

## Vascular Plants of Williamson County

*Tetraneuris linearifolia* var. *linearifolia* – SLENDERLEAF BITTERWEED [Asteraceae]

*Tetraneuris linearifolia* (Hooker) Greene var. *linearifolia*, SLENDERLEAF BITTERWEED.

Annual, taprooted, initially rosetted, 1(–several)-stemmed at base, erect to suberect, initially with 1 principal axis forming lateral branches downward from each axillary bud, with inflorescences in range 8–35 cm tall; gynomonoecious; shoots with to 8 basal leaves and several cauline leaves, rosette miniature on the smallest plants, pubescent, gland-dotted with sunken glandular hairs on young stems and leaves and heads aging pinkish. **Stems:** low-ridged, to 3 mm diameter, with 3 ridges descending from each leaf but  $\pm$  densely covered with upward-pointing nonglandular hairs concealing sunken glandular heads.

**Leaves:** helically alternate, simple, petiolate (lower leaves) and subsessile (upper leaves), without stipules; petiole flared at base and above flattened to-to-bottom, to 20 mm long, indistinct from blade, 3-veined, with narrow membranous margins; blade linear, or nearly lanceolate to oblanceolate-linear or spatulate (narrowly elliptic-oblanceolate), 5.3–60  $\times$  0.9–5 mm, long-tapered at base, entire, acute at tip, 3-veined from base with white midrib raised on lower surface, fine nonglandular hairs to 4 mm long. **Inflorescence:** heads, solitary and terminal on long peduncle of each principal shoot, head radiate, 11–26+ mm across, with 4–13 pistillate ray flowers and 8–125+ bisexual disc flowers, disc 3.8–13.5 mm across, bracteate; peduncle arising at or below midplant, erect, straight and slender, 32–170+  $\times$  1.5 mm, appressed-villous or sericeous to short-strigose with upward-pointing hairs concealing inconspicuous glandular hairs colorless at flowering, lacking bracts (calyculus) at top; **involucre** broadly funnel-shaped to hemispheroid, 3.5–6  $\times$  3–15 mm, in range phyllaries 8–20 in 2–3 series, outer phyllaries ovate and inner phyllaries oblong to narrowly obovate or elliptic, 2–3.5  $\times$  0.8–1.5 mm, finely 2-veined, green but inner phyllaries with colorless margins, colorless margin sometimes with a shoulder, often with a reddish callus at tip, sericeous on green tissue; receptacle convex to domed, lacking bractlets (paleae), with glandular hairs between ovaries. **Ray flower:** bilateral, 2.5–6.5 mm across (corolla limb); **calyx (pappus)** of (4–)5–7 awned, scarios scales (aristate), in more than 1 series, ca. 2.5 mm long, scarios portion obovate, 1.2–1.5 mm long, awnlike portion from ca. midpoint with fine point at tip; **corolla** 3(–4)-lobed; tube 0.8–1.3  $\times$  0.7 mm, pale green, densely short-hairy; limb narrowly fan-shaped to obovate or elliptic, 5–10.5  $\times$  2.5–6.5 mm, orange-yellow with 4 green-yellow raised veins on lower surface, the 2 central veins 2-forked to lobes, lobes obtuse to rounded (acute), 0.2–2 mm long, lower surface short-hirsute and with conspicuous short-stalked glandular hairs with spheric, colorless heads; **stamens** absent; **pistil** 1; ovary inferior, narrowly inversely pyramidal,  $\pm$  1.7  $\times$  0.5 mm, greenish, oblique at base, short-hairy with ascending hairs, 1-chambered with 1 ovule; style with tips of stigmatic branches exerted or scarcely so, ca. 1.8 mm long, 2-branched from midpoint. **Disc flower:** radial, ca. 1 mm across, 4–4.5 mm long; in bud truncate on top with a thick cover of yellow-orange (golden) hairs  $\pm$  0.3 mm long, the hairs sometimes with a scarlet terminal cell; **calyx (pappus)** of (4–)5–7 awned, scarios scales (aristate), in more than 1 series, ca. 2.5 mm long, scarios portion obovate, 1.2–1.5 mm long, awnlike portion from ca. midpoint with fine point at tip; **corolla** 4–5-lobed, ca. 2 mm long; tube short-cylindric, 0.25–0.3  $\times$  0.35 mm; throat  $\pm$  bell-shaped, 1.4–1.5  $\times$  0.7 mm, colorless with 8 or 10 yellow-orange ribs = veins to lobes and sinuses,

having some short hairs; lobes deltate, ca. 0.35 mm, somewhat hidden by colored hairs on outer surface; **stamens** 4–5, attached at top of corolla tube; filaments to 0.5 mm long; anthers fused into cylinder surrounding style, basifixed, dithecal, included, 1 mm long, whitish, longitudinally dehiscent; pollen pale yellow; **pistil** 1; ovary inferior, narrowly inversely pyramidal,  $\pm 1.7 \times 0.5$  mm, greenish, oblique at base, short-hairy with ascending hairs, 1-chambered with 1 ovule; style included, ca. 1.8 mm long, 2-branched from midpoint. **Fruits:** cypselae (achenes) monomorphic; club-shaped, ca.  $2 \times 1$  mm, with short ascending hairs; pappus of 5+ aristate scales persistent.

A. C. Gibson