

Fritillaria biflora Lindl. var. *biflora*, CHOCOLATE LILY, MISSION BELLS. Perennial herb, geophytic, bulb-bearing, fibrous-rooted, rosetted, 1-stemmed at base, typically unbranched, ascending to erect, to 100 cm tall; shoots with < 9 basal leaves + several cauline leaves, glabrous, somewhat glaucous; bulb deep-seated to 25 cm, ± spheroid, to 25 mm diameter, having to 10 fleshy, 3-dimensional scales concealing smaller, nonfleshy membranous scales, fleshy scales 9 × 6 × 3.5 to 20 × 15 × 10 mm, narrowly attached to base of central bulb, the largest scales in center, older fleshy scales shriveled but persistent at bulb base; adventitious roots arising from base of bulb. **Stems:** cylindric, 3–7 mm diameter, green (aboveground) and white (belowground), smooth, glabrous; solid. **Leaves:** mostly alternate but sometimes opposite to whorled where forming a basal rosette, simple, sessile (broadly attached to stem), without stipules; blade elliptic to narrowly obovate (basal leaves) to narrowly ovate or lanceolate (cauline leaves), in range 65–140+ × 15–45 mm, satiny, entire or sometimes wavy on margins, acute at tip, parallel-veined with midrib somewhat raised on lower surface. **Inflorescence:** leafy raceme, terminal, with 2–10+ nodding flowers, bracteate; bractlet subtending pedicel leaflike, lanceolate to narrowly lanceolate, typically 25–65 × 7–25 mm, acute to acuminate at tip; pedicel at anthesis 3–30 mm long increasing in fruit, strongly hooked beneath flower becoming erect in fruit. **Flower:** bisexual, radial, 30–45 mm across, without fragrance; **tepals** 6 in 2 whorls, corolla bell-shaped aging wider; tepals narrowly ovate to lanceolate (outer tepals) to elliptic or oblanceolate (inner tepals), (18–)23–35(–40) × 7–12 mm (slightly narrower in outer whorl), appearing brown but outer (lower) surface dark wine red, commonly with a greenish central area sometimes extending toward the tip along middle veins, inner (upper) surface dark wine red along veins, below midpoint yellowish green and above midpoint dark wine red between veins, glossy but outer surface below midpoint somewhat glaucous, acute to acuminate and flaring at tip, aging recurved, parallel-veined with 15–20 veins conspicuously raised on inner surface base to tip, midvein expanded from base forking at midpoint into 2 narrow midveins; **nectary** on lower inner surface; **stamens** 6 in 2 whorls, free, outer whorl opposite outer tepals, inner whorl opposite inner tepals, unequal with outer whorl 1–1.5 mm < inner whorl; filaments 7.5–8.5 mm long (outer whorl) and 8.5–9.7 mm (inner whorl), purplish red basally to greenish at tips, nearly touching at broad bases, tapering to fine tips; anthers versatile, dithecal, elliptic to oblong, 3–7 × 1.5–2.5 mm, yellow with light green axis, longitudinally dehiscent; pollen yellow to pale yellow; **pistil** 1; ovary superior, weakly 3-lobed, 4–8 × 2–2.5 mm, green, 3-chambered, each chamber with many ovules attached to center; style stout, 11–13 mm long, green sometimes with short, purplish streaks, triangular to weakly 3-lobed at base and 3-branched above, the branches hooked and positioned below anthers (i.e., in a nodding flower), 7–8 mm long, hollow, stigmatic at tip; stigmas oblique, ± 1 mm long, short-grooved on outward-facing edge with margins tightly appressed, papillate on tip and sometimes on lateral margins. **Fruit:** capsule, loculicidal, many-seeded, ± bell-shaped in outline and 6-lobed (2 lobes per chamber), ca. 30 mm long, length ≤ width, with lobes flaring at base and rounded at tip, purplish red at tips and in grooves, becoming light green or whitish at base, aging papery brown, each chamber with 2 vertical rows of seeds. **Seed:** flat D-shaped to ear-shaped, 10–11 × 6.8–8, light brown, winged, the wing ca. 1 mm wide, 1-layered on straight edge, 2-layered and becoming inflated when wetted on rounded edge; seed coat finely textured. Late January–mid-April.

Native. A spectacular geophytic perennial occurring in open, grassy fields on rocky clay soils in SMM and SH. *Fritillaria biflora* appears during early springtime only in years with plentiful winter rains providing enough soil moisture to trigger growth from the bulb, which typically is sandwiched tightly between rocks about twenty-five centimeters belowground. This species does not clone, so that there is only one shoot from each bulb; the fleshy leaves do not appear to become bulblets. The nodding flower requires the pollinator to enter from below, and the stigmas are placed to receive pollen falling from the anthers.

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