

Vascular Plants of Williamson County
Thymophylla pentachaeta – PARRALENA [Asteraceae]

Thymophylla pentachaeta (DC.) Small, PARRALENA. Perennial herb, taprooted, not rosetted, several-stemmed at base, in range to 16 cm tall; gynomonecious or with pistillate only plants; shoots with only cauline leaves, leaves finely dissected, foliage having orange, blisterlike glands, aromatic when crushed. **Stems:** ± cylindric, to 1.5 mm diameter, often red-purple, zigzagged, puberulent, lacking orange glands, lower stems covered by retained lower portions of leaves. **Leaves:** opposite decussate, deeply pinnately lobed with 3–7 linear lobes and lateral lobes ± paired and widely spaced, with sheathing bases often fused across node, without stipules; blade to 20 mm long, leaf axis winglike at base with pair of short lobes, at base upper surface short-pubescent and puberulent, other lateral lobes to 8 mm long above, terminal lobe to 10 mm long, lobes fine-pointed at tips, pinnately veined with midrib whitish and raised on upper and lower surface, lobes surfaces with orangish blister glands. **Inflorescence:** solitary head, terminal on long peduncle, head radiate, 7–10 mm across, having to 12 ray flowers, some individuals with ca. 60 bisexual disc flowers, different individuals with pistillate disc flowers and 0 bisexual disc flowers, bracteate (bracts having orange, blisterlike glands); peduncle slender cylindric, 30–75 × 0.6 mm, wiry, green or lushed red, with several alternate appressed bracts along axis, awl-shaped, 0.8–1.4 mm long, bracts at top 0–5 (calyculus) subtending involucre, awl-shaped, ca. 1 mm long, with raised base and conspicuously short-ciliate on margins; **involucre** bell-shaped becoming hemispheric in fruit, 4–4.5 × 2.5–3 mm, phyllaries ca. 13 in 2 series, fused above midpoint, conspicuously ciliate on margins base-to-tip, outer phyllaries triangular, 0.5–0.6 mm wide, of inner series ± deltate, 1–1.2 mm, parallel-veined, inner phyllaries with wide membranous margins, mostly with 2 light orange oil glands on green (purplish) tissue, pairs of oil glands on fused involucre, glabrous or glabrate; receptacle domed, having papillae surrounding each ovary of disc flower becoming tufts of short hairs in fruit. **Ray flower:** pistillate, bilateral, ca. 1 mm across, ca. 4.5 mm long; **calyx (pappus)** in range to 10 scales, fused at base into ring, 5–7 oblanceolate to narrowly obovate scales 0.7–1.2 mm long + 3 scales mostly having needlelike point (aristate) 2–2.8 mm long, scarious, jagged on margins, persistent; **corolla** unlobed and without teeth; tube cylindric, 1.5–1.7 × 0.3 mm, yellowish, faintly 5-veined, with several glandular hairs; limb when fully formed widely spreading, ± elliptic, 3–4 × 0.8–1.4 mm, golden yellow, rounded at tip, upper surface with domed cells, lower surface with 3–5 faint veins; **stamens** absent; **pistil** 1; ovary inferior, wedge-shaped, ca. 2 × 0.3 mm, with short ascending hairs at base, 1-chambered with 1 ovule; style exerted, 3 mm long, 2-branched, below fork yellow, the branches stigmatic, fully exerted, spreading, 0.4–0.5 mm long. **Disc flower:** bisexual or pistillate, radial (bisexual flower) or somewhat bilateral (pistillate flower), 1 mm across; **calyx (pappus)** in range to 10 scales, fused at base into ring, 5–7 oblanceolate to narrowly obovate scales 0.7–1.2 mm long + 3 scales having only 1 needlelike point (aristate) 2–2.8 mm long, scarious, jagged on margins, persistent; **corolla** 5-lobed (bisexual flower) or 2–4-lobed (pistillate flower), tube (pistillate flower) or tube + throat cylindric, ± 2.5 × 0.4–0.45 mm, colorless at base to yellowish above midpoint; lobes erect, triangular, 0.4–0.6 mm long, golden yellow; **stamens** 5, attached to top of corolla tube, in pistillate flower 0 or 5 not fused, vestigial stamens < 1 mm long with miniature anthers; filaments

threadlike, ± 0.5 mm long, colorless; anthers of bisexual flowers fused into cylinder surrounding style, basifixed, dithecal, ca. 0.5 mm long, yellow-orange, longitudinally dehiscent; pollen yellow-orange; **pistil** 1; ovary inferior, narrowly wedge-shaped, ca. 1.4×0.3 mm, white, with ascending short hairs, 1-chambered with 1 ovule; style included, 1.8 mm long (bisexual flower) or ca. 3 mm long (pistillate flower), 2-branched, yellowish below fork, the branches stigmatic, 0.5 mm long, yellow-orange. **Fruits:** cypselae (achenes), angled gradually tapered to sharp base, $2.2\text{--}2.5 \times 0.3$ mm, black (disc flowers) to mid-brown (ray flowers), with ascending short hairs; pappus scales suberect.

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