

## Vascular Plants of Williamson County

*Oenothera capillifolia* subsp. *capillifolia* – SUNDROPS, SQUARE-BUD PRIMROSE, BERLANDIER'S EVENING PRIMROSE [Onagraceae]

*Oenothera capillifolia* Scheele subsp. *capillifolia*, SUNDROPS, SQUARE-BUD PRIMROSE, BERLANDIER'S EVENING PRIMROSE. Perennial herb to subshrub or annual, taprooted, rosetted (annual), 1–several-stemmed at base, with relatively long principal axes from lower plant and shorter vegetative and flowering branchlets in canopy, decumbent to spreading or ascending to suberect, in range 15–60 cm tall; shoots with slender cauline leaves (basal leaves rarely observed), feathery in an open canopy, short-hairy with arched hairs (hirtellous) or  $\pm$  short-strigose. **Stems:** cylindric, to 4.5 mm diameter at base on woody stem, initially red sparsely hirtellous with hairs arched upward, on old axes with surface layer grayish, loose and potentially peeling (exfoliating) from reddish brown periderm and glabrescent. **Leaves:** helically alternate, simple, subsessile to sessile, without stipules; petiole indistinct from blade, to 1 mm long, red at base; blade linear and flat or folded upward from midrib,  $< 20\text{--}75 \times 1.2\text{--}3$  mm, short-serrate with several widely spaced teeth on margins, the teeth not paired, acute to short-acuminate with red point at tip, 1-veined with midrib slightly raised on lower surface,  $\pm$  short-strigose, upper surface with most hairs along midrib, lower surface with scattered hairs pointing toward tip.

**Inflorescence:** flower solitary and axillary or in small leafy spikes having axillary flowers at several successive nodes; bractlet = cauline leaf; pedicel indistinct,  $< 1$  mm long.

**Flower:** bisexual, radial, 28–40 mm across; hypanthium above ovary, 10–11.5 mm long, sparsely short-hairy, lower portion  $\pm$  4-sided, nearly to midpoint, 1 mm diameter, pale green, with short radiating hairs ca. 3 mm from base, upper portion funnel-shaped and 4-angled, to 4 mm wide at orifice, light yellow with greenish angles; **nectary** at base of hypanthium of 4 short glands surrounding style base, filling at least lower portion of hypanthium with thin nectar; **sepals** 4, arising at top of hypanthium, fused in bud with free cylindric tips 1.5–3.5 mm long, calyx in bud strongly 4-sided with folded sepals, at anthesis splitting into 4 separate sepals, sepals spreading,  $\pm$  triangular, ca.  $10 \times 4$  mm, folded along midline and hoodlike below tips,  $\pm$  green with red along fold and margins to red tip; **petals** 4, arising from rim of hypanthium, widely spreading, fan-shaped to heart-shaped or obovate, (9–)16–19(–21)  $\times$  (6.5–)8–14 mm, bright yellow without conspicuous venation, glabrous; **stamens** 8 in 2 close whorls, arising from rim of hypanthium; filaments alternating long (opposite sepals) and short (opposite petals), suberect but not straight, 6.5–7.5 mm long (long stamens) and 2.8–4 mm long (short stamens), in bud light yellow after anthesis aging orange or yellow-orange, glabrous; anthers versatile or dorsifixed (short anthers), (2.7–)4.5–5 mm long, light yellow in bud aging salmon-orange to orange-yellow, longitudinally dehiscent; pollen orange-yellow to salmon, 3-pointed, somewhat held together by minute threads (viscin threads); **pistil** 1; ovary inferior, 4-lobed with 4 deep grooves, ca.  $10 \times 1.3$  mm, green, hirtellous, 4-chambered, each chamber with to 10 ovules; style exerted with stigma above level of anthers, cylindric, ca. 19 mm long, greenish after pollination aging orange, glabrous, flared at top with a horizontal, platelike (peltate) stigmatic surface, scarcely 4-lobed and light yellow in bud, fully expanded not obviously lobed,  $1.7\text{--}2 \times 1.7\text{--}2$  mm, and crimson to purple-red and wet. **Fruit:** capsule, loculicidal, 4-valved, to 35-seeded, before dehiscing 4-lobed and reddish (aging brown),

14–19 × 1.5–2 mm, the widest near midpoint, valves ± short-strigose with upward arched hairs. **Seed:** parallelogram-like to polygonal, 1.5–1.8 × 0.5–0.6 mm, brown, 1 end with thinner, winglike margins.

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