

Oenothera elata Kunth subsp. *hirsutissima* (S. Watson) W. Dietr., HOOKER'S EVENING PRIMROSE, HAIRY EVENING PRIMROSE. Biennial herb to short-lived perennial herb, robust, fleshy-taprooted, rosetted, 1–several-stemmed at base, erect, 100–250 cm tall; shoots with basal leaves and cauline leaves, \pm velveteen (velutinous), densely pubescent and having long hairs with or without expanded, reddish, blisterlike bases and having many short, erect nonglandular or glandular hairs. **Stems:** \pm cylindric, to 15 mm diameter, with 1 broad, short ridge descending from each leaf, green or reddish on exposed side, pubescent with scattered ascending hairs, the ascending hairs with colorless bases on the lower plant and often red approaching inflorescence; internode solid. **Leaves:** helically alternate, simple, long-petiolate, without stipules; petiole of basal leaves hemi-cylindric, 14–90 mm long, with blade margins decurrent as 2 edges, petiole of cauline leaves with base appressed to stem, 1–14 mm long; blade of basal leaves oblanceolate to narrowly elliptic, 80–250(–310) \times 18–28(–40) mm, tapered at base, remotely short-dentate on margins, acute at tip, pinnately veined with conspicuous, whitish midrib raised on lower surface, velutinous, lower surface with longer hairs along midrib; blade of cauline leaves narrowly elliptic to lanceolate, 25–150 \times 7–20(–25) mm, long-tapered at base, entire, remotely short-dentate to subentire and sometimes wavy on margins, acute at tip, pinnately veined with conspicuous, whitish midrib raised on lower surface. **Inflorescence:** leafy spike, terminal, of helically alternate, axillary flowers, having several flowers open per day in an ascending order along the rachis, pubescent like shoot; rachis stemlike but more red and red-striped, the stripes extending from bractlets and also having more red hair bases; bractlet leaflike, < 70 mm long, with short petiole \pm expanded and cupped around base of ovary. **Flower:** bisexual, radial, ca. 70–100 mm across; bud erect to ascending; hypanthium above ovary, forming a long floral tube, tube (20–)40–55 mm long, 2–3.5 mm diameter most of length expanding abruptly to 5–8 mm diameter at orifice, greenish yellow, having 4 or 8 shallow ridges, sparsely short-pilose, internally with downward-pointing hairs below midpoint and longer, matted hairy above midpoint, **nectary** at base of hypanthium surrounding style base, with copious nectar; **sepals** 4, free or partially fused as they split from pressure of expanding petals along suture lines, splitting mostly along 2 suture lines base to tip, forming mostly strongly reflexed pairs, individually narrowly lanceolate, 27–48 mm long, greenish, with tips free for 3–6 mm in bud, externally pilose; **petals** 4, spreading, not clawed, broadly fan-shaped to inversely heart-shaped (obcordate) or roundish with an irregular outer margin, typically 30–50 mm long, bright yellow aging reddish orange, glabrous; **stamens** 8 in 1 set, free, arising from hypanthium rim, exerted; filaments erect, subequal, 12–25 mm long, yellow, \pm bent at base (positioning stamens to 1 side); anthers \pm versatile, dithecal, 8–15 mm long, light yellow, longitudinally and inwardly dehiscent; pollen light yellow, pollen grains triangular (permanently united tetrads), connected with minute threads (viscin threads), ca. 100% fertile; **pistil** 1; ovary inferior, shallowly 4-lobed and straight, 10–15 mm long, green, pilose with red or colorless, blister-based hairs and shorter hairs (some glandular), 4-chambered, each chamber with > 100 ovules attached to center; style extending 5–9 mm above anthers, to 70 \times 0.7–0.8 mm, greenish yellow; stigma 4-lobed, lobes spreading, 4–9 mm long, yellow-green. **Fruit:** capsule, loculicidal, dehiscent by 4 valves along 4 grooves downward to midpoint, many-seeded, before dehiscing lanceoloid-cylindric with 4 shallow grooves, in range 30–45 \times 4–7 mm, valves flaring after dehiscing, pubescent, with 2 rows of seeds per

chamber, persistent. **Seed:** ± wedge-shaped, 1.2–1.4 × 0.5–0.8(–1) mm, dark brown, ± truncate at base and top, several-sided with winglike edges, faces veiny. Early June–mid-September.

Native. A robust biennial herb in range growing mostly on wet margins of creeks. From a fleshy taproot *Oenothera elata* subsp. *hirsutissima* forms a large basal rosette that persists during winter months, and then bolts during the second spring forming its tall, typically unbranched flowering stalk. The upper portion of the new shoot, once flowering has begun, forms a single flower at each node. This is a leafy spike, which has also been described as having solitary, axillary flowers. The flowers are broad and bright yellow, and they have the longest hypanthium and sepals of any Onagraceae in range.

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