## Vascular Plants of Williamson County Thymophylla pentachaeta var. puberula - PARRALENA [Asteraceae]

Thymophylla pentachaeta (DC.) Small var. puberula (Rydb.) Strother (if var. recognized), parralena. Perennial herb, taprooted, not rosetted, several-stemmed at base, in range to 22 cm tall; gynomonecious; shoots with only cauline leaves, leaves finely dissected, foliage having orange, blisterlike glands, aromatic when crushed, foliage and stems puberulent.
Stems: $\pm$ 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 $\pm$ 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 shortpubescent and puberulent, other lateral lobes to 10 mm long above, terminal lobe to 12 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, 11-13 mm across, having 12-14 ray flowers and to 60 bisexual disc flowers, bracteate (bracts having orange, blisterlike glands); peduncle slender cylindric, $30-75 \times 0.6 \mathrm{~mm}$, wiry, green or blushed red, with several alternate appressed bracts along axis awl-shaped, $0.8-1.4 \mathrm{~mm}$ long, bracts at top $0-5$ (calyculus) subtending involucre, awl-shaped, ca. 1 mm long, with raised base, puberulent and short-ciliate on margins; involucre bell-shaped becoming hemispheric in fruit, $4-5 \times \pm$ 4 mm , phyllaries ca. 21 in 3 series, fused above midpoint, puberulent and short-ciliate on margins, outer phyllaries triangular, $0.5-0.6 \mathrm{~mm}$ wide, of inner series $\pm$ deltate, $1-1.2 \mathrm{~mm}$, 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, puberulent; receptacle domed, having papillae surrounding each ovary of disc flower. Ray flower: pistillate, bilateral, $1.5-1.8 \mathrm{~mm}$ across; calyx (pappus) in range to 10 scales, fused at base into ring, 5-7 oblanceolate to narrowly obovate scales $0.7-1.2 \mathrm{~mm}$ long +3 scales having needlelike point (aristate) ca. 2.5 mm long, scarious, jagged on margins, persistent; corolla unlobed and without teeth; tube cylindric, $1.5-1.7 \times 0.3 \mathrm{~mm}$, yellowish, faintly 5 -veined, with several glandular hairs; limb when fully formed widely spreading, elliptic, $4-5 \times 1.5-1.8 \mathrm{~mm}$, golden yellow, rounded at tip, upper surface with domed cells, lower surface with 5 faint veins; stamens absent; pistil 1; ovary inferior, long-tapered to point at base and somewhat angular, ca. $2.5 \times 0.3 \mathrm{~mm}$, finely 20 -ribbed with short ascending hairs, 1-chambered with 1 ovule; style exserted, ca. 2.3 mm long, 2-branched, below fork yellow, the branches stigmatic, spreading, $0.4-0.5 \mathrm{~mm}$ long. Disc flower: bisexual, radial, 1 mm across; calyx (pappus) in range $10-12$ scales, fused at base into ring, 5-7 oblanceolate to narrowly obovate scales $0.7-1.3 \mathrm{~mm}$ long +5 scales with ( $0-$ )3(-5) having only 1 needlelike point (aristate) $2-2.6 \mathrm{~mm}$ long, scarious, jagged on margins, persistent; corolla 5-lobed, tube + throat cylindric, $\pm 2.5 \times 0.4-0.45 \mathrm{~mm}$, colorless at base to yellowish then golden yellow above midpoint; lobes ascending, triangular, $0.4-0.6 \mathrm{~mm}$ long, golden yellow; stamens 5, attached to top of corolla tube; filaments threadlike, $\pm 0.5 \mathrm{~mm}$ long, colorless; anthers fused into cylinder surrounding style, basifixed, dithecal, ca. 0.7 mm long, yellow-orange, longitudinally dehiscent; pollen yellow-orange; pistil 1; ovary inferior, long-tapered to point at base and somewhat angular,
$2.5 \times 0.3 \mathrm{~mm}$, white, 20 -ribbed with ascending short hairs, 1 -chambered with 1 ovule; style included, ca. 2.5 mm long, 2-branched, yellowish below fork, the branches stigmatic, 0.5 mm long, yellow-orange. Fruits: cypselae (achenes), angled with ca. 20 fine ribs gradually tapered to sharp base, 1.7-2.7 $\times 0.3 \mathrm{~mm}$, black to deep purple (brown), with ascending short hairs along ribs; pappus scales in 2 series ascending, scarious, to 2.7 mm long, with brownish axis.
A. C. Gibson

