Vascular Plants of Milam County

Lepidium densiflorum – PRAIRIE PEPPERWEED, GREEN-FLOWERED PEPPERGRASS [Brassicaceae]

Lepidium densiflorum Schrad., PRAIRIE PEPPERWEED, GREEN-FLOWERED PEPPERGRASS. Annual, taprooted, initially rosetted, in range 1-stemmed at base, principal shoots unbranched below canopy, in range only observed plants to ca. 20 cm tall; shoots initially with basal leaves and above with cauline leaves, foliage odorous (sulfurous) when crushed, essentially glabrous, lobed leaves absent on diminutive and fruiting plants. Stems: initially weakly ridged aging cylindric, in range to 2 mm diameter, green to purple on lower stem, glabrous. Leaves: helical alternate, simple (to odd-1-pinnately lobed on robust plant) and petiolate (basal and the lowermost cauline leaves) and slender and unlobed and subsessile to sessile (most cauline leaves), without stipules; petiole somewhat compressed top-to-bottom, in range < 8 mm long, narrowly winged along midvein raised on lower surface, puberulent-ciliate, of cauline leaves absent or short and indistinct from blade; blade in range linear or narrowly oblong to linear-oblanceolate, $< 10 \times 0.5-2$ mm, narrowly pinnately veined with midrib raised on lower surface, long-tapered at base, sometimes with several low teeth approaching tip or entire, acute at tip, surfaces glabrous. Inflorescence: raceme, terminal on principal shoot and axillary shoots in canopy, 40+flowered, somewhat indented at narrow tip with young fruit > flowers and flower buds, lacking bracts, in range almost totally glabrous; rachis with short internodes; pedicel at anthesis ascending-suberect, cylindric (terete), to 2 mm long spreading but not increasing in fruit, sparsely puberulent on upper side (most pedicels), green. Flower: bisexual, \pm radial, in range ± 0.6 mm across and 0.6 mm long (essentially cleistogamous); sepals 4, 2 boat-shaped and cupping (concealing edges of ovary) and ovate and flatter (opposite faces of ovary), in range ca. 0.6×0.5 mm (flattened), rounded and green on back with narrow whitish margins, not jagged at tip, glabrous, early-deciduous; petals in range 4 or absent, not clawed, lanceolate, in range < 0.4 mm long, early-deciduous; stamens 2, free, on the broad face of ovary; filaments erect, at anthesis < 0.5 mm long and tapered to tip aging to threadlike and 0.7 mm long, whitish; anthers basifixed, dithecal, ca. 0.1 mm long, pale light yellow, longitudinally dehiscent; pollen light yellow; nectaries not observed, if present vestigial; **pistil** 1; ovary superior, 2-lobed and \pm circular flattened \perp septum, at anthesis ca. 0.5×0.5 mm, green, glabrous, 2-chambered, each chamber with 1 ovule; style in narrow, short notch at top of ovary, wider at top than base, in range ± 0.1 mm long, colorless, persistent below midpoint of notch; stigma capitate, papillate. Fruit: siliqua (silicle), dehiscent by 2 valves from a fusiform septum, 2-seeded, circular-obovate to nearly circular in outline, in range 2.3–2.6 mm, compressed and biconvex but not inflated, notch ca. 0.4 mm deep, glabrous, inner surface not veiny. Seed: compressed D-shaped (ovate) with contour of bent embryo, $1.1-1.3 \times 0.7$ mm, light orange, embryo incumbent (cotyledons parallel, not \perp , the radicle. A. C. Gibson