

Senecio L. GROUNDSEL, RAGWORT

Senecio aphanactis Greene, CALIFORNIA RAGWORT, CALIFORNIA GROUNDSEL. Annual, slender, taprooted, not rosetted, 1-stemmed at base, often unbranched or with ascending lateral shoots, erect, 3–15+ cm tall; shoots with only cauline leaves, initially sparsely cobwebby-tomentose with loose, colorless, weak hairs, the hairs fine and not dense at leaf bases or in axils, aging sparsely hairy to glabrate. **Stems:** ridged, to 1.5 mm diameter, with 3 ridges descending from each leaf, often purple on lower stem, aging glabrescent. **Leaves:** helically alternate (above cotyledons the first 2 leaves opposite and pair connected across node), unlobed or pinnately lobed, indistinctly petiolate (lower cauline leaves) and sessile and sometimes with tiny basal lobes (most cauline leaves), without stipules; petiole weakly defined, to 5 mm long, \pm flattened on upper side, grading to blade; blade oblanceolate or oblong to narrowly elliptic, (4–)7–30 \times 1.5–8 mm, somewhat fleshy, long-tapered at base (lower leaves) to minutely toothed at base (upper leaves), dentate-serrate or lobed on margins with lobes \pm paired and sinuses midway to midrib (the lowest pair sometimes entire to remotely toothed), sometimes partially inrolled under, pinnately veined with midrib conspicuously sunken on upper surface, glabrescent often with inconspicuous hairs along midrib. **Inflorescence:** heads, in terminal, ascending, loose, cymelike arrays of 4–10 erect heads, head radiate, in range with (3–)5(–6) inconspicuous ray flowers and 8–14 disc flowers, bracteate, loosely sparse-tomentose; bract subtending array leaflike, reduced upward to lanceolate or narrowly triangular and \pm short-dentate; axes and peduncle green, finely ridged; peduncle 4–20 mm long; bracts along peduncle and subtending head typically 3–4, 1 or 2 on the axis and others subtending involucre (calyculus), appressed, narrowly lanceolate to awl-shaped, 1.5–2.5 mm long, lacking dark tips; **involucre** cylindric aging narrowly ovoid, 5–7 \times 2–2.5 mm, phyllaries typically 8(13), linear-lanceolate, each with 2–4 dark green (red) stripes and membranous margins, greenish and membranous at tip with short hairs, the tips arching over and concealing flowers in bud; receptacle flat, lacking bractlets (paleae) or shallow pits, hollow beneath receptacle. **Ray flower:** pistillate, bilateral, to 0.7 mm across; **calyx (pappus)** of numerous capillary bristles, 2.5–3 mm long, thin, silky white, pappus $<$ phyllaries, with minute, ascending barbs (visible at 30 \times); **corolla** minutely 3-lobed to truncate, 3–3.5 mm long; tube cylindric, 0.3 mm diameter, colorless, with several hairs near top; limb often recurved, oval, 1 \times 0.3–0.7 mm, bright yellow, 3-veined; **stamens** absent; **pistil** 1; ovary inferior, \pm cylindric, ca. 1 mm long, densely short-hairy, 1-chambered with 1 ovule; style exerted, \pm 3 mm long, yellow, 2-branched, the branches spreading. **Disc flower:** bisexual, radial, 0.4 mm across, extending slightly beyond phyllaries; **calyx (pappus)** of numerous capillary bristles, 2.5–3 mm long, thin, silky white, with minute ascending barbs (visible at 30 \times); **corolla** 4-lobed, 3 mm long, glabrous; tube narrowly cylindric, ca. 2 \times 0.3 mm, colorless; throat cylindric and barely wider than tube, 0.7–0.8 mm long, yellowish; lobes erect, acute, typically 0.25 mm long, yellow; **stamens** 4, fused to base of corolla throat; filaments ca. 1 mm long; anthers fused into cylinder surrounding style, with tips scarcely exerted, basifixed, dithecal, \pm 1 mm long, yellow, longitudinally dehiscent; pollen yellow; **pistil** 1; ovary inferior, often 4-angled, 1–1.4 mm long, densely short-hairy; style short-exserted, yellow, 2-branched, the branches flattened top to bottom, long-papillate on truncate tips, 1-chambered with 1 ovule; **nectary** absent. **Fruits:** cypselae,

monomorphic, straight-cylindric or angled, $2.3\text{--}2.8 \times 0.3\text{--}0.4$ mm, densely gray-hairy; intact pappus mass spheric, colored like dandelion (*Taraxacum*), pappus 2.5–3 mm long. Mid-February–mid-March.

Native. A slender annual rarely observed in open habitats of coastal sage scrub, e.g., at Wildwood Regional Park occurring with other short native annuals (*Gilia*, *Lasthenia*, *Pectocarya*) and perennial herbs (*Lomatium dasycarpum*). *Senecio aphanactis* overall resembles the naturalized *S. vulgaris*, especially depauperate specimens of that growing on thin soil and thus having miniature, erect heads, but leaves of the native are smaller and less hairy, and, most importantly, ray flowers are present. The head of *S. aphanactis* lacks the black-tipped bractlets and phyllaries, and in *S. aphanactis* the disc flowers have four, not five, lobes. In range, *S. aphanactis* is sometimes attacked by dodder (*Cuscuta*).

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