

*Toxicoscordion fremontii* (Torrey) Rydb., STAR-LILY, FREMONT'S DEATH CAMAS.

Perennial herb, geophytic, bulb-bearing, fibrous-rooted, 1-stemmed at base, rosetted,  $\pm$  erect, 12–90 cm tall; shoots with 1–5 basal leaves and several cauline leaves below inflorescence, glabrous; bulb solitary, ovoid to pear-shaped, to 35 mm diameter, with black outer layers; roots adventitious and contractile. **Stems:** 3-sided with rounded edges, to 7 mm diameter, light green, slightly glaucous. **Leaves:** helically alternate, simple, sessile and basal leaves sheathing stem; blade of basal leaves arching, linear strap-shaped, 350–400(–500)  $\times$  11–16 mm, folded upward from midline, minutely toothed and not wavy on margins, parallel-veined without raised veins; blade of cauline leaves similar to basal leaves but narrowly lanceolate, 130–160  $\times$  8–13 mm. **Inflorescence:** panicle with terminal raceme + 1–7 lateral racemes, each raceme several–20-flowered, bracteate, glabrous; bract subtending lateral raceme partially sheathing, leaflike at base of inflorescence decreasing to 20  $\times$  3 mm at top of inflorescence; bractlet subtending and partially sheathing pedicel, short-lived and membranous becoming scarious, long-tapered, to 15 mm long; pedicel ascending to spreading, at anthesis 6–10 mm long increasing to 30 mm in fruit. **Flower:** bisexual, radial, 16–32 mm across, rotate; **tepals** 6 in 2 whorls, ovate, 8–10(–15)  $\times$  5–6 mm and ca. 9-veined (outer tepals) and lanceolate, 10–11(–15)  $\times$  3–4 mm and ca. 7-veined with narrowed base but not distinctly clawed (inner tepals), white but greenish to midpoint, parallel-veined and veins conspicuously raised on upper surface with a swollen, glistening **nectary** gland at the base of each vein, only central vein continuous to tip; **stamens** 6,  $\pm$  free, attached to basal edge of each tepal, with bases as wide as tepal base and touching but not obviously fused; filaments erect against the ovary and then arched outward near the top of the ovary or remaining erect,  $\pm$  4.5 mm long, off-white to pale green, tapered; anthers  $\pm$  versatile or dorsifixed, dithecal, heart-shaped to kidney-shaped,  $\pm$  2  $\times$  1.5–1.8 mm, creamy yellow aging darker, longitudinally dehiscent with horizontal, outward-facing slit; pollen yellow; **pistil** 1, 3–6 mm long; ovary superior or shallowly inferior when basal 0.5 mm immersed in receptacle, conspicuously 3-lobed, light green, 3-chambered, each chamber with a stack of ovules attached to center; styles 3, opposite outer tepals, 1–3 mm long and tapered, at first erect then spreading and becoming recurved after most pollen shed; stigmas blunt, not papillate. **Fruit:** capsule, septicidal later loculicidal, many-seeded, oblong and strongly 3-lobed with elliptic segments, in range 15–28(–35) mm long, erect with curved tips on segments, straw-colored, with several–11 seeds per chamber in 1 stack, midvein conspicuous on each chamber; tepals (and filaments) persistent dry and  $\pm$  appressed. **Seed:** irregularly and sharply angled, flattened rhomboid, 3–5.2  $\times$  1.8–2.5 mm, dark brown to black, edges  $\pm$  winged, with oblique end walls, faces concave. Mid-February–early July.

Native. Geophytic perennial herb locally abundant in chaparral, especially in recently burned stands of chamise (*Adenostoma fasciculatum*), and which generally starts flowering at the same time as chamise. *Toxicoscordion fremontii* was formerly treated as a species of *Zigadenus*. This species may also be found growing with soap plant (*Chlorogalum pomeridianum*), another strap-leaved geophyte, which instead has conspicuously wavy leaf margins and begins to flower only during summer. The rotate, white and green flowers of *T. fremontii* are distinctive among the lily type flowers in the range, and they readily

produce many-seeded capsules in which the seeds rattle and spill out when shaken. Some authors treat this as the false-hellebore family (after *Veratrum*).

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