

Vascular Plants of Williamson County

Desmanthus leptolobus – PRAIRIE BUNDLEFLOWER [Fabaceae]

Desmanthus leptolobus Torrey & A. Gray, PRAIRIE BUNDLEFLOWER. Suffrutescent perennial, deciduous, several-stemmed at base, unarmed, in range mostly prostrate to spreading and < 30 cm tall; shoots with feathery foliage, not glaucous, glabrous to glabrate. **Stems:** low-ridged, young stem with 2 ridges descending from each raised leaf base, woody stem < 2.5 mm diameter, internodes to 30 mm long. **Leaves:** helically alternate, even-2-pinnately compound with 8–12+ primary leaflets mostly in pairs (pinnae), the lowest pair and uppermost pair always opposite and others opposite, subopposite, or alternate, petiolate with pulvinus, with stipules; stipules 2, attached to base of petiole and \pm persistent, slender and linear, 2.8–4+ mm long; petiole < 4 mm long, with yellow-green pulvinus at base to above midpoint and conspicuous, low-channeled above pulvinus, with oblate nectary (gland) at top on upper side between the lowest pair of primary leaflets, gland 0.3–0.6 mm across, yellow-green to purplish red, lacking glands at other leaflets; blade \pm rectangular in outline with widely spreading primary leaflets, 15–30 mm wide; rachis low-channeled with 2 ridges on upper side and lower side with 2 colorless ridges sometimes appearing narrowly winged, sparsely short-hairy, with axis extended to 2 mm beyond the uppermost pair of primary leaflets, lacking stipules of primary leaflets; primary leaflets attached to upper side of rachis, diverging from rachis < 45°, with 10–24 pairs of raised, secondary leaflets (pinnules) formed on upper side of axis (rachilla); petiolule = pulvinus ca. 1 mm long continuous to base of the lowest secondary leaflets and yellow-green; rachilla cylindrical, to 14 mm long, segments < 1 mm between pairs, often with several short hairs at point of attachment of each secondary leaflet; secondary leaflets equal in pairs except the lowest pair unequal, secondary petiolule = pulvinuslike and < 0.3 mm long, rachilla to 15 mm long with short extension at tip beyond the uppermost secondary leaflets, blades of secondary leaflets overlapping, elliptic to oblong (narrowly oblanceolate-oblong), (0.5–)2.5–4 \times (0.3–)0.5–0.7 mm, broadly tapered at base but with midvein closer at base to trailing side, entire and often short-ciliate on margins, acute to obtuse with minute point at tip, with only midvein visible and never raised, glabrous to glabrate. **Inflorescence:** headlike spikes, axillary (sometimes appearing terminal), heads somewhat flat-topped, < 10 mm across, appearing whitish, flowers helically alternate and densely crowded, 8–10-flowered, bracteate, glabrate; peduncle straight, channeled, at anthesis to 14 \times 0.25 mm increasing to 20 mm long and \pm cylindrical in fruit with short pulvinus at base, at top of peduncle having to 4 bractlets separated by short internodes and lacking flowers, those bractlets broad at base and narrowly acuminate above, 1–1.5 mm long, greenish, sometimes sparsely short-ciliate on margins below midpoint, persistent; bractlet subtending sessile flower broad at base and narrowly acuminate above, 1–1.5 mm long, greenish, somewhat keeled, sometimes sparsely short-ciliate on margins below midpoint, . **Flower:** bisexual, radial, ca. 3 mm across (= ascending stamens), appearing mostly white (filaments and styles); **calyx** 5-lobed, \pm 1.5 mm long, initially yellowish green aging yellowish white, tightly appressed to midpoint of corolla; tube bell-shaped to above midpoint; lobes triangular with paler margins; **petals** 5, oblong-linear, ca. 3 \times 0.3 mm, pale yellow with whitish margins; **stamens** 5, free, exserted; filaments 3.5–4 mm long, white, strongly twisted in bud and often not straight when exserted, glabrous; anthers

dorsifixed, dithecal, 0.6–0.7 mm long, light yellow, longitudinally dehiscent; pollen of single grains, light yellow; **pistil** 1, to 4 mm long; ovary superior, ± fusiform compressed side-to-side, ca. 1 mm long, yellow-green, 1-chambered with < 10 ovules attached to upper side; style exerted to same level as anthers, white, often twisted like filaments; stigma terminal, somewhat flared. **Fruit:** legume (pod), dehiscent by 2 valves, sessile, several-seeded, linear compressed somewhat side-to-side and ± straight, 20–50 × 2 × 2 mm including acuminate tip to 2 mm long, with somewhat bulging seeds but not obviously constricted, glabrous; at base of fruit having a cuplike base (receptacle) forming a persistent collar from which calyx abscises cleanly. **Seed:** almond-shaped to ellipsoid compressed top-to-bottom, in range ca. 5 × 2–2.2 × 1.2 mm, brown, having longitudinal, blistered golden brown lines, with a narrow, U-shaped, reddish marking on each face, with small hilum near the point; funiculus ca. 2 mm long.

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