

Vascular Plants of Williamson County

Indigofera miniata var. *leptosepala* – WESTERN INDIGO [Fabaceae]

Indigofera miniata Ortega var. *leptosepala* (Nutt.) B. L. Turner, WESTERN INDIGO.

Perennial herb, not rosetted, several-stemmed at base, having long shoots often with diverging lateral branch at successive nodes, mostly prostrate on soil; shoots with only cauline leaves, short-strigose with appressed, 2-armed (T-shaped) hairs. **Stems:** finely 3-ridged, aging cylindric to < 3 mm diameter, with 3 ridges descending from each leaf and principal ridge = stem angles, green striped (=flat ridges), tough, flexible, arms of hairs oriented lengthwise, aging glabrescent. **Leaves:** helically alternate, odd-1-pinnately compound with (5–)7–8 alternating leaflets (never in pairs), petiolate with pulvinus, with stipules; stipules 2, attached to lower petiole below pulvinus from gib on leaf base, long-acuminate, 3.5–5 × 0.3 mm, green with colorless margins to midpoint, 1-veined, short-strigose with appressed 2-armed hairs; petiole pulvinus 2 mm long, light green, axis above pulvinus and rachis channeled, short-strigose; stipels at base of each petiolule, inconspicuous, hairlike and ascending to erect, often crimson, having short hairs; petiolule = pulvinus, 1 mm long, pale greenish yellow short-strigose; blades of leaflets oblanceolate to obovate, to 15 × 3 mm, terminal leaflet the largest, bluish green, sometimes folded upward from midrib, tapered at base, entire, rounded with short point at tip, pinnately veined with midrib sunken on upper surface and raised on lower surface, other veins inconspicuous, dull with 2-armed hairs and especially glaucous on lower surface.

Inflorescence: raceme, axillary, > 20-flowered, to 160 mm long and > leaf, bracteate, with appressed, 2-armed hairs, sometimes the arms unequal with the trailing arm shorter; peduncle, to 15 mm long; rachis ± angled with a broad ridge descending from each bractlet, with projecting bractlet bases, light green, internodes at anthesis ± 3 mm long 3–7 mm in fruit, short-strigose with upward-pointing arms; bractlet cupped awl-shaped, in range 1.2–1.5 mm long, pale green to whitish, short-strigose, abscising at anthesis; pedicel cylindric, ascending aging decurved, at anthesis ca. 1 mm long not increasing in fruit, light green and rose, short-strigose with upward-pointing arms. **Flower:** bisexual, bilateral, pealike (papilionaceous), ca. 10 mm across; receptacle with **nectary** around base of ovary; **calyx** 5-lobed, in range 5–6 mm long; tube cup-shaped, 1–1.2 mm long increasing 2× in fruit, low-ribbed to lobes whitish below roundish sinuses, densely short-strigose; lobes unequal, 3 lobes on lower side, 2 lobes on upper side widely divergent, acuminate-triangular, 4–5 × 0.4–0.7 mm, green, inner (upper) surface glabrous, outer (lower) surface with 2-armed hairs, several hairs red; **petals** 5; banner without claw, widely spreading, roundish, in range ca. 10 × 10 mm, upper surface light salmon with heart-shaped blotch near base rose and whitish, short-notched at tip and minutely notched and white at base (easily detached), lower (outer) surface white to pale pink or light rose, conspicuously short-strigose with appressed, 2-armed hairs, upper surface glabrous with ca. 17 radiating veins from base; wings 2, clawed, claws cupped, < 2 mm long, limbs asymmetric-obovate, ca. 8.5 × 3.5 mm, pale rose, lacking lobes and rounded at tip, not strigose, papillate on lower surface, keel of 2 petals fused from top of claws to 2 mm below tip, not fused or adherent to wings, goldfish-shaped with keel poorly defined, claws triangular, 2–2.5 × 1 mm, white, limbs obovate, ca. 6 × 2.5 mm, near midpoint with a pair of projecting fingerlike pouches 1 mm long, lower portion of limb white and upper portion blushed pinkish with fine, faint veins, rounded at base, lower edge (keel) with short-appressed hairs

approaching tip, upper edges glandular short-ciliate base-to-tip; **stamens** 10, monadelphous (10 fused); filament column straight and cylindric, ca. 7×0.75 mm, pale green to greenish (free filament colorless), glabrous, free portions of filaments straight, to 2 mm long, alternating short and longer; anthers dorsifixed, dithecal, 0.35–0.5 mm long, light green, connective glandular, longitudinally dehiscent; pollen greenish; **pistil** 1, 8–9 mm long; ovary superior, \pm cylindric, 0.35 mm diameter, green to midpoint and densely short-strigose above midpoint, 1-chambered with to 9 ovules on upper side; style exerted, straight through stamen column at end sharply curved upward 90° touching stigma to anthers, pale green, with 2-armed hairs on upper side below bend; stigma terminal, capitate, exerted ca. 1.5 mm, green, 0.2–0.25 mm across, with minute hairs at base of stigma. **Fruit:** pod (legume) not stalked (no gynophore), descending to reflexed from rachis, dehiscent upward, 2-valved, < 10-seeded, straight and \pm angular, with furrow on each face and having cross ridges, ca. $30 \times 3\text{--}3.5$ mm + acuminate lower beak 2 mm long, light brown, suture groove with a fine red line, with appressed 2-armed hairs; having partitions between seeds and enclosed by a papery inner wall of chamber. **Seed:** strongly angled often flat-sided with 6 faces, ca. $2 \times 1.5\text{--}1.7$ mm, glossy green, with small, centered hilum; seed coat extremely hard.

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