Vascular Plants of Williamson County

Oenothera curtiflora – LIZARDTAIL, VELVET-LEAF GAURA, SMALL-FLOWER GAURA, DOWNY GAURA [Onagraceae]

Oenothera curtiflora W. L. Wagner & Hoch, LIZARDTAIL, VELVET-LEAF GAURA, SMALL-FLOWER GAURA, DOWNY GAURA. Annual, taprooted, not rosetted, mostly 1-stemmed at base, with ascending lateral branches in canopy, erect to suberect, in range 30–90+ cm tall; shoots with basal leaves and cauline leaves, basal leaves abscised before flowering leaving a group of scars at ground level, foliage velveteen, densely short-hairy with scattered pilose hairs and stalked glandular hairs (aging nonglandular). Stems: cylindric, to 8 mm diameter, tough, green, internodes to 35 mm long, densely soft-hairy with radiating hairs. **Leaves:** helically alternate, simple, sessile to subsessile, without stipules; petiole to 3 mm long, broadly and shallowly channeled, pilose and short-pilose; blade elliptic to lanceolate, $< 30-90 \times < 8-25$ mm, tapered to long-tapered at base, wavy and low-dentate with callus tooth points on margins, acute with callus point at tip, pinnately veined with principal veins raised slightly on upper surface and raised on lower surface, upper surface midrib whitish, lower surface sometimes with scattered stalked glandular hairs. Inflorescence: spike (raceme) of subsessile flowers, terminal, many-flowered and sometimes > main shoot, flowers helically alternate and closely overlapping with short internodes, flowers and fruits overlapping, where flowering ca. 5 mm across, bracteate, with conspicuous, straight mostly nonglandular short-hirsute and hirsute hairs; bractlet subtending the first few flowers leaflike (= cauline leaves), persistent, bractlet subtending short pedicel of other flowers awl-shaped, 2–2.5 mm long, at least ciliate on margins with hairs short–0.9 mm long, abscising from a projecting base < 0.3 mm long, persistent base pale green; pedicel < 0.5mm long, short-hairy. **Flower:** bisexual, radial, ± 3 mm across; hypanthium above ovary, narrowly funnel-shaped, $\pm 3 \times 0.7 - 0.8$ mm, mostly red, with a slight bulge below midpoint, outer surface with radiating short and some longer hairs, inner surface shortvillous, **nectary** below hairs at hypanthium base 1 mm surrounding style base, of greenish ridges; sepals 4, free after splitting apart upward along suture lines from just above the hypanthium, quickly reflexed, oblong-oblanceolate and somewhat cupped, $2.3-2.7 \times$ 0.5–0.65 mm, green or with purple-red, short-hairy on original outer surface with some longer hairs; **petals** 4, arising from rim of hypanthium, ascending to suberect, obovate, ± 1.5×0.5 mm, white or aging light rose, glabrous; **stamens** 8 in 1 whorl arising on rim of hypanthium, exserted; filaments slender, 1.7–2.1 mm long, white, glabrous; anthers exserted, dorsifixed, dithecal, subequal, 0.7–0.8 mm long, pale yellow, longitudinally dehiscent; pollen distinctly 3-armed, whitish, relatively loose but also held in mass by minute threads (viscin threads); pistil 1, ca. 7 mm long; ovary inferior, narrowly ellipsoid to narrowly lanceoloid but inconspicuously 4-sided with 4 angles, $3-3.7 \times 0.7-0.8$ mm, green and often red on exposed side, short-hirsute with scattered longer straight hairs, 1chambered 3–4 ovules; style cylindric, ca. 4 mm long, pale green at base and creamcolored where exposed, at top with 4 spreading, bulbous, stigmatic lobes 0.3–9.35 mm long, stigmas wet. **Fruit:** capsule, indehiscent with hard wall, subsessile, mostly 3(-4)seeded, narrowly obovoid or slightly 4-sided, ca. 8 × 2.7–3 mm, maturing with reddish blush, thick-walled especially above midpoint, with 4 shallow furrows approaching tip,

uniformly short-pilose with several longer straight hairs. **Seed:** stacked and variable in size and shape within fruit, $2-2.3\times0.7-1$ mm, the largest in the upper chamber ovoid, . A. C. Gibson