Vascular Plants of Williamson County

Linum sulcatum – GROOVED YELLOW FLAX [Linaceae]

Linum sulcatum Ridd., GROOVED YELLOW FLAX. Annual, taprooted, not rosetted, in range typically 1-stemmed at base and sparsely leafy, with branched inflorescence in canopy, to 30 cm tall; shoots with only cauline leaves, leaves strongly ascending, lacking hairs. **Stems:** 8-ridged, to 0.8 mm diameter, green but lower stem aging reddish, internodes mostly to 15(-25) mm long with 3 ridges descending from each leaf (blade + stipules), papillate (beadlike) along ridges. Leaves: helically alternate, simple and sessile, with stipules; stipules = a pair of raised glands (dotlike) at base of blade, red aging black; blade linear, in range $9-15 \times 0.8$ mm, blade < internode, entire (not ciliate), acute with fine colorless point at tip, 1-veined with midrib slightly raised on lower surface. Inflorescence: monochasial cyme, terminal, open, several-flowered, flowers subsessile, bracteate, glabrous; peduncle and other axes stemlike, low-ridged, green, peduncle to 45 mm long, internodes to 25 mm long; bractlet subtending pedicel, ascending, leaflike with a pair of red glands (stipules) at base, sessile, linear, the lowest ca. 6 mm long decreasing upward to 3.5 mm long, margins short-ciliate with gland-teeth on margins, 1-veined; pedicel < 0.5 mm long, attached to a flaring, 5-ribbed receptacle. Flower: bisexual, radial, ca. 9 mm across; **sepals** 5 in 2 series, outer whorl of 3 sepals overlapping inner 2 sepals, all strongly attached to receptacle, tightly appressed to corolla and later to developing fruit, narrowly ovate sharp-pointed at tip, ca. $3.2-3.5 \times 1.3$ mm, outer sepals > inner sepals, green often purplish black above midpoint and tip colorless, 3-veined at base with veins strongly raised on outer (lower) surface, all margins gland-tipped short-ciliate; petals 5, twisted in bud, during part of daytime widely spreading and overlapping, fan-shaped, in range ca. 8 × 4 mm, in bud shorter and light yellow-orange at opening maturing light yellow lacking red basal portion, easily dislodged (white callouslike base); stamens 5, ca. 4.5 mm long, fused ca. 0.7 mm as a papery cup covering lower ovary, filaments tapered to threadlike at top, light yellow-orange; anthers exserted, dorsifixed, dithecal, ca. 0.7 mm long, light yelloworange, longitudinally dehiscent; pollen light yellow-orange; **pistil** 1, ca. 4.5 mm long; ovary superior, ovoid, ca. 1×0.8 mm, light green, 5-chambered, each chamber with 2 ovules; styles 5 fused at base in range ca. 0.5 mm, light yellow-orange, 5-lobed, free portion slender, ca. 3 mm long; stigma capitate, 0.2 mm diameter, light green. Fruit: capsule, septicidal and loculicidal, with 10 seeds in a ring, shattering into 10 1-seeded segments, intact fruit broadly ovoid with 10 low ribs, in range ca. 3×2.5 mm, green drying light brown, glabrous, segments (mericarps) wedgelike rounded on back with 2 flat faces.

[[[Seed: hemi-ovoid, ca. 2×1 mm, glossy, \pm orange, minutely textured with collapsed cells, becoming mucilaginous when wetted.]]]]
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