

***Rubus armeniacus*** Focke, HIMALAYAN BLACKBERRY. Trailing shrub, winter-deciduous, clonal, thicket-forming, sharply spinescent, much-branched, with long arching stems, 150+ cm tall, principal shoots to 300 cm long; shoots armed with sharp-tipped prickles along all axes and lower side of midribs, silky-hairy; sometimes forming adventitious roots where contacting wet soil. **Stems:** biennial stems from a perennial base, first-year stems (primocanes) normally unbranched and without flowers, conspicuously 5-ridged, stiff and thick, green or rose-red, with 3 ridges descending from each leaf, second-year stems (floricanes) = short lateral branches on primocane and having terminal inflorescences, with few and smaller leaves; prickles  $\pm$  straight, spreading or pointing somewhat backward, 3–10 mm long, compressed side-to-side, with expanded elliptic bases oriented along long axis of plant organ, sparsely pilose with scattered single or clustered soft hairs. **Leaves:** helically alternate, primocane leaves palmately 3-foliolate and mostly 5-foliolate, if (2)3-foliolate then lateral leaflets sometimes unequally 2-lobed, petiolate, with stipules; stipules 2, fused to petiole near base, linear to narrowly lanceolate, < 15 mm long, green or reddish, silky-hairy; petiole 30–115 mm long, with prickles straight and backward-pointing, < prickles of stem, villous or pilose; petiolules 1.5–50 mm long, the longest for terminal leaflet, the shortest for leaflets of 3-foliolate leaves, with backward-pointing prickles to 5 mm long, < prickles of petiole; blades of leaflet round-obovate to broadly ovate, 45–140  $\times$  25–110 mm, terminal > lateral leaflets, 3 central leaflets wider above midpoint, subcordate to rounded and symmetric to somewhat asymmetric at base, serrate on margins, acuminate to acute at tip, pinnately veined with principal veins sunken on upper surface and raised on lower surface, midrib with clawlike, backward-pointing prickles to 3 mm long, upper surface dull dark green, having stalked glandular hairs along vein and widely scattered silky hairs, becoming glabrescent, lower surface suedelike, light grayish green, tomentose with matted hairs and longer, spreading, unbranched or branched silky hairs; bracteoles absent. **Inflorescence:** panicle of cymes, terminal, many-flowered, bracteate, spinescent, soft-hairy throughout; bract subtending lower branchlet leafletlike, unlobed to 3-lobed, petiolate and with stipules, reduced upward, upper surface pilose and often retaining some glandular hairs, lower surface densely villous or pilose as on leaflets; branchlet axes and peduncle armed with straight prickles to 6 mm long; bractlet subtending pedicel narrowly elliptic to oblanceolate or lanceolate, to 16 mm long, acute to 3-toothed, often with 1 or 2 bractlets along pedicel (= bractlets of future flowers); pedicel at anthesis < 10 mm increasing 2 $\times$  in fruit, tomentose, with spreading prickles as on stem. **Flower:** bisexual, radial, 18–32 mm across; hypanthium dish-shaped, spreading ca. 1.5 mm, thick, densely white-tomentose; receptacle domes (torus); **sepals** 5, at anthesis strongly reflexed and cupped inward, broadly ovate, 5–7 mm long, entire, with a point 1–2 mm long at tip, exposed upper surface densely white-tomentose, prickles absent; **petals** 5, corolla dish-shaped, petals round-obovate, 7–16 mm long, white to light pink, abruptly narrowed at base, entire, rounded at tip; **stamens** > 125 in numerous series, free, arising on hypanthium rim; filaments erect to ascending and straight, unequal, of a single flower 5–10.5 mm long, white; anthers dorsifixed, dithecal,  $\pm$  1 mm, pinkish aging red, longitudinally dehiscent; pollen colorless; **pistils** to 70, free, arranged helically but sometime appearing in horizontal rings on surface of torus, ca. 3 mm long; ovaries superior, spheric, green, with silky hairs near tip, 1-chambered with 1 ovule; style arched outward, cylindrical and the narrowest at base, greenish white, glabrous; stigma expanded with bumps on surface.

**Fruits:** aggregate fruit of 12–25 fleshy drupelets from 1 flower, in a hemispheric, oblong, or conelike cluster having walls fused at base via a fleshy receptacle, aggregate 8–13 mm diameter; drupelets helically arranged, subspheroid to obovoid mutually compressed below midpoint, 4–5 × 2.5–4 mm, at maturity black, glabrous or with several inconspicuous hairs in pit by style; style ± persistent; pulp (mesocarp) juicy, sweet, dark red; stone (endocarp, putamen) D-shaped, ca. 2.5 × 1.5 × 1.2 mm, tan but often stained darker from pulp, extremely hard, conspicuously netlike, ridged around edge. Early June–mid-July.

Naturalized. Trailing, thicket-forming shrub first reported in 2004 established along the creek bank in Zuma Canyon, where it co-occurs with *Rubus ursinus*, but now known from Rustic Canyon and SMMNRA Rocky Oaks. *Rubus armeniacus*, formerly treated as *R. discolor*, has arching, spinescent branches (primocanes) that initially form five-foliolate, palmately compound leaves, and in the second year (floricanes) the new leaves have fewer leaflets and are produced on flowering branchlets with many sharp prickles. Flowers of this species are bisexual, whereas the other species in range has functionally unisexual flowers. The aggregate fruit, arising from many pistils of a single flower, consists of fleshy, blackish, subspheroidal drupelets fused to a fleshy receptacle, and in each occurs a stone (also termed a putamen), covered having a hard endocarp that resembles a miniature peach pit.

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