

Vascular Plants of Williamson County

Lactuca ludoviciana – WESTERN WILD LETTUCE, LOUISIANA WILD LETTUCE [Asteraceae]

Lactuca ludoviciana (Nutt.) Ridd., WESTERN WILD LETTUCE, LOUISIANA WILD LETTUCE. Biennial herb, in range scarcely spinescent, taprooted, rosetted, 1-stemmed at base, erect, with ascending flowering branches in canopy and developing downward, in range 120–230 cm tall; shoots with basal leaves and canopy leaves to about 3/4 of plant height, axes often blushed purple-red, leaves mostly present at flowering, in range essentially all coarsely pinnately lobed with deep, broad and rounded sinuses (often nearly to midrib) and broad lobes, to 310 mm long (lower cauline leaves), lobes alternate (basal leaves) or ± paired (cauline leaves), on large leaves terminal lobe ± deltate in outline, prickles somewhat noticeable or scabrous along midrib on lower surface of foliage and occasionally on blade margins; latex milky drying brown. **Stems:** cylindrical, to 11 mm diameter, often purple-red (especially in full sun), internodes above midplant to 100 mm long, glabrous and somewhat glaucous; internodes hollow. **Leaves:** helically alternate, deeply pinnately lobed, petiolate (basal leaves and lower cauline leaves) and sessile and clasping (most cauline leaves and bracts) with toothed, rounded basal lobes, without stipules; petiole broadly channeled with narrow green wings to the lowest tooth on margin, to 105 mm long, indistinct from blade and wings usually inrolled to lower side, lower side having inconspicuous midridge often scabrous and with some nonglandular hairs, often glaucous; blade ± obovate to ovate (coarsely lobed) to various shapes in upper canopy, the largest 150–210 × 60–75 mm (above midblade), on petiolate leaves with several minor teeth near petiole, on sessile leaves basal portion of blade broadly winged, dentate on margins with or without hardened points at tips, lobes to 45 × 35 mm and never slender, pinnately veined with principal veins slightly sunken on upper surface and raised on lower surface, somewhat glaucous. **Inflorescence:** heads, in panicle of cymelike branches and branchlets, terminal on all principal shoots, with many heads, axes and often buds often tinged purple-red, early in season panicle appearing condensed along principal axis lateral open with elongation of internodes, major branch often with 20+ heads including a range from small buds to those ready to open and heads rapidly going into fruit and dispersing fruits, ultimate branchlets often with 5 heads, head ligulate, of 25–30 flowers, 4–5 mm across, having corollas scarcely > involucre (early morning), bracteate, essentially glabrous and neither prickly or scabrous; bract subtending panicle diminutive leaflike with clasping basal lobes, decreasing upward to appressed bracts; principal axes cylindrical, stemlike; bract at fork within branchlet appressed to pedicel of younger flower, acuminate-deltate, ca. 2 × 2 mm; peduncle initially short with several appressed bracts elongating to 11 mm long with appressed bracts then above midpoint and a series of bracts at top of peduncle (calculus), bracts along peduncle acuminate-ovate, 2 mm long, of calculus ca. 8 in 2 series appressed to involucre, ovate, the lowest 1.5 mm long to the uppermost ca. 7.5 mm long, minutely ciliate at tip; **involucre** in bud cylindrical aging to slightly lanceoloid at anthesis and later that day conspicuously lanceoloid with enlarging fruits 12–17 mm long (pappus tips visible at top), phyllaries typically 8 in 2 series, appressed, triangular-lanceolate (outer series) to oblong and narrower (inner series), in range 12–16.5 × 2.2–3.4 mm, green or exposed surface blushed purple-red and tips always purple-red and minutely ciliate (also the largest calculus bracts), of inner series with narrow membranous margins to midpoint, in fruit phyllaries strongly reflexed beneath receptacle; receptacle ± flat and

narrow, with a low rim subtending each flower (later appearing somewhat pitted), glabrous. **Ligulate flower:** bisexual, bilateral, ca. 1.5 mm across (corolla limb); **calyx (pappus)** of 50+ capillary bristles, in range 5.5–7 mm long, soft and silky, arising from a subsessile cup on top of ovary (stalk beneath cup elongating as beak in fruit); **corolla** minutely 5-toothed, 9.5–10.5 mm long, glabrous; tube cylindric, to midpoint and 0.3 mm diameter, white, glabrous; limb flat soon inrolled, ca. 1.5 mm across, lower limb pale purplish to yellow approaching purple-red teeth; **stamens** 5, attached at top of corolla tube, included; filaments ca. 1 mm long, colorless; anthers fused into cylinder surrounding style, basifixed, dithecal, ca. 2 mm long, light yellow, longitudinally dehiscent; pollen yellowish; **pistil** 1, ca. 12 mm long; ovary inferior, at anthesis round and discuslike (low-biconvex) compressed front-to-back, 1 × 1 mm, with colorless wings, glabrous, 1-chambered with 1 ovule; style > corolla, to 11 mm long, straight, minutely scabrous above anthers, 2-branched, the stigmatic branches exerted and spreading, 1 mm long, aging pinkish. **Fruits:** cypselae (achenes), with pappus in spheric display ca. 24 mm across, beaked, beak (not stylar) persistent; fruit body broadly obovate to oval or elliptic compressed and winged, in range 4.5–5.3 × 2.2–2.75 mm, dark brown sometimes mottled, minutely scabrous on margins, with midrib on each face (biconvex fruit chamber) and a pair of lateral veins of wings at least visible in tapered, narrow tip at beak, faces highly textured with radiating, raised microlines, glabrous; beak often straight, in range 2.5–3 mm long with cup-shaped structure at top, before drying light green drying golden brown, glabrous and without teeth; pappus = a set of many capillary bristles radiating but easily detached as a unit from cup (bristles fused at base), 5.5–7 mm long, soft and silky.

A. C. Gibson