Vascular Plants of Williamson County Linum rupestre – ROCK FLAX [Linaceae]

Linum rupestre (A. Gray) Engelm., ROCK FLAX. Perennial herb, taprooted, several-manystemmed at base, with spreading to ascending, usually unbranched shoots below flowering canopy, in range to 30 cm tall; shoots with only cauline leaves ascending to somewhat appressed to stem, slightly glaucous. Stems: 10-ridged, to 1.5 mm diameter, with 3 ridges descending from each leaf, tough, basal internodes short and above to 16 mm long, green and photosynthetic; solid; periderm on old stems near the ground. Leaves: helically alternate of opposite (the lowest leaves), simple, sessile, with stipules; stipules 2, at base of leaf on stem, domelike, ca. 0.3 mm long, reddish; blade linear, $7-16 \times 1.2-1.4$ mm, entire or sparsely short-ciliate, acuminate with short bristle at tip, 1-veined with midrib raised on lower surface and ending at tip, somewhat glaucous. Inflorescence: panicle of racemelike cymes, terminal, open, < 150 mm long, many-flowered, lateral branchlets helically alternate, bracteate but not appearing leafy; bract subtending each branchlet, leaflike, 4–5 mm long, each with 2 stipules; branchlet axes slender, wiry; bractlet subtending pedicel awl-shaped, ± 3 mm long, reddish, with 2 stipules at base, keeled with several glandular teeth along keel and margins, bristle 0.5–0.6 mm long and red-tipped; pedicel at anthesis 1.5–2 mm long increasing in fruit, somewhat flat-sided. Flower: bisexual, radial, 10–11 mm across, glabrous, open and dishlike in morning, closing before afternoon with petals readily abscising; sepals 5, helically alternate, firmly attached to receptacle, while open ascending and appressed to corolla later erect, overlapping below midpoint, unequal, outer sepals broadly lanceolate, $3-4 \times 1.25$ mm increasing slightly in fruit, often green to midpoint and purplish above with short bristle at tip 0.3–0.4 mm long, conspicuously 3-veined, margins and raised midvein with conspicuously glandular teeth, sepals decreasing in length outer to inner, inner sepals with wide colorless margins to bristle and green herbaceous center; petals 5, spreading, attached to base of short stamen tube, twisted in bud with overlapping limbs, short-clawed, easily dislodged; claw inverted short-deltate, pale yellowish to whitish, with tuft of short hair near base on upper surface < 1 mm from base; limb narrowly fan-shaped to oblanceolate, above hairs $8-15 \times 3.4-4.7$ mm, broadly rounded and weakly jagged at tip, yellow with dark faint veins radiating from base, lower surface glossy below midpoint; stamens 5, fused at their bases forming a ringlike tube around ovary base appressed to ovary, with exserted anthers touching stigmas; tube 1 mm long, pale green, with small tooth in each sinus between filaments (vestigial staminodes); filaments ito 3.3 mm long, yellow with a hint of green; anthers dorsifixed, dithecal, 0.8–1 mm long, light yellow, longitudinally dehiscent; pollen light yellow; nectaries 5, fused to stamen tube opposite filament bases; pistil 1; ovary superior, smoothly ovoid, 1.2×1 mm, lacking strongly 5-angled beak, green, inconspicuously striped and veined, 5-chambered becoming falsely 10-chambered by growth of false septa, with 2 ovules per chamber; styles 5, fused at based ca. 0.5 mm, erect, pale green at base to yellow above, parallel and appressed, unequal, $3.3-3.7 \times 0.15$ mm, exserted to level of anthers but not at same height; stigmas capitate, ± 0.3 mm across, conspicuously papillate. Fruit: capsule, schizocarpic, septicidal and loculicidal, 10-seeded, breaking into 10 crescent-shaped, 1-seeded segments, ovoid, ± 2.5 mm long + 1 mm for 5-angled beak. Seed: persistent in thick-walled fruit segment between papery divisions, ± 1.5 mm long. A. C. Gibson