

## Vascular Plants of Williamson County

*Hedeoma reverchonii* var. *serpyllifolium* – THYME-LEAVED MOCK PENNYROYAL  
[Lamiaceae]

*Hedeoma reverchonii* (A. Gray) A. Gray var. *serpyllifolium* (Small) R. S. Irving, THYME-LEAVED MOCK PENNYROYAL. Perennial herb, taprooted, not rosetted, several–many-stemmed at base from root crown, branching opposite-decussate along principal shoot spreading to ascending often appearing densely leafy on flowering shoots, in range to 35 cm tall; shoots with only cauline leaves, leaves on early-season growth larger than on flowering shoots, foliage conspicuously gland-dotted with sessile glandular hairs having colorless heads sunken in pits, strongly lemon-scented when crushed; taproot aging woody, to 6 mm diameter, with brown bark. **Stems:** 4-sided, to 2 mm diameter (lower stem) and ca. 1.3 mm diameter (green stems of flowering shoots), tough, on flowering shoots internodes mostly 9–15 mm long, lower stem aging reddish then forming periderm with peeling (exfoliating) epidermis with old hairs, rounded on edges, with a pair of ledges across each node, the edges with downward-arching short-hirsute hairs (geniculate of cell units), faces with nonglandular and minute glandular hairs. **Leaves:** opposite decussate, simple, short-petiolate, without stipules; petiole compressed top-to-bottom, 1–2 mm long, whitish and greenish, not flared at base, with spaced puberulent hairs and lower side with hirsute hairs curving toward blade; blade elliptic to oblong or ovate-elliptic, (5–)7–12 × 4–5.5 mm, mostly leaves (both at node) > internode, tapered to obtuse at base, entire or with 1–4 minute teeth approaching tip (to 2 per margin), obtuse at tip, pinnately veined with principal veins sunken on upper surface and raised on lower surface, short-hirsute and with sunken sessile glandular hairs, on early-season shoots at base of plant young leaves with denser, longer hairs (pilose-hirsute). **Inflorescence:** cyme, axillary paired at successive nodes (verticils not condensed) at growing tips of shoots, cyme initially 1-flowered shortly becoming 3-flowered by forming a pair of lateral flowers at pedicel base, among leaves (opposite leaflike bracts at each node), flowers ascending to widely spreading, bracteate, hirsute and short-hirsute and with glandular hairs with colorless heads; axes 4-sided, green, internodes of flowering shoot at maturity 4–7 mm apart, with arching short hairs and sessile glandular hairs; peduncle cylindrical, 0.5–1 × 0.4 mm, green, with downward-arching hairs and glandular hairs with tiny heads; bractlets subtending each pedicel 2 and opposite, lanceolate-linear, at anthesis 2–3 × 0.3 mm, the longest 2 subtending the terminal flower, sometimes with extra pairs of undeveloped bractlets for future flowers, ciliate or short-ciliate with widely spreading hirsute hairs on margins, with or without spreading nonglandular puberulent hairs on lower surface; pedicel ascending to widely spreading, cylindrical, fully mature 3–5.5 mm long, with mostly downward-arching hairs (appearing jointed). **Flower:** bisexual, bilateral, 5.5–6 mm across, in range 13–17 mm long (straightened); **calyx** 2-lipped, 5-lobed, in range mostly 6–7.3 mm long, green or toothlike lobes tinged purplish; tube conspicuously 13-ribbed, 4–5 × 1.3 mm, light yellow-green, pinched above midpoint, ribs puberulent and with hirsute hairs to 1.2 mm long, the hirsute hairs enlarged at base and somewhat bent at each cell wall (geniculate), furrows with conspicuous sessile glandular hairs with colorless heads aging orange-red in fruit, inner surface with puffy, colorless surface, at orifice and lower lips fringed with straight white hairs concealing access to nectar, approaching orifice appearing closed with dense

layers of white, stiff, straight hairs mostly 0.7–1 mm long; lower lip with 2 bristlelike lobes appressed to corolla gently curved, 2–2.3 mm long, green and often purplish, stiff ciliate on margins, upper surface lacking hairs, lower (outer) surface puberulent, with several glandular hairs in furrows; upper lip 3-lobed, lobes narrowly triangular and bend slightly upward, fused at base, 1–1.2 mm long, green purplish at tip, upper surface lacking hairs, lower surface puberulent; **corolla** 2-lipped, 4-lobed, mostly light pink-purple; tube 7–8 mm long (tube + throat 9–12.3 mm long), 10-veined, lower portion ± cylindric to midpoint expanded at base around ovary and above pale orangish with short hairs approaching top, upper portion of tube narrowly funnel-shaped, light pink-purple with short hairs and scattered sessile glandular hairs, inner surface with purple fine lines, floor mostly white, with 2 lines of short-pilose hairs next to filaments of fertile stamens; lower lip 3-lobed, 4–5.8 mm long, white continuous from floor of throat often with irregular, purple spots and streaks, lobes light pink-purple, central lobe resembling dogbone notched at top, to 3.5 × 3.5 mm, lateral lobes semicircular trailing on outer margin, earlike and rounded, to 3 × 2 mm; upper lip semicircular notched at top, ca. 2 × 2 mm, outer surface evenly short-pilose with scattered sessile glandular hairs having colorless heads; **stamens** 2, attached to corolla with free portion ca. 9 mm from base, sometimes with 2 slender vestigial stamens attached lower on corolla throat, anthers mostly equally exerted beyond upper corolla lip (sometimes anthers touching); filaments straight, 3.5–4 mm long (rarely shorter with abortive anthers; of vestigial stamens threadlike and < 2 mm long), light pink-purple, glabrous; anther ⊥ filament with 1 sac on each end of a split connective, ca. 1.2 mm across, sacs 0.5 mm long, pink or rose, longitudinally dehiscent; pollen pinkish white; **nectary disc** beneath ovary, ca. 0.2 mm long, pale green; **pistil** 1; ovary superior, strongly 4-lobed on base ca. 0.4 mm long and pale green, lobes equal, rounded, 0.25 mm long, glabrous, 2-chambered, each lobe pale green with 1 ovule; style attached to ovary base at center of ovary lobes (gynobasic), 11.5–16 mm long, white at base and light pink-purple from below midpoint, glabrous, unequally 2-branched, rose, the upper branch appressed, triangular, ca. 0.25 mm long, the lower stigmatic branch narrowly lanceolate, 1.5–2 × 0.3 mm, coiled exerted next to upper corolla lip at or above lower corolla lip. **Fruits:** nutlets, (1–)3–4, oblong, 1.3–1.5 × 0.55–0.7 mm, smooth, brown with darker cell outlines, initially glossy drying duller, outer side rounded, lateral sides ± flat with a pair of dimplelike attachment scars at base.

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