

Vascular Plants of Williamson County
Thelesperma filifolium – GREENTHREAD [Asteraceae]

Thelesperma filifolium (Hooker) A. Gray, GREENTHREAD. Annual (persisting), taprooted, initially rosetted, several–many-stemmed at base, ± erect to ascending with canopy of heads on long peduncles, 20–70 cm tall; shoots with basal leaves and cauline leaves, foliage finely dissected, feathery, and restricted to lower half of plants, glabrous. **Stems:** cylindrical, to 3 mm diameter (aboveground) but thicker if older stem branched belowground, internodes < 35–90 mm long, tough, light green. **Leaves:** opposite decussate, symmetrically 1–2(–3)-pinnately dissected having paired principal lateral lobes and with paired lateral, linear secondary lobes, petiolate with pair of leaves fused across and sheathing node, without stipules; petiole indistinct from channeled leaf axis, petiole technically 2–5 mm long, whitish, (3)5-veined, the truncate connection across node membranous and concealing node, sometimes sparsely and minutely ciliate on margin; blade broadly triangular in outline (threadlike lobes), primary and secondary blade axis channeled, below the basal primary lobes 5–25 mm long. **Inflorescence:** head, terminal on each principal shoot, 1–several heads in loose, open, cymelike array, head radiate, 20–45 mm across, with 8 neuter ray flowers and many bisexual disc flowers, disc 7–17 mm across, bracteate, glabrous and green parts often glaucous; peduncle cylindrical, 50–150 mm long, with leaflike bract below midpoint to approaching head (= node for future heads), = diminutive leaf with threadlike segments and lobes, having bend at base, 2-veined, bracts at top of peduncle 7–8 bracts (calyculus) fused at base into rim and spreading, long-tapered, ca. 7 mm long; **involucre** barrel-shaped to urn-shaped truncate at base, glaucous, phyllaries 7–8 in 2 series fused 1–2 mm at base, appressed from base then bent and spreading above midpoint, ± acute-ovate, 7.5–8 × 4–4.5 mm, outer surface green with translucent narrow membranous margins, inner surface above midpoint light yellow with many fine purple-red veins converging at tip; receptacle flat, glabrous, hollow beneath receptacle, with bractlet (palea) subtending and cupping the ovary of each disc flower, palea oblong, 5–6 × 1.2–1.7 mm, scarious with 2 fine, pale orange to red parallel stripes along yellowish midrib to midpoint or approaching tip, having scattered, inconspicuous glands in colorless tissue, abscising clinging to fruit. **Ray flower:** bilateral, 4–10 mm across; **calyx (pappus)** vestigial rim with a pair of minute bumps and minute hairs; **corolla** 3-lobed; tube shallowly 3-ribbed, 2.2–2.5 × 0.5–0.6 mm; limb fan-shaped, (12–)14–24.5 × 4–10 mm, golden yellow, somewhat jagged on outer margin, finely parallel-veined with short hairs on lower surface along veins; **stamens** absent; **pistil** 1, sterile; ovary inferior, 3-sided flat on outer side, ca. 5 × 0.8–0.9 mm, whitish, thin front-to-back, papillate along edges and barely papillate-tufted at 2 top corners; style absent. **Disc flower:** bisexual, radial, ca. 2 mm across, ca. 12 mm long; **calyx (pappus)** of 2 dwarf awns, conic and fleshy, 0.4–0.5(–1) mm long, whitish, with backward-leaning barbs, persistent; **corolla** 5-lobed, lacking hairs; tube straight to slightly curved, 4.5–5.5 × 0.3 mm, golden yellow, with 5 fine veins; throat bell-shaped, ca. 1.3 × 1 mm, yellowish to midpoint and red above midpoint, with 5 veins leading to sinuses; lobes suberect to ascending, acute-triangular, 1.8–2 × 0.5 mm, glossy burgundy, ± stiff; **stamens** 5, attached to top of corolla tube; filaments 1 mm long, golden yellow (orange-yellow); anthers fused into cylinder surrounding style, often fully exerted from corolla, basifixed, dithecal, 2–2.4 mm long

including appendages at top, burgundy, appendages triangular flexed outward, 0.5 mm long; pollen golden yellow; **pistil** 1; ovary inferior, cylindric and often straight but outer series somewhat arched, ca. 3×0.4 mm long, white, glabrous, 1-chambered with 1 ovule; **nectary disc** surrounding base of style, 0.25 mm long, greenish; style exerted from anthers ca. 1 mm, golden yellow, 2-branched, the branches stigmatic at deltate tips conspicuously papillate, often scarcely spreading. **Fruits:** cypselae (achenes) of disc flowers, having papery palea and 2 dwarf awns; cypsela straight to somewhat arched, $4\text{--}6.5 \times 1.1\text{--}1.4$ mm, dark brown, 1 face rough, other sides conspicuously bumpy (tuberculate); awns erect, 3-sided with sloping edge to center of fruit top, 0.5–1 mm long; palea pale to light brown with a pair of darker lines parallel to a raised midrib.

A. C. Gibson