

Vascular Plants of Williamson County

Linum berlandieri var. *berlandieri* – BERLANDIER FLAX [Linaceae]

Linum berlandieri Hooker var. *berlandieri*, BERLANDIER FLAX. Annual, taprooted, often 1(–2)-stemmed at base but appearing several-stemmed with whorled principal shoots within 35 mm of root, with ascending shoots each with terminal inflorescence, in range mostly to 20 cm tall; shoots with ascending cauline leaves, having short, stalked glands. **Stems:** of green stems ca. 10-ridged, to 1.5 mm diameter, with 3 colorless, winglike ridges descending from each leaf and stipules, tough, internodes 1–2 mm long, having minute glandular hairs along ridges, of basal stem cylindrical with brown and purple-red periderm having vertical lines of minute glandular hairs. **Leaves:** helically alternate (opposite or whorled at certain basal nodes), simple, sessile, with stipules; stipules 2, at base of leaf on stem, domelike and glandular, 0.2–0.3 mm long, reddish; blade lanceolate-linear (narrowly elliptic to narrowly oblanceolate), 5–20 × (1.3–)2–3 mm (first-formed leaves < 2 mm long), tapered at base (not clasping), entire and minutely toothed on margins, acuminate with short point at tip, 1-veined from base with midrib raised on both surfaces, glabrous and glaucous. **Inflorescence:** panicle of racemelike cymes, terminal, open and somewhat flat-topped, lateral branches helically alternate and ascending, forked or unforked and several-flowered, inflorescence mostly < 10-flowered, bracteate; bract subtending each branchlet, leaflike, decreasing upward, each with 2 minute stipules, with glandular teeth on margins, midrib raised more on lower surface, with point at tip often reddish, minutely beaded; branchlet axes conspicuously ridged; bractlet subtending pedicel awl-shaped, to 5.5 mm long, with 2 stipules at base, 1-veined with glandular teeth along midvein and margins, bristle 0.5–0.6 mm long; pedicel ca. 7-ridged, at anthesis 5.5–10 mm long increasing in fruit, winglike ridges abruptly constricted approaching calyx, pedicel enlarged above constriction but ridges continuous on exposed sepals. **Flower:** bisexual, radial, 21–25 mm across, open and dishlike in morning, closing before afternoon with petals readily abscising; buds and flowers after petals abscised lanceoloid; **sepals** 5, helically alternate, firmly attached to receptacle, while open ascending and appressed to corolla later erect, overlapping below midpoint, subequal, acuminate-lanceolate with bristle point < 1 mm long, (6.5–)7.8–9 × 1.7–2.7 mm decreasing slightly from outer sepal to inner sepal, increasing slightly in fruit, green but the inner sepal having colorless portions below midpoint, having tip colorless or aging orangish and purple-red at base, margins colorless, conspicuously 3-veined, margins and raised midvein with glandular teeth having greenish heads; **petals** 5, spreading, attached to base of short stamen tube, twisted in bud with overlapping limbs, short-clawed, easily dislodged, in bud yellow and apricot; claw inverted deltate, to 2 mm, white, with tuft of short white hair 1 mm from base on upper surface; limb fan-shaped, 11–13.5 × 10–11 mm, broadly rounded and sometimes notched at tip, yellow and yellow-orange to apricot with 12+ radiating orange to red-orange veins, the orange pigment to 2/3, especially veins glossy; **stamens** 5, fused at their bases forming a ringlike tube around ovary base appressed to ovary; tube 1 mm long, white, with minute tooth in each sinus between filaments (vestigial staminodes); filaments ca. 5 mm long, white base-to-tip; anthers dorsifixed, dithecal, ± 2 mm long, orange-yellow, longitudinally dehiscent; pollen orange-yellow; **nectaries** 5, fused to stamen tube opposite filament bases; **pistil** 1, erect, 9.5–10 mm long; ovary superior, smoothly ovoid, ca. 1.2 × 1

mm, lacking strongly 5-angled beak, green but whitish at base, inconspicuously striped and veined, 5-chambered becoming falsely 10-chambered by growth of false septa, with 2 ovules per chamber; styles fused most of length, 5-branched, white at base then yellowish becoming yellow-orange below midpoint, the branches erect to ascending ca. 1.3 mm from end of column, short-papillate, exerted several mm above anthers and exposed ca. 2.5 mm after petals lost and calyx tightly closed; stigmas capitate, ± 0.35 mm across, cream-colored, conspicuously papillate. **Fruit:** capsule, schizocarpic, septicidal, 10-seeded, breaking into 5 crescent-shaped, 1–2-seeded segments, ovoid, $3.8\text{--}4.3 \times 2.6\text{--}3.3$ mm, tan; often with dried staminal ring and filaments at base. **Seed:** persistent in thick-walled fruit segment between papery divisions, flattened ovoid, ca. 2.5×1.2 mm, orange-brown and somewhat glossy, with outlines of cells on seed coat.

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