# Vascular Plants of Williamson County Oenothera laciniata - CUTLEAF EVENING PRIMROSE [Onagraceae] 

Oenothera laciniata Hill, cutleaf evening primrose. Annual (perennial herb), taprooted, rosetted, 1-stemmed at base (annual) or several-stemmed at base (perennial), below midplant branching at every node along principal axis, erect to decumbent, to 33 cm tall; shoots with basal leaves and cauline leaves, basal leaves withered at and abscising during flowering, hirsute with spreading or slightly arched hairs and pubescent with ascending arched hairs, sometimes with short, narrowly club-shaped or blunt hairs. Stems: $\pm$ cylindric, to 4 mm diameter, with a broad, light green vein descending from each leaf becoming tinged reddish orange. Leaves: helically alternate, simple, petiolate (basal leaves) and sessile (cauline leaves), without stipules; petiole to 33 mm long, gradually narrowly winged approaching blade; blade oblanceolate to oblong or lanceolate to ovate, $8-85 \times 3-22 \mathrm{~mm}$, long-tapered at base, entire to dentate or cut-lobed with 3-5 teeth or lobes per side, acute at tip, pinnately veined with principal veins slightly sunken on upper surface and raised on lower surface, pubescent with arching hairs and some scattered longer hairs, aging sparsely pubescent with hairs mostly on margins and along veins.
Inflorescence: interrupted leafy spike, terminal, of helically alternate flowers, flowering nodes separated by several (commonly 3) vegetative nodes having new lateral shoots, bracteate. Flower: bisexual, radial, $25-33 \mathrm{~mm}$ across, rotate, nocturnal (opening at sunset and closing by midmorning); in late bud with hypanthium curved upward; hypanthium above ovary, long-tubular but expanded at tip, (12-) $18-30 \times \pm 1 \mathrm{~mm}$, in $\times$-section 4 -sided, pinkish but pale yellowish green approaching petals and sometimes next to ovary, longhirsute and with short, narrowly club-shaped hairs (sometimes glandular), internally finely puberulent at base to finely tomentose-matted but glabrous at top, the tip inversely conic, ca. $3 \times 3 \mathrm{~mm}$, nectary at base of hypanthium of $4 \pm$ riblike glands surrounding style base, yellowish green; sepals 4 , free or partially fused as they split from pressure of expanding petals along suture lines, splitting along 2 suture lines base to tip forming pairs, or with short splits and sepals remaining fused above midpoint or at tips, strongly reflexed individually or pairs, individually narrowly triangular to narrowly lanceolate with a free, subterminal projection, $12.5-17.5 \times 2.5-3.5 \mathrm{~mm}$ (including projection), green with reddish midvein, hooded at tip, the subterminal projection narrowly conic and $1.5-3.3 \mathrm{~mm}$ long, solid, with $\pm$ erect, long ( $1-2 \mathrm{~mm}$ ) and short, narrowly club-shaped or blunt hairs; petals 4 , spreading, not clawed, fan-shaped, (5-)10-18(-22) $\times 15-20 \mathrm{~mm}$, yellow to light yellow aging orangish during the day, palmately veined with principal veins somewhat glossy; stamens 8 in 1 set, arising from hypanthium rim, monomorphic; filaments erect, tapered, $7-10 \mathrm{~mm}$ long, $\pm 0.7 \mathrm{~mm}$ wide at base, yellow to light yellow, glabrous; anther exserted, versatile, dithecal, linear, $4.8-5.2 \mathrm{~mm}$ long, pale yellow, longitudinally dehiscent; pollen pale yellow, pollen grains 3-pointed, held in mass by minute threads (viscin threads), $\pm$ $50 \%$ fertile; pistil 1; ovary inferior, ascending or spreading (sometimes slightly curved), narrowly oblong, 11-18 $\times 2-3 \mathrm{~mm}$ long, 4 -sided with rounded angles and 4 shallow grooves, slightly wider above midpoint, 4-chambered, each chamber with numerous ovules attached to center; style exserted, cylindric, 25-35 $\times 0.5-0.7 \mathrm{~mm}$, pale green to greenish yellow; stigma conspicuously 4-lobed, lobes spreading, fingerlike, $3.5-5.3 \mathrm{~mm}$ long, yellowish to greenish yellow. Fruit: capsule, loculicidal, dehiscent by 4 valves, manyseeded, slightly club-shaped, $24-40 \times 3.5-4 \mathrm{~mm}$, in $\times$-section 4-lobed, valves with
ascending heart-shaped tips, ascending-hirsute and arching-pubescent. Seed: $\pm$ ovoid, $1.3-1.6 \times 0.7-0.9 \mathrm{~mm}$, tan, pointed on basal end, grooved on 1 side with groove slightly open approaching tip, slightly netlike.
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