

Mentzelia laevicaulis (Hooker) Torrey & A. Gray, SMOOTHSTEM BLAZING STAR. Perennial herb, taprooted, flat-rosetted and 1-stemmed at base (year 1) and not rosetted and 1–several-stemmed at base (after year 1), much-branched above, erect, 50–180 cm tall; shoots with basal leaves (to 25) or also cauline leaves, densely pubescent with barbed hairs, some hairs tipped with upward-pointed (antrorse) barbs (pointed hairs), other hairs blunt and pagodalike with whorls of downward-pointed (retorse) barbs; taproot to 24 mm diameter, becoming woody. **Stems:** cylindric, to 25 mm diameter, initially densely pubescent with mostly pointed hairs, aging satiny white and glabrescent, mottled with brown at shoot base and bases of larger branches. **Leaves:** helically alternate, pinnately lobed (to 12 lobes per side) and petiolate (lower leaves) and unlobed with teeth and sessile + clasping (upper cauline leaves), without stipules; petiole of basal leaves usually winged and lobed, to 25 mm long, reduced upward; blade of lobed rosette leaves narrowly lanceolate to oblanceolate in outline, 100–200 × 25–35 mm, of lower cauline leaves 160–230 × 30–55 mm, the sinuses incised 1/3 to 1/2 distance to midrib or deeper at base, often with 1–2 teeth at the deepest part to dentate or wavy dentate on margins with 9–12 broad, acute teeth per side, acute to rounded at tip, pinnately veined with midrib raised on lower surface or both surfaces (large blades), with predominantly pointed hairs but pagodalike hairs more common on margins and tips of leaves; of upper cauline leaves lanceolate-triangular to triangular, 30–145 × 20–60 mm, dentate to 2-toothed on margins, pinnately veined with principal veins raised on lower surface. **Inflorescence:** simple and compound cymes, terminal and axillary, several–many-flowered, bracteate, barbed-hairy like shoot; bract subtending branchlet and bractlet subtending pedicel leaflike, triangular to lanceolate, 15–30 × 5–15 mm, decreasing upward, acute at tip with 0–5 teeth per side, bractlet persistent with fruit; pedicel 0–20 mm long. **Flower:** bisexual, radial, ± 95 mm across, open during morning, closing mostly before noon; **calyx** 5-lobed; tube 1.5–2 mm long; lobes triangular-lanceolate, in range 26–34 × 8–11 mm, green, 3-veined with veins whitish to pale green or slightly pinkish, primarily with pointed hairs changing to mostly pagodalike hairs at tip; **petals** 5, spreading, elliptic, in range 60–64 × 19–21 mm, brilliant yellow on upper surface with white at base and whitish on lower surface, tapered at base, acute to acuminate at tip, with many faint veins; **stamens** < 200 in 4–5 pseudowhorls, free, outer stamens > inner stamens; filaments 34–53 × 0.5–1 mm except outer 5 stamens (opposite sepals) 1.7–2.2 mm wide at base, white at base changing to bright yellow at tip, tapered to tip; anthers basifixed, dithecal, oblong, mostly 2–2.4 × 0.7–0.8 mm, of outer 5 stamens ± 1.6 mm long with subequal halves, light yellow, longitudinally and sideways dehiscent; pollen pale yellow; **pistil** 1; ovary inferior, narrowly conic but flaring below sepals, ± 23 mm long, 10 mm wide at top, 1-chambered with ca. 150 ovules attached to 6 placentae around wall; top of ovary depressed, ± bowl-shaped, 6–6.5 mm wide, green; **nectary** nectar-producing within whorls of stamens; style arising from center of depression, in range 54–56 mm long, light green, 3-branched, the stigmatic lobes glandular-hairy on margins. **Fruit:** capsule, dehiscent by 3 valves at tip, many-seeded, cylindric, 30–35 × 9–10 mm, initially ± leathery aging rigid and brittle, rounded at base; with persistent calyx and bractlet. **Seed:** lenticular, broadly elliptic to obovate, in range 3.2–3.4 × 2.5–2.6 mm, tannish to light gray brown in range mottled with dull purple, truncate and 2-winged at base around hilum, the wings 0.4–0.5 mm wide. Early July–early August.

Native. Perennial herb only collected to date in Brush Canyon near the Hollywood Hills growing on gravelly slopes. *Mentzelia laevicaulis* has stems that age satiny and then lacking hairs. Its wide, showy yellow flowers with a brush of many stamens cannot be confused with any other plant in the flora, but seed packets sometimes include *M. lindleyi*, which has showy, creamy yellow flowers, and so that species should also be anticipated as an introduction but for which no voucher currently exists. The flowers are open for several hours during the morning.

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