Vitis girdiana Munson, DESERT WILD GRAPE. Woody climber (liana), winter-deciduous, with tendrils, trailing and attaching to surrounding plants or itself; androdioecious; shoots with only cauline leaves, densely white-woolly on developing leaves with long straight or crooked hairs; tendril opposite leaf base, on vegetative shoots at 2 successive nodes and absent from third node, stemlike but sometimes becoming an inflorescence by forming flower buds on new forks, to 150 mm long, 1–several-forked, the first fork 50–80 mm from base, terminal axes unequal, striped but mostly purplish red, bract at first fork appressed and scalelike with prominent midvein and membranous margins, 1.5–2.8 mm long, reddish, aging scarious. **Stems:** ridged aging ± cylindric, with ridges descending from each leaf, tough, often faintly striped and aging purplish red, internodes 30–150 mm long, nodal ledges beneath stipules blunt, cobwobby but sections shedding cobwebby hairs and becoming essentially glabrescent; old stems woody, with peeling bark. **Leaves:** helically alternate, unlobed to shallowly palmately 3-lobed (heteromorphic), long-petiolate, with stipules; stipules 2, attached to stem and petiole base, triangular to broadly deltate, 2–4 mm long, orangish scarious, woolly, deciduous; petiole ± cylindric, 6–90 mm long, < blade, aging purplish, densely cobwebby woolly sometimes aging sparsely woolly; blade broadly ovate or broadly heart-shaped to roundish, 25–250 × 30–280 mm, symmetric, where lobes present sinuses shallow and < 1/3 distance to base, cordate to lobelike (auriculate) at base, coarsely dentate to serrate-dentate on margins, terminal tooth of lobes generally obtuse, palmately 5-veined with principal veins somewhat raised on lower surface, veins yellowish white, upper surface initially woolly but aging less so, lower surface lighter green, soft-hairy. **Inflorescence:** panicle with cymelike branchlets, = a modified tendril opposite leaf at node, many-flowered, with either staminate or bisexual flowers, each cyme several-flowered; peduncle 15–60+ mm long, cobwebby; with 0–several principal lateral branches and irregularly spaced secondary branches, sometimes having third-order branchlets; bract generally subtending each lateral branch; bract subtending cyme branchlet appressed, awl-shaped, 1.5–2.5 mm long, cyme branchlet relatively short and much thicker than lower axes, cobwebby, with several–20 flowers, the flowers in several-flowered cymes on papillate, raised bases; bractlet subtending pedicel absent; pedicel cylindric but expanded approaching flower, 2–4 mm long, light green, glabrous. **Staminate flower:** radial, 3–4 mm across; **calyx** unlobed to weakly 5–7-angled, forming a narrow, thin rim 0.15–0.3 mm long, initially appressed to corolla, green aging reddish; **corolla** of 5–7 petals forming cap abscising as a unit (calyptra), calyptra initially bell-shaped to hemispheroid becoming ± star-shaped and inverted rotate, with petals splitting from base upward but remaining fused for 1 mm, green but often rosy red at depressed tip, glabrous, grooved where petal margins meet, each petal elliptic, 2–2.3 × 0.7–1.1 mm, truncate at base where abscised, callus = a ± fleshy green ring next to calyx aging red; **stamens** 5–7, free, opposite petals; filaments ascending curving inward, (2–)3–4 mm long, whitish, tapered approaching anther; anthers dorsifixed, dithecal, 0.8–1.2 mm long, pale yellow aging reddish on outer side, initially with a thick connective, longitudinally dehiscent; pollen pale yellow; **nectary disc** cupped around base of ovary, swollen with weak lobes alternate with stamens, 0.4–0.5 mm tall, green aging greenish yellow, producing nectar at base; **pistil** 1, aborted, = central dome, ca. 0.5 × 0.6 mm, green, glabrous, 2-chambered, each chamber appearing to have 2 viable ovules; style and stigma absent. **Bisexual flower:** radial, 3 mm across; **calyx** unlobed to weakly 5–7-

angled, forming a narrow, thin rim 0.15–0.3 mm long, initially appressed to corolla, green aging reddish; **corolla** of 5–7 petals forming cap abscising as a unit (calyptra), calyptra initially bell-shaped to hemispheroid becoming ± star-shaped and inverted rotate, with petals splitting from base upward but remaining fused for 1 mm, green but often rosy red at depressed tip, glabrous, grooved where petal margins meet, each petal elliptic, 2–2.3 × 0.7–1.1 mm, truncate at base where abscised, callus = a ± fleshy green ring next to calyx aging red; **stamens** 5–7, free, opposite petals; filaments spreading aging horizontal to deflexed, 0.7–1 mm long, whitish, tapered approaching anther; anthers dorsifixed, dithecal, 0.8–1 mm long, pale yellow aging reddish on outside, initially with thick connective, longitudinally dehiscent (in bud); pollen pale yellow; **nectary disc** cupped around base of ovary, swollen with weak lobes alternate with stamens, 0.4–0.5 mm tall, green aging greenish yellow, producing nectar at base; **pistil** 1, 1.3–1.4 mm long; ovary superior, ovoid and inconspicuously 5–7-lobed, 0.8–0.9 mm long, green, glabrous, 2-chambered, each chamber with 2 ovules; style short; stigma terminal, 2-lobed, pale green, papillate on margins. **Fruit:** berry, 1–4-seeded, spheric, in range 3.5–7 mm, blackish purple, not glaucous to slightly glaucous; skin separating from pulp; pulp purple. **Seed:** obovoid, (3–)4.5–5 mm long, brown, 1 side ± flat, rounded side with sunken scar and grooved suture line above scar. Early May–early June.

Native. Woody climber known from several shady canyon bottoms in SMM. *Vitis girdiana* has the typical vegetative appearance of other grape species, but its new growth is thickly covered with so much wool that stems and emerging leaves are cottony white. That pubescence becomes more cobwebby, and is mostly shed as the season progresses, although presumably the desert wild grape presumably has less hair loss than its cousin, *V. californica* of northern California. Plants used for this description were either staminate or had bisexual flowers, hence this species is androdioecious, given that pollen of the fruit-producing plants tested as being viable, and those anthers dehisced in bud.
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