

*Mentzelia veatchiana* Kellogg, VEATCH'S BLAZINGSTAR. Annual, taprooted, with basal rosette of leaves (rosette leaves and lower cauline leaves often withered or absent at flowering), 1–several-stemmed at base, with ascending branches above to form an erect, obconic canopy, 3–50 cm tall; shoots with mixture of barbed hairs: strigose barbed hairs 0.5–1.2 mm long, arched upward, white to semitransparent, tapered from an expanded swollen base to a pointed apex, with minute antrorse barbs scattered along length of hair (visible at magnification > 10×); hirsute barbed hairs thin, semitransparent, mostly 0.15–1 mm long, straight (shorter hairs) to ± wavy (longer hairs), with minute barbs in 2–10 whorls (visible at magnification > 10×). **Stems:** cylindrical, light green, sometimes tinged orange or pink, becoming straw-colored, light gray or whitish, brittle near base, densely hirsute with hairs 0.15–0.4 mm long and barbs in 2–4 whorls on younger stems, becoming glabrous on older stems, sparsely strigose on younger, distal stems, absent on older stems. **Leaves:** helically alternate, pinnately lobed, petiolate (basal and lower cauline leaves) or sessile, whitish strigose and hirsute, without stipules; petiole 0–23(–55) mm long; blade of lower leaves narrowly lanceolate to oblanceolate in outline, 47–150(–180) × 7–32 mm, with 5–13 lobes per side, sometimes reduced to a tooth, additional teeth in the sinuses or on margin of lobes may be present, petioled or sessile with a tapered base, with apical lobe 2–9 × 1.4–3.2 mm; blade of upper leaves lanceolate to elliptic or triangular in outline, 10–60(–90) × 8–23(–40) mm, with 3–8 lobes per side (lobes may be reduced to short teeth at base or at tip of blade), broadly acuminate to tapered or truncate to cordate at sessile base, the apex triangular and acute or lobe-like and lanceolate 2.5–7.0 × 2–3 mm. **Inflorescence:** dichasial cyme, commonly with multiple orders of branching (proportional to length of flowering season), becoming very open proximally with lateral pair of branchlets subtending flower elongating, condensed distally with very short branchlets; flowers sessile, bracteate, densely hirsute and sparsely to moderately strigose; axes commonly fused with ovary base; bract commonly attached to basal portion of ovary, ± leaflike, green but sometimes with a small, whitish area at base when dried, lanceolate to triangular or widely ovate, 5.5–15 × 2.8–10 mm, 1–2-lobed on each margin, lower lobe sometimes reduced to a tooth, apex triangular with length to  $\frac{2}{3}$  × bract length and width ca.  $\frac{1}{3}$  × bract width. **Flower:** bisexual, radial, 9–13(–15) mm across; **hypanthium** extends 0.3–0.7 mm above ovary; **sepals** 5, spreading, broadly attached and continuous with hypanthium, triangular to lanceolate, 4.0–4.7 × 1.4–1.7 mm, green, acute to acuminate at tip, hirsute and strigose on abaxial face, glabrous on adaxial face; **petals** 5, ovate, 4–7(–10) × 1.5–1.8(–2.5 mm), yellow to yellow-orange with dark orange to orange-red base, (greenish at point of attachment to hypanthium), mostly glabrous but commonly with a few hairs at tip; **stamens** to 50, arising from adaxial face of hypanthium, bent inward and downward in bud, erect at anthesis; filaments thread-like but widened at base, 3–7 mm long, mostly yellow or sometimes reddish orange like base of petal; anthers basifixed and versatile, dithecal, oblong (to spheroidal when dry), 0.4–0.5 mm, light yellow, longitudinally dehiscent; pollen golden yellow; **pistil** 1; ovary inferior, 1-chambered, with parietal placentation; style erect, 3–5(–6) mm long, thicker than filaments, spirally twisted, yellowish; stigmas minute, terminal, obscurely 3. **Fruit:** capsule, 9–27 mm long, 2.2–3.0 mm wide at top, tapering to base, ± triangular in ×-section, straight sometimes arching 30°(–45°) away from stem axis, or sometimes slightly S-shaped, dehiscent by 3 valves at top and sometimes splitting lengthwise along angles, to 32-seeded in longer capsules, densely hirsute with straight and wavy hairs, sparsely to

moderately strigose; with persistent hypanthium and sepals. **Seed:** grain-like, irregularly angled, with a short, beak-like flap where attached to placenta (from upper capsule) or triangular with 3 longitudinal grooves at each apex of triangle and  $\pm$  transverse end-walls (from lower capsule),  $1.1\text{--}1.5 \times 0.8\text{--}1.4$  mm, prominently papillate, mostly light tan and generally spotted with dark brown or black epidermal cells, the dark epidermal cells solitary or in small cell clusters. Late March–late June.

Native. Annual, in our area found in openings in grassland on steep ( $30\text{--}40^\circ$ ) slopes, on loamy soils. The species has a flower with an inferior ovary, five, bright yellow or yellow-orange petals with a reddish-orange base, and filaments all thread-like. Most populations of this species have a whitish basal area on the bracts, but bracts in our population appear green when fresh. However, a small white basal area is commonly apparent in dried material. The comment under *M. micrantha* about the foliage clinging to clothing applies to this species and other species of *Mentzelia*. The periderm of older stems becomes  $\pm$  longitudinally wrinkled and may exfoliate. Rosette and lowest cauline leaves are ephemeral and are commonly absent even in material collected in early spring; our comments on the basal leaves are from specimens collected outside our range.

B. A. Prigge & A. C. Gibson