

***Romneya coulteri*** Harvey, COULTER'S MATILJA POPPY. Shrublike perennial dying back to the ground during late summer and resprouting during winter rains, clonal, forming clumps from spreading rootstocks, erect with ascending lateral shoots, in range 100–250 cm tall; shoots bluish green to grayish green, glaucous, glabrous except with localized short, bristlelike prickles; latex inconspicuous, colorless; rootstocks to 150 mm deep, bark-covered, producing ascending, belowground woody stems with buds projecting from bark and horizontal roots with projecting buds (adventitious buds); horizontal roots crooked and knobby, 2–8 mm diameter. **Stems:** cylindrical, green, glaucous, finely striped with alternating strips of photosynthetic tissues and unpigmented fibrous strips; internodes of upper canopy hollow, where present pith white. **Leaves:** helically alternate,  $\pm$  symmetric and deeply pinnately 3-lobed, 5-lobed, or 7-lobed with paired lateral lobes or occasionally 3(5)-foliolate, petiolate, without stipules; petiole < 10–25 mm long, narrowly winged and grading into blade, often having short prickles on margins; blade (4.5–)30–135  $\times$  (11–)22–145 mm, commonly length = width, long-tapered at base, with lanceolate lobes, the lobes entire or coarsely toothed on margins, sinuses rounded, teeth and tips acute with short, bristle point, pinnately veined with principal veins raised on both surfaces, when young sometimes with prickles along midrib below midblade. **Inflorescence:** leafy cyme (alternatively interpreted as having solitary flowers), terminal and sometimes axillary, cyme 1–3-flowered on each principal shoot arising as fork above an axillary bud, bracteate; peduncle (pedicel) ill-defined = an axis with a series of diminutive, irregularly arranged leaves and leaflike bracts, erect to ascending, 15–150+ mm long, glaucous, the uppermost axis approaching flower sometimes with short prickles and forming a brown or blackish band during fruit development; lower bracts often deeply lobed like leaves grading to upper bracts and bractlet  $\pm$  sessile approaching flower, often yellowish with either short teeth or elliptic to lanceolate and entire. **Flower:** bisexual, radial, 120–200 mm across, horizontal and disc-shaped, white with hemispheric, bright yellow center; bud before anthesis ca. 30  $\times$  20 mm; **sepals** 3,  $\pm$  equal, strongly cupped and overlapping to form a subspheroid bud cover, exposed portion green (glaucous) with a purple patch at tip and slight peaks, often having scattered prickles, abscised as flower opens (caducous); sepal asymmetric, length = 1/2 bud circumference, with only left (overlapped) margin expanded and membranous, the left margin eccentric above midpoint, fan-shaped, to 16 mm wide, pale brown-membranous and veiny; **petals** 5–6(–7) in 1 whorl, spreading,  $\pm$  obovate, 45–90  $\times$  50–70 mm, length  $\geq$  width, white, crinkled (crapelike from being irregularly folded in bud), thickened at base, with fine veins radiating from base; **stamens** > 600, free (inner stamens occasionally fused with neighboring filament in pairs), helically alternate, forming a bright yellow mound in flower center on a steeply domed receptacle; filaments 5–14 mm long, the shortest on the outside and the longest next to pistil, deep purple (brown-purple) below midpoint and light yellow above midpoint, abruptly tapered and threadlike beneath anthers; anthers basifixed, dithecal, 3.5–4.3 mm long, bright yellow, longitudinally dehiscent; pollen bright yellow; **pistil** 1, 8–18 mm long; ovary superior, narrowly ovoid and densely covered with appressed-ascending stiff bristles, typically 12–14  $\times$  ca. 6 mm (with bristles, appearing 9–9.5 mm wide), the bristles 1–4 mm long, translucent aging light tan, 1-chambered packed with ovules attached in 10–12 longitudinal ridges (= projecting placentae), with a central post; style absent; stigmas as many as placentae, forming a turbinlike dome, 4  $\times$  7 mm, whitish in bud aging brown,

stigmas = papillate grooves on fingerlike crests arched toward center (center hollow), persistent. **Fruit:** capsule, initially ovoid opening bell-shaped from top with 10–12 toothlike valves, 23–45 × 8–22 mm, the valves covered with stiff, golden bristles and the surface glaucous beneath bristles, eventually valves separating from framework of 10–12 fibrous strands of placenta (replum) arched above chamber and typically fused at tip by persistent style and stigmas, framework appearing narrower and obovoid. **Seed:** somewhat D-shaped to ovoid, 1.3–1.75 mm long, dark brown (light brown), with domed to short-papillate cells and sometimes with several pitlike dimples; hilum typically on a lighter colored ridge along half of the thin edge of seed. Mid-April–early June.

Native. Perennial herb, a native California species but planted as a large-flowered landscape plant and persisting as a clone, spreading by belowground rootstocks (rhizomes). *Romneya coulteri* forms new woody shoots during the rainy season, in late spring each bearing large, showy white flowers. Flowers in some clones may be two hundred millimeter in diameter, whereas in other clones they are about the same size as in *Argemone munita*. Capsules of matilija poppy are easily recognized because they are covered with irritating, golden bristles, and the fruit dehisces from the top by toothlike valves; eventually the valves fall off revealing a birdcagelike design of the inner fruit (replum).

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