## **Vascular Plants of Williamson County**

*Chrysopsis pilosa* – SOFT GOLDENASTER [Asteraceae]

Chrysopsis pilosa Nutt. SOFT GOLDENASTER. 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,  $15-30 \times 3.5-7$  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 bisexual 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,  $4.5 \times 0$ . mm; **involucre** bell-shaped, ca. 6 mm across, of ca. 15 phyllaries in 3(-4) series, lanceolate,  $4.5-7 \times 0.8-1$  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; calvx (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.  $3.5 \times 0.3$  mm, white; limb mostly  $8.5-10 \times 10^{-10}$ 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 frontto-back,  $1.8-2 \times 0.7$  mm, white, short-hairy, with green rim at top, 1-chambered with 1 ovule; style exserted,  $\pm 4$  mm long, 2-branched, below fork orangish, the stigmatic branches 0.5 mm long, orange-yellow aging red. **Disc flower:** radial, 1 mm across; **calvx** (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,  $1.6 \times 0.35$  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,  $1.8-2 \times 0.7$  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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