

Datura stramonium L., JIMSON WEED, TOLOACHE. Annual, taprooted, 1-stemmed at base, with ± equal forking beneath each flower, branches divergent and spreading, erect, 50–90(–150) cm tall; shoots sparsely puberulent and lacking glandular hairs, odorous when crushed but not offensively so. **Stems:** cylindrical, in range < 10 mm diameter, somewhat zigzagged; solid. **Leaves:** helically alternate, sublobed to coarsely toothed, petiolate, without stipules; petiole ± cylindrical with channel developed above midpoint, in range < 35 mm long (scaling with blade length), fleshy, puberulent in channel; blade ovate to broadly elliptic, in range 50–110 × 40–110 mm, conspicuously oblique at broadly tapered base, dentate-lobed on margins with lobes to 23 mm long, ± acute at tip, pinnately veined with principal veins slightly sunken on upper surface and conspicuously raised on lower surface, upper surface aging sparsely puberulent, lower surface especially with hairs along veins. **Inflorescence:** flowers solitary, arising in fork of ± equal stems, erect in bud, at anthesis, and after flower closes; bractlet subtending pedicel absent; pedicel erect, at anthesis ± 6 mm long increasing 2× and remaining erect in fruit, sparsely puberulent, aging woody. **Flower:** bisexual, radial, ± 40 mm across the flaring corolla, with nocturnal anthesis, sweetly fragrant; **calyx** 4–5-lobed, 35–45 mm long, to 12 mm wide just above base narrowing gradually to orifice (ca. 8 mm wide), green, 15-veined, glabrous to sparsely puberulent; tube conspicuously 5-sided, with 5 conspicuous angles and 5 sides concave, minor veins of sides fine and appearing parallel, base sparsely puberulent, internally without glandular hairs, becoming papery when drying; soon after flowering calyx separating from thickened base, base ca. 4 mm long increasing 2× and reflexed around base of developing fruit; lobes subequal, erect to ascending, ± triangular, 3–5(–8) mm long, sinuses of slightly different depths, inconspicuously short-hairy on margins; **corolla** 5-lobed, trumpetlike (salverform), 60–80 mm long, green at base fading to pure white above calyx lobes, with principal veins light green at base fading eventually to white on lobes, in bud pleated and strongly twisted; tube 5-angled, tube + throat 50–65 mm long, tube ± 4 mm wide increasing to 7–8 mm at orifice of throat, with 5 ridges, at junction of tube and throat small-dimpled behind where filaments depart corolla; lobes ± broadly rounded with V-shaped sinuses 3–4 mm deep, each with tail-like tip (caudate) curving upward 3–5(–8) mm, lacking hairs; **stamens** 5, fused to base of corolla tube, alternate with corolla lobes, the fused portion riblike and grooved, ± 25 mm long, light green at base fading upward, irregularly transversely wrinkled and bearing scattered papillate hairs; filament free portions arising at base of corolla throat, slightly unequal, 21–24 mm long, white, glabrous; anthers included, basifixed, dithecal, oval, 1.8–2.2 mm long, yellowish ochre, with scattered fine hairs along aperture, longitudinally dehiscent; pollen creamy white; **nectary disc** surrounding base of ovary, irregularly lobed, whitish, minutely capitate-glandular; **pistil** 1; ovary superior, sometimes slightly immersed in receptacle at anthesis, conic, ca. 4 mm long, whitish, puberulent, covered with appressed, ascending, stiff, pale green, narrowly conic emergences, 2-chambered (appearing 4-chambered with 4 longitudinal placentae), each chamber with many ovules attached to center; style included and at a level several millimeters beneath anthers, ± 40 × 0.7–0.9 mm, white, slightly flared and flattened at tip; stigma crested over rounded tip (appearing obovoid) with wedgelike portions decurrent 4 mm on 2 sides, light green, sticky. **Fruit:** capsule, loculicidal, dehiscent by 4 regular valves, > 300-seeded, spinescent; fruit body erect, ovoid to ellipsoid-ovoid, 35–50 × 22–35 mm + prickles, brown, the prickles spreading and those

approaching tip ascending, woody and sharp-pointed, 1–6(–10) mm long, surface puberulent, with a persistent, reflexed, disclike calyx having raised veins. **Seed:** ear-shaped to ± D-shaped, 2.7–3.3 × 2–2.6 × 1.2–1.4 mm, black, minutely pitted (individual cells concave), with a netlike system of low ridges on the fatter portion; hilum on edge above midpoint, yellowish. (Mid-summer.)

Naturalized. Annual collected originally in the range near Las Virgenes Road and Highway 101 but also now known from the westernmost boundary. *Datura stramonium*, the original Jimson weed of Jamestown fame, is easy to distinguish at all phases from the perennial *D. wrightii*. This annual has one stem at the base and an erect stature. A flower of *D. stramonium* is much shorter, with a more slender tube and a limb more reminiscent of tobacco, and its fruit is erect and dehisces by four valves.

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