

Vascular Plants of Williamson County

Oenothera heterophylla subsp. *heterophylla* – VARIABLE EVENING PRIMROSE
[Onagraceae]

Oenothera heterophylla Spach. subsp. *heterophylla*, VARIABLE EVENING PRIMROSE. Annual (perennial herb), taprooted, 1-stemmed at base, ± rosetted, branched above midplant, in range to 35 cm tall; shoots with basal leaves and cauline leaves, with long hairs, the longest ones with swollen bases (pustulate). **Stems:** ± cylindric, < 4 mm diameter, with low ridge descending from leaf. tough; green or purple-red aging brownish, strigose and short-strigose with upward-pointing hairs. **Leaves:** helically alternate, simple, petiolate (basal leaves) and sessile (cauline leaves), without stipules; petiole < 5 mm long; blades obovate (rosette leaves) or narrowly elliptic to lanceolate or narrowly ovate, < 15–90 × 3–17 mm, tapered at base, irregularly low-dentate, acute to tip, pinnately veined with principal veins raised on lower surface. **Inflorescence:** leafy spike, of axillary flowers (alternatively interpreted as solitary axillary flowers), with nonglandular hairs and scattered glandular hairs on green tissues. **Flower:** bisexual, radial, ca. 35 mm across; hypanthium cylindric funnel-shaped at top, to 22 mm long, cylindric portion ca. 1.3 mm diameter, light yellow, lined with erect short hairs; **sepals** 4, partially fused splitting from pressure of expanding petals along 2 suture line upward from base but remaining coherent approaching tip, with green, subterminal tips 3 mm long, mottled red and green, outer surface with scattered long hairs (pustulate) and stalked glandular hairs; **petals** 4, widely spreading, rhombate, ca. 18 × 13 mm, light yellow, acute at tip; **stamens** 8 in 1 whorl, attached on rim of hypanthium; filaments, exserted, ca. 15 × 0.2 mm, light yellow; anthers dorsifixed, dithecal, (3.4–)4–5.5 mm long, light yellow, longitudinally dehiscent; pollen light yellow, pollen grains held in a mass by minute threads (viscin threads); **nectary** at base of hypanthium surrounding style base, 1.5 mm long; **pistil** 1; ovary inferior, ± cylindric, (inconspicuously 4-sided), to 10 × 1–1.2 mm, with ascending long hairs and stalked glandular hairs, 4-chambered, each chamber with many ovules; style exserted, ± 40 mm long, green within hypanthium and green-yellow where exposed; stigma lobes above tips of anthers, horizontal and widely spreading, fingerlike, in range 3–4 mm long, green, sticky. **Fruit:** capsule, 4-valved, many-seeded, ± cylindric, in range 20–25 × 4 mm, curved at base, having 4 thick lobes at top, with long ascending hairs and stalked glandular hairs; in chamber seeds oriented upward in each chamber. **Seed:** angular fusiform, 0.9–1.1 × 0.3–0.4 mm, light brown.
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