

Vascular Plants of Williamson County

Rhynchosia senna var. *texana* – TEXAS SNOUTBEAN [Fabaceae]

Rhynchosia senna Hooker var. *texana* (Torrey & A. Gray) M. C. Johnst., TEXAS SNOUTBEAN. Perennial vine, twining on low vegetation and itself, not rosetted, several-stemmed at base; shoots with only cauline leaves on flexible stems, short-hairy and with scattered, sessile glandular hairs having translucent heads. **Stems:** initially cylindrical weakly 3-ridged descending from each leaf, aging 6-ridged, to 1.2 mm diameter, tough, internodes to 75 mm long usually twisted and often twining, \geq leaf, short-hairy. **Leaves:** helically alternate, pinnately-3-foliolate, petiolate with pulvinus, with stipules; stipules 2, attached to base of petiole below pulvinus, acute triangular-lanceolate to ovate, (1–)1.5–2 \times 0.5–0.8 mm, green or tip aging reddish, (3)5-veined from base not converging at tip, outer (lower) surface short-villous, upper surface glabrous; petiole pulvinus 1.2–2.6 mm long, axis above pulvinus slender and channeled + angled on lower side, in range to 37 \times 0.35 mm, short-hairy base-to-tip; rachis channeled, in range to 4.5 mm long, short-hairy; stipel subtending lateral leaflet 1, subtending terminal leaflet 2, fingerlike extensions of ridges 0.25–0.3 mm long; petiolule = pulvinus 1–1.5 mm long, short-hairy; bladelets of leaflets ovate and asymmetric (lateral leaflets) wider on trailing half or symmetric (terminal leaflet), in range $< 15\text{--}42 \times 3.5\text{--}22$ mm, terminal $>$ lateral leaflets, subcordate at base, entire, obtuse to rounded or slightly notched with minute point (midrib extension) at tip, conspicuously 3(–5)-veined at base each pinnately veined with principal veins raised on lower surface, short-villous, lower surface with conspicuous, scattered, sessile glandular hairs having translucent heads. **Inflorescence:** raceme, axillary, condensed at base, open, 1–3-flowered, the flowers of vastly different stages of development, bracteate, short-hairy and bud with many sessile glandular hairs; peduncle = pulvinus, 1 mm long; bract subtending raceme awl-shaped or deeply 2-forked with triangular lobes, < 1 mm long, green, short-hairy on lower (outer) surface, bractlet subtending pedicel like bract, to 0.7 mm long, 1-veined or 3-veined; pedicel cylindrical, at anthesis ascending and ca. 5 \times 0.3 mm increasing 2 \times in fruit, initially purple-red, short-hairy. **Flower:** bisexual, bilateral, papilionaceous, 3–4 mm across; **nectary** not observed on receptacle below ovary; **calyx** 5-lobed from midpoint, green to reddish, short-villous with sessile glandular hairs (conspicuous in bud); tube funnel-shaped, $\pm 2 \times 2$ mm, inner surface glabrous; lobes dimorphic, lower 3 lobes acuminate-triangular, 1.5–1.8 mm long, upper portion deeply 2-lobed, acute-triangular, 1 mm long, inner (upper) surfaces of lobes short-hairy; **petals** 5, clawed, in range in range 4.5–5 mm long, the claws whitish, limbs light yellow to light orange-yellow; banner obovate to roundish, ca. 5 \times 3–4 mm, claw triangular, 1.3 mm long, limb folded over flower, with a pair of short deltate teeth at base, outer (lower) surface with short hairs above midpoint; wings 2, $<$ banner, claws slender linear, ca. 1.5 mm long, whitish, limbs oblong, ca. 3 \times 1 mm, light yellow or tinged orange, glabrous; keel of 2 petals fused only 1 mm on lower side of limbs, glabrous, claws slender linear, ca. 1.5 mm long, whitish, limb halves cupped rounded-elliptic (not keel-like), ca. 3 \times 1.5 mm, pale light yellow, glabrous; **stamens** 10, diadelphous (9 fused and 1 free), ca. 5 mm long; filament sheet ca. 4 mm long, whitish, glabrous, free portions curving upward, ca. 1 mm long; anthers dorsifixed, dithecal, some slightly exerted, monomorphic, ± 0.2 mm long, pale yellowish, longitudinally dehiscent; pollen \pm colorless; **pistil** 1, sessile; ovary superior,

± hatchet-shaped, ca. 3×0.8 mm, green, densely short-villous with upward-pointing hairs, 1-chambered with 2–3 ovules attached on upper side; style with deflexed base 0.5 mm long having short hairs, above bent upward and arching, 2.5–3 mm long, pale green to translucent and glabrous; stigma capitate, 0.2 mm across, green, short-papillate. **Fruit:** pod (legume), dehiscent with valves twisting to 360° , 1–2-seeded, hatchet-shaped bulging at seeds, $11\text{--}20 \times 5.5\text{--}7$ mm, brown to dark brown, with short beak (style) at tip, veiny, short-pilose and gland-dotted with translucent heads. **Seed:** plump kidney-shaped, $4 \times 4 \times 2$ mm, hard, dull mottled beige, light brown, and dark brown (blackish); hilum median with swollen funiculus at hilum.

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