Chrysopsis pilosa Nutt. SOFT GOLDENASTER [Asteraceae]

Annual, taprooted, erect to suberect, unbranched or with ascending branches in canopy each with terminal inflorescence, erect, in range 15–30 cm tall; gynomonoecious; shoots with basal leaves and cauline leaves, pilose and short-pilose with hairs somewhat stiff and to 3 mm long. **Stems:** cylindric, to 2 mm diameter, tough. **Leaves:** helically alternate, simple and sessile, without stipules; blade oblanceolate to oblong or elliptic, 15–30 × 3.5–7 mm, tapered to long-tapered at base, in range entire, acute at tip, pinnately veined and 1 veined at base with midrib raised on lower surface, the longest hairs on margins. **Inflorescence:** solitary head, terminal on long peduncle, head radiate, ca. 25 mm across, in range of 11–17 pistillate ray flowers and 25–40 bissexual disc flowers, bracteate, short-pilose and pilose and with long-stalked glandular hairs, lacking resin glands; peduncle to 70 mm long, with greater number of stalked glandular hairs approaching involucre and sometimes having a bract subtending involucre narrowly lanceolate, 4.5 × 0. mm; **involucre** bell-shaped, ca. 6 mm across, of ca. 15 phyllaries in 3(−4) series, lanceolate, 4.5–7 × 0.8–1 mm, green with colorless margins, pilose and with long-stalked glandular hairs having greenish heads; receptacle somewhat convex, lacking bractlets (paleae) but each ovary surrounded by colorless, pillowy projections ca. 0.5 mm long. **Ray flower:** bilateral, 2.5–3 mm across; **calyx (pappus)** dimorphic, of ca. 15 scarious scales in 2 outer series and of ca. 20 inner bristles in 1 inner series, scales oblanceolate and flat, ca. 0.7 mm long, bristles stiff, in range 4–5 mm long, tawny; **corolla** unlobed; tube cylindric, ca. 3.5 × 0.3 mm, white; limb mostly 8.5–10 × 2.5–3 mm, bright yellow, lower surface of limb and adjacent tube with nonglandular and glandular short hairs; **stamens** absent; **pistil** 1; ovary inferior, obovoid compressed front-to-back, 1.8–2 × 0.7 mm, white, short-hairy, with green rim at top, 1-chambered with 1 ovule; style exserted, ± 4 mm long, 2-branched, below fork orangish, the stigmatic branches 0.5 mm long, orange-yellow aging red. **Disc flower:** radial, 1 mm across; **calyx (pappus)** dimorphic, of ca. 15 scarious scales in 2 outer series and of ca. 20 inner bristles in 1 inner series, scales oblanceolate and flat, ca. 0.7 mm long, bristles stiff, in range 4–5 mm long, tawny; **corolla** 5-lobed; tube cylindric, 1.6 × 0.35 mm, white; throat cylindric, ca. 2.5 mm long, lower portion nearly colorless with 5 yellow-orange veins, above midpoint yellow; lobes triangular, 0.6–0.7 mm long, yellow-orange to golden yellow; **stamens** 5, attached to top of corolla tube; filaments cylindric, ca. 0.8 mm long, pale yellow-orange; anthers included, basifixed, dithecal, 1.9–2.2 mm long with appendages, yellow-orange, longitudinally dehiscent; pollen pale yellow-orange; **pistil** 1; ovary inferior, obovoid compressed side-to-side, 1.8–2 × 0.7 mm, white, short-hairy, with green rim at top, 1-chambered with 1 ovule; style exserted, ± 6 mm long, 2-branched, below fork orangish, the stigmatic branches narrowly acuminate, 1.8–2 mm long, orange-yellow, most often tightly appressed, with short ascending hairs. **Fruits:** cypselae (achenes), dimorphic but with similar pappus, cypselae obovoid compressed, ca. 2.5 mm long, straw-colored to light brown, short-hairy, of ray flowers mostly with 10 raised ribs, of disc flowers smooth; pappus of widely spreading scarious scales ca. 0.7 mm long and tawny to rusty brown bristles to 5 mm long.

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