

Vascular Plants of Williamson County
Thelesperma simplicifolium – NAVAJO TEA [Asteraceae]

Thelesperma simplicifolium (Hooker) A. Gray, NAVAJO TEA. Perennial herb, taprooted, 1–several-stemmed at base, initially rosetted, with ascending photosynthetic stems, 30–70 cm; shoots with several basal leaves and widely spaced cauline leaves, foliage inconspicuous along stems having long internodes, aromatic when crushed, glabrous. **Stems:** ridged and 6-sided, to 5 mm diameter at base having slender upper stems, with 3 ridges descending from each leaf, ± tough, internodes to 95 mm long, often glaucous, woody base cylindrical and with rough periderm. **Leaves:** opposite decussate, simple and threadlike and 1-compound (3-fork to pinnate) with threadlike lobes, short-petiolate fused across node, without stipules; petiole flared at base, to 3 mm long, indistinct from blade, channeled; blade cylindrical or somewhat compressed, 25–60(–75) × < 1 mm, << internode, midrib ± sunken on upper surface. **Inflorescence:** heads, in terminal, cymelike array of 3 heads, head radiate, 17–21 mm across, with 8 neuter ray flowers and 20–40 bisexual disc flowers, bracteate, lacking hairs; bracts subtending peduncle 2 fused across node, leaflike, 14–25 mm long; peduncle 5-sided, to 105 × 0.8 mm, green, wiry, at top glaucous and with 6–8 herbaceous bracts in 2 series (calyculus), appressed to involucre, obtuse-triangular, 1.2–2 × 0.4–0.5 mm, green with narrow colorless margins; **involucre** bell-shaped, ca. 5 × 5 mm, of 8 phyllaries fused 1.5–2.5 mm, fused portion glaucous green, free upper portion ovate with wide, colorless margins and scarious approaching tip, ca. 5.5 long widely spreading above midpoint, central tissue glaucous appearing pinkish and orangish having fine, parallel crimson stripes, the margins to 0.7 mm wide and lobed (auriculate) at base, number of stripes decreasing to 2 but not reaching puberulent tip; receptacle flat (in fruit recurved), with bractlet subtending and cupping each disc flower (paleae), scarious, oblanceolate to oblong, 3.5–4 × 1–1.3 mm, with a pair of central crimson stripes. **Ray flower:** bilateral, ca. 5 mm across; **calyx (pappus)** 2 triangular nubs (awn), ca. 0.3 mm long, with several short scabrous hairs; **corolla** short 3-lobed; tube compressed front-to-back, 1.5 × 0.3 mm, light green; limb widely spreading from tube, narrowly fan-shaped, in range 9–11 × 5–5.5 mm, bright yellow, lobes rounded, broad, and < 0.5 mm long, ca. 13-veined from base with 2 principal veins to sinuses slightly sunken on upper surface and raised on lower surface; **stamens** absent; **pistil** 1, sterile; ovary inferior, 3-sided compressed front-to-back, flat on broader outer face, 3.2–3.4 × 0.45–0.5 mm, short-hirsute along 2 edges; style absent. **Disc flower:** radial, 1.5 mm across, ca. 7 mm long; **calyx (pappus)** 2 triangular nubs (awn), ca. 0.3 mm long, with several short scabrous hairs; **corolla** ca. 4.5 mm long; tube cylindrical, 2 × 0.4 mm, light yellow-green, expanded around nectary disc; throat cylindrical, ca. 2 × 1.1 mm, yellowish with 5 bold, golden yellow veins; lobes ascending, triangular, 0.6–0.7 × 0.4 mm, < throat, golden yellow; **stamens** 5, attached at top of corolla tube; filaments 1 mm long, yellowish; anthers basifixed, dithecal, ca. 2.2 mm long including appendages, golden yellow, longitudinally dehiscent; pollen golden yellow; **pistil** 1; ovary inferior, curved 3-sided, ca. 1.6 × 0.6 × 0.4 mm, slightly constricted below rim (of calyx), rounded on back with 2 flat inner faces, glabrous except for several short hairs near top, 1-chambered with 1 ovule; **nectary disc** surrounding base of style on top of ovary, 0.2 mm long, pale green; style ca. 4.5 mm long, slightly bulbous at base, 2-branched, pale yellow-green at base to fork, the stigmatic branches ascending, 1

mm long, golden yellow. **Fruits:** cypselae (achenes), of disc flowers (0–several/head), with a pair of diminutive pappus awns, commonly dispersed with cupped, papery palea; cypselae mostly comma-shaped and \pm 3-sided, $3.5\text{--}4.2 \times 1\text{--}2$ mm, pale to light brown or brown often mottled with darker specks of red or red-brown to brown and dark brown, the outer face rounded and on larger fruits conspicuously warty (verrucose), inner faces somewhat flat and typically not warty; awns triangular, to 0.4 mm long, scabrous with short teeth; pappus translucent with a central pair of red-brown stripes.

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