

Passiflora caerulea L., BLUE PASSION VINE. Perennial climber, herbaceous or having woody lower stems, with tendrils, several–many-stemmed at base, trailing, growing over shrubs and climbing trees to 20 m above ground; shoots with long internodes and widely spaced leaves, glabrous, ± glaucous when young; tendril (stem tendril) 1 per node, axillary and neighboring pedicel below a vegetative bud (= accessory bud, a future branch), cylindric and unbranched, 125–200 mm long (straightened), typically forming 10–20 tight coils around support. **Stems:** conspicuously 5-ridged and 5-sided + minor ridges, with 3 principal ridges descending from each leaf (petiole + 2 stipules), ridges reddish purple, tough, with internodes typically 50–100 mm long; woody lower stems to 15 mm diameter, bark tight, moderate red with greenish longitudinal streaks (= long, slender lenticels). **Leaves:** helically alternate, deeply palmately lobed with 5 principal lobes and the outer pair often having an out-facing sublobe, petiolate, with stipules; stipules 2, attached to node, conspicuously leafy and persistent, asymmetric and ear-shaped clasping below attachment, 18–35 mm long, to 10 mm wide, green, somewhat wavy and with several coarse teeth on outer margin, with slender, linear tip to 7.5 mm long, glaucous; petiole cylindric, 12–28 mm long, with 2–4 stalked extrafloral nectaries, often with ± opposite pair of nectaries at or below midpoint, the extrafloral nectaries top-shaped, 0.5–1.3 mm long, tip concave with a nectar droplet; blade roundish in outline, 60–130 × 60–170 mm, length ≤ width, sinuses acute, > 4/5 the distance from lobe tip to base of blade, lobes elliptic to lanceolate, somewhat folded upward along midrib, central lobe to 22 mm wide and longer and wider than lateral lobes, sublobe of outer lobe to 30 mm long, cordate to subtruncate at base, entire or subentire to remotely toothed on lobe margins, sometimes central lobe with 1 sublobe or an obvious tooth, broadly acute with short point at tip, palmately veined with 5 principal veins at base and lobes pinnately veined, principal veins raised on lower surface, often with purplish margins and minor veins, upper surface often aging dark green and somewhat glossy, lower surface much lighter green and glaucous. **Inflorescence:** flowers solitary, axillary and arising beside tendril, bracteate, glabrous; peduncle at anthesis 30–65 mm long, with 2–3 bracts at top alternate in 1 series, bracts overlapping, broadly ovate, 22–30 mm long, green with white midrib, somewhat clasping, entire, rounded at tip or with short point, conspicuously veined, aging papery and persistent in fruit; pedicel forming between bracts and hypanthium, 4–8 mm long, glaucous. **Flower:** bisexual, radial, 60–65 mm across; hypanthium deep bowl-shaped, at anthesis ± 10 mm diameter, truncate at base aging indented around pedicel, thick-walled, internally with a white, thick, recurved lip protruding as nectar chamber; **nectar chamber** ringlike but in x-section kidney-shaped, filled with nectary, defined above by flaring rim on the inside (limen) arising from the staminal column and a loosely attached, comblike barrier on the outer side arising from hypanthium (operculum), flaring rim ca. 1.5 mm long, cobblestonelike at top and often pinkish, the comblike barrier ca. 4 mm long with cobblestonelike surface touching the flaring rim, with many deep purple-red, comblike teeth leaning inward and 3.5–4 mm long, flattened side-to-side; hypanthium extending 2–2.5 mm beyond the comblike barrier; **calyx** 5-lobed, arising from hypanthium rim, fused at base < 1 mm, green on outer (lower) surface and whitish on inner (upper) surface; lobes widespreading, overlapping, ovate and hooded and also with a narrow, subterminal tip, ± 35 mm long, somewhat fleshy at base, keeled approaching hood on lower surface becoming strongly folded into a tail-like tip (caudate) 6.5–8.5 mm long; **corolla** arising on

hypanthium surface, of 5 petals and 2 rings of many filaments (outer and inner corona); petals widely spreading, oblong, 25–30 × 9.5–11.5 mm, whitish with 3 green veins from base blushed pale violet near margins, rounded at tip; outer corona filaments many, widespread above petals, cylindrical, 13–17.5 mm long, banded white then red-purple then white at base but blue-violet for most of length to tip, wavy especially above midpoint; inner corona filaments many in several series, erect, cylindrical, 1–3.5 mm long, white at base changing to deep purple to tip, ± straight; **stamens** 5, arising on central column fused to stalk beneath pistil (androgynophore) and forming inner wall of nectar chamber, green, fused portion ± 11 mm long; filaments nodding, strap-shaped, ca. 8 × 2 mm; anthers exerted, versatile, dithecal, 11–13 mm long, yellow-orange, longitudinally dehiscent; pollen bright yellow-orange; **pistil** 1, stalked; at anthesis stalk above staminal column short, pale green, glaucous; ovary superior, ellipsoid, 6–7 × 3–3.5 mm, pale green, glabrous, glaucous, 1-chambered with many ovules attached to 3 long placentae on wall; style base < 0.5 mm long, base pale green and glaucous like ovary, conspicuously 3-forked, the branches ascending and not straight, narrowly club-shaped, 10–11 mm long, deep maroon, hemi-cylindric becoming flattened on inner side, somewhat fleshy and aging wrinkled; stigmas terminal, hemispheric, 2 mm diameter, maroon but paler than style, minutely papillate. **Fruit:** berry, pendent on stalk (androgynophore), many-seeded, ovoid to oblong or broadly ellipsoid, 40–63 × 33–45 mm, orange, glabrous, wall somewhat fleshy with extensive whitish placental and funicular tissue, pulp absent, juicy tissue = arils of seeds; androgynophore to 23 mm long. **Seed:** completely enclosed by juicy aril attached at base of seed; aril ellipsoid to narrowly obovoid, 7–8 × 3–4.5 mm, bright red, covered with colorless skin, watery and sweet; seed obovoid compressed side-to-side, 4.3–4.7 × 3–3.3 × ± 1.6 mm, glossy dark brown to blackish with dark pink-amber at least on 1 margin, faces shallowly pitted-netlike. Early May–mid-July.

Naturalized. A trailing and climbing perennial occurring at several wooded locations in Griffith Park, especially at Cedar Grove, where well-established plants have conspicuous woody stems and have climbed tall trees. *Passiflora caerulea* has strongly coiled, unbranched tendrils (here a type of modified stem), which wrap around small branches and cylindrical axes of supporting plants, while also forming bridges with its own axes. Flowers of passionflowers are famous for being very elaborate and complex, by having radiating filaments of the corolla (corona), nodding, versatile anthers, and three radiating style branches; the design and colors have been used to symbolize Christ's Passion. In Griffith Park fruits are regularly produced.

B. A. Prigge & A. C. Gibson