Clarkia purpurea (Curtis) Nelson & J. F. Macbr. subsp. quadrivulnera (Dougl.) H. Lewis & M. Lewis, FOUR-SPOT, PURPLE CLARKIA, WINECUP CLARKIA (= dark form). Annual, taprooted, not rosetted, 1-stemmed at base, unbranched or with several ascending branches typically above midplant, flowering shoots erect with erect buds, 9-65 cm tall; shoots with only cauline leaves, typically with unexpanded axillary shoots with small leaves, shortstrigose, not glandular-hairy. **Stems:** cylindric, to 2 mm diameter, green to reddish, on a large specimen lower stem with brownish skin peeling in strips (exfoliating) thereby appearing glabrous. Leaves: opposite or subopposite (the lowermost 1 or 2 cauline nodes and sometimes the first node on a lateral shoot) and helically alternate (cauline leaves), simple, subsessile, without stipules; petiole < 2 mm long, typically indistinct from blade; blade linear to lanceolate-linear,  $12-37 \times 1.5-3$  mm, often folded upward from midrib, entire to remotely short-dentate on margins, acute and reddish at tip, 1-veined with midrib raised on lower surface, puberulent. **Inflorescence:** leafy raceme, terminal, severalflowered, flowers with inconspicuous pedicel beneath long inferior ovary, bracteate, shortstrigose; bractlet subtending pedicel leaflike, typically > fruit; pedicel < 1 mm long, as thick as ovary base, short-strigose. Flower: bisexual, radial, 10-18 mm across, bowlshaped; bud lanceoloid and somewhat 4-sided; hypanthium above ovary, inversely pyramidal and 4-sided, in range  $(1.8-)3-6 \times 1.5-2.5$  mm, pale green and often with 4 purplish veins, white short-strigose with downward-pointing hairs, internally green with a ring of short coarse white hairs 1 mm above base, **nectary** at base of hypanthium surrounding style base, of small lobes, green; sepals 4, free or partially fused as pairs when they split from pressure of expanding petals along purplish suture lines, splitting along 1 suture line base to tip, or with short splits and sepals remaining fused above midpoint, short-reflexed at base and ascending and appressed to corolla, units broadly ovate to boatlike and 1-sided (= 4-sepal unit) to ovate on opposite sides (= 2-sepal units) and strongly reflexed individually or pairs, individually lanceolate,  $6-9 \times 2$  mm, typically green, acuminate at tip,  $\pm$  3-veined from base, short-strigose, internally glabrous; **petals** 4, spreading, broadly obovate,  $5.5-15 \times 4-10$  mm, not clawed, either light to deep purple or deep wine-red (2 distinct morphs), in lighter forms above midpoint at center with a darker, inverted triangular spot (absent in wine-red flowers), without radiating fine veins, sharply and irregularly jagged on upper margin, glabrous or with widely scattered short hairs; stamens 8 appearing in 1 set, free or fuse at bases forming an irregular short tube, arising from hypanthium rim, dimorphic; filaments 2.5–3 mm long (opposite sepals) and 0.7–1.1 mm long (opposite petals), pale purple or lavender to whitish, tapered gradually to tip, flattened front-to-back, glabrous or sparsely short-pilose, without glandular hairs; anthers monomorphic, dorsifixed, dithecal, arrow-shaped, 2.5–3.3 mm long, white, when filaments puberulent also puberulent on some anthers, longitudinally dehiscent; pollen whitish, held in mass by minute threads (viscin threads); **pistil** 1; ovary inferior, straight, oblong to narrowly lanceoloid,  $11-17 \times 1.4-1.8$  mm, green with red-purple at tip, 8-ribbed with 8 grooves, short-strigose, lacking glandular hairs, 4-chambered, each chamber packed with 1 stack of many ovules; style exserted and at lower or middle level of upper anthers,  $5.5-10 \times 0.3-0.4$  mm, greenish white and occasionally pale purple approaching stigma, never longer than outer anthers; stigma 4-lobed, the lobes recurved, tongue-shaped,  $\pm 1$ mm long, fleshy, deep purple (whitish with purplish margins), margins not inrolled,

stigmatic surface long-papillate. **Fruit:** capsule, loculicidal, dehiscing by 4 valves, many-seeded,  $\pm$  4-sided, 16– $21 \times \pm 2.3$  mm, with 4 edges alternating with raised midface vein, valves  $\pm$  5 mm long and flaring, sides short-strigose. **Seed:** rhomboid, 6-sided ( $\pm$  parallelogram) with sides quadrangular having 2 parallel, oblique end walls, dark brown with tannish papillae, the largest on edges and the smallest on lateral walls, papillae fairly dense on end walls and clustered on lateral walls resulting in a spotted appearance. Mid-April–late June.

Native. Annual common throughout the range, especially in grassy habitats but expected in any sunny locations. *Clarkia purpurea* subsp. *quadrivulnera* has the common name four-spot because typically each petal has a wine-red spot. But occurring at some localities, e.g., SMMNRA Rocky Oaks and Triunfo Canyon Park, can also be observed wine-red flowers on which the spot on the petal is not distinguishable.

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