

*Leptosyne gigantea* Kell., GIANT COREOPSIS, SEA DAHLIA. Shrub, summer-dormant, typically 1-stemmed at base, thick-stemmed and resembling a miniature tree, branches along main axis ascending to spreading, typically erect, in range 35–130 cm tall; shoots with feathery cauline leaves, glabrate, when crushed having a mild turpentine aroma. **Stems:** cylindric, in  $\times$ -section oval, when young 6–8 mm wide, light green and finely striped at base of new growth, glabrous but initially with occasional hairs; containing colorless resin in resin ducts; branch stems 20–40 mm diameter, with projecting persistent leaf bases; main axis trunklike, (25–)40–80(–100) mm diameter, fleshy with soft wood, bark gray. **Leaves:** helically alternate, 2–4-pinnately dissected, somewhat 3-dimensional, petiolate, without stipules; petiole 30–70 mm long, flared and swollen at leaf base; blade rhombic to broadly ovate in outline, (40–)80–250  $\times$  35–120 mm, axes deeply channeled with appressed hairs in channel; primary lobes alternate, opposite, whorled, or pseudowhorled; ultimate segments in unequal pairs or 3, linear, 2–35(–60)  $\times$  1–1.5 mm, entire,  $\pm$  fleshy, in  $\times$ -section wide heart-shaped with prominent channel on upper surface, the channel often with hairs. **Inflorescence:** heads, in leafy, terminal cymelike arrays on new shoots, head radiate, 50–70 mm across, with (10–)13(–16) ray flowers and  $>$  120 disc flowers, bracteate, with honeylike fragrance; bract subtending each array leaflike, more highly reduced at successive branches; peduncle (45–)60–150(–200) mm long, glabrous; bracts along peduncle 0–5, oblong to linear, 12–37  $\times$  1.5–3 mm; bracts subtending involucre (5–)8–10(–13) (calyculus), ascending in bud later spreading,  $\pm$  oblong to linear, 5–25  $\times$  2–3.5(–4.5) mm, fleshy, green, upper surface with scattered hairs and 3 or 5 longitudinal channels; **involucre** deep bowl-shaped, 10–15 mm wide, phyllaries (10–)13, erect, rhombic or broadly elliptic to obovate, 10–15  $\times$  4.5–6 mm, greenish, membranous, acute, short-hairy, yellowish at tip; receptacle convex, with bractlets (paleae) subtending disc florets, palea erect, linear-oblong, 7–8(–10)  $\times$  1–1.5 mm, flat, entire, parallel-veined, yellow-membranous aging scarious. **Ray flower:** pistillate, bilateral, 6.5–8 mm across; **calyx (pappus)** absent; **corolla** 3-lobed, bright yellow; tube cylindric, 3–3.5 mm long; limb elliptic to oblong, 18–30  $\times$  6.5–8 mm, with 3 teeth and 11 or 13 parallel veins; **stamens** absent; **pistil** 1; ovary inferior, narrowly ovoid compressed front-to-back, 2 mm long, light green, winged, truncate at base, glabrous, 1-chambered with 1 ovule; style exserted, 7–8 mm long, pale yellow-green at base to green-yellow, **nectary** at base of style inconspicuous but producing some nectar, style 2-branched, the branches spreading, ca. 1.5 mm long, with hairy capitate tip. **Disc flower:** bisexual, radial, 3 mm across; **calyx (pappus)** absent; **corolla** 5-lobed, bright yellow; tube + throat funnel-shaped, 5.5–7 mm long, tube cylindric, base of throat just below midpoint and above conspicuous ringlike rim with glandular hairs; lobes spreading, deltate, 0.7–0.9 mm, papillate; **stamens** 5, fused to corolla at bottom of throat; filaments somewhat flattened, 1.5 mm long, yellowish; anthers fused into cylinder surrounding style, exserted, basifixed, dithecal,  $\pm$  2.5 mm long, golden yellow, acute at tip, longitudinally dehiscent; pollen golden yellow; **pistil** 1; ovary inferior, ovoid compressed front-to-back, 2 mm long, light green, winged, truncate at base, glabrous, 1-chambered with 1 ovule; style 2-branched, the branches exserted, initially erect and  $\pm$  appressed but later recurved, 1.5 mm long with hairy, capitate tip, golden yellow; **nectary** at base of style, cup-shaped, producing copious nectar half-filling corolla. **Fruits:** cypselae, monomorphic, compressed-ovoid, 5–6  $\times$  3–4 mm, with pale wings and a brown seed chamber, straight or curving to 1 side. Mid-November–early June (August).

Native. A distinctive shrub conspicuous in the coastal bluff phase of the coastal sage scrub community, having a fleshy, thick “trunk,” branches with dense tufts of finely dissected leaves, and, a gorgeous, springtime display of bright yellow flowers at the top of the canopy. *Leptosyne gigantea* is best known as *Coreopsis gigantea*. Colonies of *L. gigantea* are a prominent feature along the immediate coast from Malibu near Point Dume westward, but also occur inland along the western border to Camarillo and Conejo Mountain, at localities that receive abundant fog. Plants are leafless from mid-summer until growth resumes after fall or winter precipitation.

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