

Helianthus L. SUNFLOWER

Helianthus gracilentus A. Gray, SLENDER SUNFLOWER. Subshrub, evergreen, many-stemmed at base, with ascending annual branches, 60–190 cm tall; shoots conspicuously scabrous and glandular-hairy, the nonglandular hairs curved with persistent, hard, white bulbous bases, the glandular hairs sessile, with colorless to pale yellow spheric heads, strongly aromatic. **Stems:** low-ridged, with ridge descending from each leaf, light green becoming tan and eventually purplish red, commonly dotted reddish to dark reddish, sparsely scabrous; pith white. **Leaves:** opposite decussate and helically alternate (mixed or having either dominant), simple, short-petiolate to sessile, without stipules; petiole hemi-cylindric or channeled, to 28 mm long, flared at base and sometimes half-encircling stem; blade broadly lanceolate or acuminate-lanceolate to linear-lanceolate, 25–130 × 6–35 mm, tough, rounded or tapered at base, several-toothed or entire on margins, acute to acuminate at tip, pinnately veined typically with 3 principal veins at expanded base and raised on lower surface, exceedingly rough and with abundant glandular hairs.

Inflorescence: heads, terminal and solitary or in cymelike arrays of 2–5 heads, head radiate, 35–75 mm across, with 11–21 ray flowers and many disc flowers, bracteate, with nonglandular and glandular hairs; peduncle 20–160(–300) mm long, stemlike, tough, with short hairs, when head solitary long and along axis having opposite and then alternate or only alternate leaflike, lanceolate bracts, bracts gradually reduced upward, if cymelike array each peduncle subtended by a smaller leaflike bract having 1–several appressed bracts along its axis; **involucre** bell-shaped to cup-shaped or hemispheric, 5–8 × 10–20 mm, phyllaries 20–25 in 2 or 3 series, outer 5 phyllaries small and others larger and subequal, narrowly ovate to lanceolate, 3.2–7.5 × 1.4–3.5 mm, inner phyllaries < disc flowers, with thick, appressed bases, ciliate on margins with hairs < 0.3 mm long, tips ascending (outer phyllaries) or spreading (inner phyllaries), midvein ± raised, tan-puberulent and glandular-hairy; receptacle slightly concave, with bractlets (paleae), palea partially enclosing flower, linear to narrowly oblanceolate, 4–7(–9) mm long, rounded on back to strongly keeled, obtuse or acute to hooded or 3-toothed at tip, if 3-toothed with a large central tooth and smaller lateral teeth, below midpoint greenish veined and mostly colorless between veins but often purplish red above midpoint, the exposed tip golden yellow to yellowish green, puberulent on margins and glandular submarginally. **Ray flower:** neuter, bilateral, 4.5–12 mm across; **calyx (pappus)** typically of 3–5 scales, unequal, narrowly triangular to lanceolate or ovate, 1.1–2.4 mm long (typically 1 long and 2 short), pale green to whitish, keeled and minutely serrate along midvein and translucent and fringed to minutely serrate on margins; **corolla** minutely 2(–3)-toothed; tube cylindric, 0.8–1 mm long, yellowish green, pubescent; limb elliptic to oblong, (9–)14.2–16.5(–31) × (3–)4.3–5.6(–12) mm, vivid yellow with 7–11 light green to brownish parallel veins, upper surface glabrous, lower surface gland-dotted and puberulent but sometimes also with conic or weakly scabrous hairs along principal veins; **stamens** absent; **pistil** 1, sterile without style; ovary inferior, 3-angled, 2–2.5 × 0.7–1 mm, pale green, glabrous. **Disc flower:** bisexual, radial, ca. 2 mm across; **calyx (pappus)** of 2(–3) scales, unequal, narrowly triangular, 1.5–4.5 mm long, erect, translucent-white or white (never tinged purple), ± keeled, fringed along keel and on margins, especially the larger scale at base with a crestlike projection on keel; **corolla** 5-lobed, 4.2–6 mm long, with short nonglandular and

glandular hairs; tube 0.5–0.8 × 0.6–0.9 mm, light green to light yellow, with conic nonglandular hairs and sparse glandular hairs; throat ± 4 mm long, 0.7–1.2 mm wide at bulbous base, upper throat ± cylindrical and only slightly narrower than swelling, vivid yellow but above midpoint appearing dark orange to brownish (either color of anthers showing through corolla or corolla becoming tinged by anther pigment), puberulent and glandular at base, sparsely hairy above base; lobes convexly acute to deltate, 0.6–1 mm long, thickish, vivid to golden yellow, ascending later spreading, puberulent, with thickened submarginal veins joined at tip (evident on drying); **stamens** 5, fused to base of corolla throat; filaments flat, 1.5–2 mm long, golden yellow; anthers fused into cylinder surrounding style, exerted 1.5–2 mm, basifixed, dithecal, 2.5 mm long, purplish red to reddish brown, short round-lobed at base with appendage at tip, the appendages triangular, ca. 0.5 mm long, yellowish or purplish red, longitudinally dehiscent; pollen vivid yellow; **pistil** 1; ovary inferior, 4-sided oblong-trapezoid to obovoid, 2–2.5 mm long, whitish, sparsely hairy, 1-chambered with 1 ovule; **nectary** at base of style cuplike, 0.3 mm long, colorless; style 4–5.5 mm long, 2-branched, light greenish to yellowish green below fork, the branches exerted most of length, spreading, linear-lanceolate to linear-oblongate, 1–1.5 mm long, golden yellow, finely acute at tip, short-strigose on outer face, finely papillate on inner face. **Fruits:** cypselae, ± 4-sided triangular-obovoid, 2.7–3.8 × 1.3–1.5 mm, black, essentially glabrous with minute bumps (= hair bases); pappus scales typically 2, unequal, lanceolate, 1.5–4.5 mm long, scarious, keeled, loosely attached and easily abscised when disturbed thus lacking when fruit dislodged from receptacle and palea. January–December.

Native. Evergreen perennial relatively common on dry hillsides in and about chaparral, at intermediate to high elevations, especially on recently burned areas but also growing on roadcuts, where plants receive extra runoff. *Helianthus gracilentus* tends to have smaller heads than the annual species but is equally showy, and the two may grow in the same habitat. Although flowering has been recorded from every month of the year, slender sunflower tends to flower mostly from early spring until late summer.

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