

## Vascular Plants of Williamson County

### *Grindelia texana* – TEXAS GUMWEED, TEXAN GUMPLANT [Asteraceae]

*Grindelia texana* Scheele (syn. *Grindelia lanceolata* var. *texana*), TEXAS GUMWEED, TEXAN GUMPLANT. Annual (short-lived perennial herb), taprooted, rosetted in early growth, 1-stemmed at base, with ascending branches in canopy, erect to ascending, in range 25–115 cm tall, shoot to 105 cm long; shoots with petiolate basal leaves and mostly sessile cauline leaves, basal leaves absent at flowering, foliage on plant not resinous but gland-dotted, aromatic when crushed, vegetative shoots glabrous. **Stems:** 3-ridged, to 6 mm diameter, with 2 fine ridges descending from each leaf, glabrous, lower stems woody. **Leaves:** helically alternate, simple and sessile, mostly not clasping at base, without stipules; blade oblong or oblong-obovate to deltate or ovate, 10–75 × 4–18 mm, 3-veined at base short-fused to base with free portion truncate or broadly tapered, regularly serrate with pointed teeth and minutely scabrous with short, appressed hairs on margin, teeth midblade (0)1–4 per cm with to 10 per edge, acute to obtuse at tip, pinnately veined with midrib raised on lower surface, when backlit elaborate network of minor veins. **Inflorescence:** heads in leafy, cymelike array of 1–3(–7) heads, terminal, head radiate, 16–39 mm across, with 16–30 pistillate ray flowers and ca. 100 bisexual disc flowers, bracteate, glabrous; peduncle short–40 mm long, with several small leaflike bract later subtending a head; **involucre** hemispheroid to subspheroid, 7–17 mm across (with ascending and spreading phyllaries 12–23 mm across), green and conspicuously resinous, phyllaries mostly 80–100 in 6–9+ series, at base 1–3 phyllaries leaflike and subtentire, narrowly elliptic to oblanceolate, to 25 × 5 mm, the lowest series (13) linear to oblanceolate-linear, to 15 × 1 mm, not flaring at base and the next series (13) somewhat flared at base, lower phyllaries arching, linear and green, middle phyllaries (30) lanceolate with shallowly scooplike base, ca. 10–11 mm, bodies ascending and green, inner phyllaries (9) to 2 mm wide at base with green acuminate tips, the innermost phyllaries (9) body ca. 8 mm long with incurved lower portion to 3 mm wide with nongreen acuminate tip, to 5-veined at base; receptacle flat to low-convex, lacking bractlets (paleae), pitted and crownlike surrounding each disc ovary tightly nested by crown, crown to 0.4 mm tall with blunt teeth on margins, white, glabrous. **Ray flower:** bilateral, 2.5–4 mm across; **calyx (pappus)** of 2 opposite, smooth, capillary “bristles,” 5–6.5 mm long, white, somewhat club-shaped at tip, easily detached; **corolla** unlobed; tube strongly 4–5-sided, 3–4 × 0.5–0.7 mm, greenish to white, low 5-ribbed, thick-walled at base somewhat bulging above ovary, glabrous; limb narrowly elliptic to oblong, 7–17 × 1.5–4 mm, bright yellow, to 7-veined, obtuse at tip (never lobed or toothed), glabrous; **stamens** absent; **pistil** 1; ovary inferior, 4-sided wedge-shaped, 0.7–1 mm long, translucent white, glabrous, 1-chambered with 1 ovule; style exerted or not, ca. 5.5 mm long, 2-branched, white and somewhat swollen to pale yellow at base, the stigmatic branches 1–1.8 mm long, golden yellow. **Disc flower:** radial, 1–1.5 mm across, 6–7.5 mm long; **calyx (pappus)** of 2 opposite, smooth, capillary “bristles,” 5–6.5 mm long, white, somewhat club-shaped at tip, club-shaped portion often exerted above corolla, easily detached; **corolla** 5-lobed; tube cylindrical, 1–1.5 × 0.65–0.7 mm, white, 5-veined; throat cylindrical, ca. 2 –1–1.3 mm diameter, colorless, thin and membranous, finely 5-veined; lobes erect, triangular, 0.3–0.7 mm long, golden yellow; **stamens** 5, attached at top of corolla tube; filaments 1.5–2 mm long,

yellowish; anthers basifixed, dithecal, 2.3–3 mm long including appendage 0.4 mm long, golden yellow, the appendages exerted or not, blunt-triangular, longitudinally dehiscent; pollen golden yellow; **pistil** 1; ovary inferior,  $\pm$  4-sided wedge-shaped, 0.7–1  $\times$  0.7–1  $\times$  0.35 mm, translucent, glabrous, 1-chambered with 1 ovule; **nectary disc** surrounding base of style, ca. 0.4 mm long, colorless; style 5–5.5 mm long, 2-branched, whitish at base, pale yellow approaching fork, the stigmatic branches appressed, ca. 1.3 mm long, golden yellow, papillate-hairy. **Fruits:** cypselae (achenes) polymorphic, of ray flowers  $\pm$  3-sided, 2.7–4.2  $\times$  1.5–2  $\times$  1.5–2 mm, brownish, faces  $\pm$  smooth or with low ridges, resin-covered, of outer disc flowers oblong to rectangular strongly flattened, 3–5  $\times$  1.5–2 mm, tan, finely parallel-ribbed on faces, with rim at top higher on 1 edge, of inner disc flowers somewhat top-shaped compressed side-to-side (obpyramidal), 2.7–4  $\times$  1.2–1.5 mm, whitish to straw-colored, with 15+ low ribs on each face.

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