## **Vascular Plants of Williamson County** *Astranthium integrifolium* subsp. *ciliatum* – COMANCHE WESTERN DAISY [Asteraceae]

Astranthium integrifolium (Michx.) Nutt. subsp. ciliatum (Raf.) DeJong (syn. Astranthium ciliatum), COMANCHE WESTERN DAISY. Annual, slender-taprooted, rosetted, 1-several-stemmed at base, principal branches ascending to decumbent (erect), 5-35 cm tall; gynomonoecious; shoots with basal leaves and cauline leaves, basal leaves withering at early flowering, short-hairy. **Stems:** weakly ridged and somewhat angled, to 2 mm diameter, with 2 ridges descending from leaf, with scattered short stiff hairs. Leaves: helically alternate, simple, subsessile, without stipules; petiole short, indistinct from blade; blade obovate or spathulate to oblanceolate, in range  $15 - \langle 30 \times 3 - 7 \text{ mm} \rangle$ , tapered to longtapered at base, entire, rounded to obtuse at tip, pinnately veined with midrib raised on lower surface, short-hairy. Inflorescence: heads, appearing solitary and terminal on slender peduncles in open, cymelike array at top of canopy, radiate, in range ca. 10 mm across, with 8–13 pistillate ray flowers and many bisexual disc flowers, bracteate; bract subtending peduncle (upper cauline leaf) leaflike, in range linear or oblanceolate to obovate,  $4-5 \times 0.8-2$  mm, acute at tip, short-hairy; peduncle <  $45 \times 0.2-0.3$  mm, shortstrigose with upward-pointing hairs; **involucre** of  $\pm 21$  phyllaries in 2 close series, bellshaped, in range 2–2.5 mm long with phyllaries mostly ovate (elliptic), the lowest 1.5–2 mm long increasing gradually to < 2.5 mm long, the longest with a short, fine point at tip, green with conspicuous membranous margins, minutely jagged on margins (sparsely shortciliate); inner phyllaries each subtending a ray flower, widely spreading in fruit; receptacle at anthesis domed to hemispheroid elevated in fruit, lacking bractlets (paleae), each disc flower ovary surrounded by a low ridge. **Ray flower:** bilateral, 1.5 mm across (corolla limb); calyx (pappus) absent or obscure (minute crownlike ring); corolla minutely 3toothed, glabrous; tube cylindric, in range  $< 1-1.5 \times 0.2-0.25$  mm, white, with several minute glandular hairs; limb widely spreading when stressed or aging coiling under, narrowly elliptic,  $3.5-4 \times 0.8-1.5$  mm, light violet-blue and lower surface pale violet-blue to whitish on upper surface and pigmented on lower surface, having 5 or 7 fine parallel veins; stamens absent; pistil 1; ovary inferior, oblanceoloid, 0.6-0.7 mm long, pale green, shallowly 5-ribbed; style 2-branched, 2–2.5 mm long, white, the stigmatic branches exserted from corolla tube, widely divergent, narrowly club-shaped, 0.5–0.6 mm long. Disc flower: radial, 1 mm across; calyx (pappus) absent or obscure (minute crownlike ring); corolla 5-lobed; tube cylindric, 0.2 mm long, white; throat funnel-shaped, ca.  $0.8 \times$ 0.4 mm, white at base to light yellow above midpoint, with several minute glandular hairs; lobes triangular 0.35–0.4 mm, light yellow; stamens 5, attached at top of corolla tube; filaments 0.3–0.4 mm long, yellowish; anthers fused into cylinder surrounding style, basifixed, dithecal, not exserted, 0.8–0.9 mm long including slender appendages at tip, light yellow, longitudinally and inwardly dehiscent; pollen white; **pistil** 1; ovary inferior, oblanceoloid, 0.6–0.7 mm long, pale green, shallowly 5-ribbed; style 2-branched, ca. 1.7 mm long, the stigmatic branches partially exserted. Fruits: cypselae (achenes), on a conic receptacle, compressed-obovoid, in range  $0.8-0.9 \times 0.4-0.5$  mm, brown, conspicuously puberulent with hairs having minute hooks at top (glochidiate-hairy); receptacle to  $2.5 \times 2$ mm, with conspicuous scars of fruits. A. C. Gibson