEIMER SENNA, VELVETLEAF SENNA, VELVETLEAF CASSIA. Perennial herb, from deep woody root, not rosetted, several-stemmed at base, in range to 130 cm tall; shoots with only cauline leaves, velveteen, villous and short-villous, odoriferous when handled or crushed. **Stems:** somewhat angled, < 10 mm diameter, tough, principal branches aging woody, all stems soft-hairy. **Leaves:** helically alternate, even-1-pinnately compound with (4–)5–7(–8) pairs of lateral leaflets, petiolate with pulvinus, with stipules; stipules 2, attached to node next to petiole, acuminate-lanceolate, 9–12.5 × 2.2–2.6 mm, green, inconspicuously 3-veined at base, soft-hairy, abscising leaving a straight scar; petiole pulvinus to 5 mm long, cylindric above pulvinus to 30 mm long, short-hairy; rachis channeled between pairs, pairs ± evenly spaced 12–18 mm apart, having an ascending, peglike projection by end of each channel, the projection 3–3.5 mm long, initially green with short hairs; petiolule cylindric, to 3 mm long, green, short-hairy; blades of leaflets obovate to broadly oblong ± asymmetric with trailing half wider, < 15–50 × < 11–19 mm, obtuse at base, entire, obtuse with short point at tip (= extension of midrib), pinnately veined with principal veins raised on lower surface, basal lobe (trailing) with 2–3 principal veins (lacking on other half), upper surface flat with villous hairs, lower surface villous hairs somewhat appressed. **Inflorescence:** raceme, terminal, mostly with 10+ flowers, in bud somewhat flat-topped, flowers on spreading pedicels becoming progressively spaced in flower and fruit, axes short-villous or with scattered longer hairs and with scattered, odor-producing glandular hairs; peduncle stemlike, aging woody; rachis short-villous of hairs of mixed length to 0.5 mm long including glandular hairs; bractlet subtending petiole, acuminate and cupped, ca. 4 × 1 mm long, green at base to yellow from below midpoint, glabrous on upper surface and short-villous on lower surface, early-abscising in small bud forming persistent base and axil having a curtain of orangish fingerlike food bodies to 0.3 mm long; pedicel initially short in young bud and at anthesis cylindric and 12–15 mm long not increasing in fruit. **Flower:** bisexual, bilateral, 25–32 mm across, with lines and arcs of light yellow aging paler, fingerlike food bodies to 0.5 mm long at bases of filaments and petals; sepals 5, obovate, 7.5–9 × 3.2–4.5 mm increasing inward, outer 2 sepals = bud cover, green, and short-villous, upper surface green at base and light yellow from below midpoint, inner 3 sepals exposed portion green and short-villous, having wide, yellow, petal-like margins, inner sepals short-ciliate approaching tip; **petals** 5, widely spreading, clawed, claw 1.5–2 mm, yellow, limb obovate, to 14–16 × 10–11 mm, yellow, wavy on margins, mostly 5-veined at base with the central 3 raised on lower surface; **stamens** 10, free, of (6–)7 fertile + 3(–4) staminodes on upper side of flower; filaments cylindric, suberect to ascending, 3–3.5 mm long, light yellow aging paler, glabrous; anthers basifixed, dithecal, banana-shaped, 3–3.5 mm long, in bud pale orangish yellow aging brown, with short collar at top above dehiscence pore and releasing droplet of liquid when squeezed; pollen faintly orangish to pale rose; staminodes in a cluster, 3–4 mm long, filamentlike to above midpoint having a diminutive anther; **pistil** 1, 5.5–6 mm long, somewhat concealed by longer stamens; ovary superior, somewhat lanceolate, ca. 5 × 1.5 mm, green, densely covered with straight,

upward-pointing, white, strigose hairs, concealing short hairs and minutely stalked glandular hairs, 1-chambered with 20+ ovules attached to upper side; style 1, bent, ca. 1 mm long, green, glabrous, with minute stigma at tip. **Fruit:** pod (legume) indehiscent, 18–25-seeded, oblong strongly flattened side-to-side bulging at seeds, 40–60 × 6–8 mm, tough and leathery, obtuse with narrow point at tip, strigose with scattered upward-pointing hairs and some short hairs along fruit edges (some minute glandular hairs before drying). **Seed:** ovoid-oblong, 4–5 × 1.5–2 mm, brown and satiny, not entirely smooth, having notch with hilum lateral close to tip; receptacle short-hairy on outer surface, on top around fruit base with some persistent food bodies.

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