

Vascular Plants of Williamson County
Mentha ×piperita – PEPPERMINT [Lamiaceae]

Mentha ×piperita L. (sterile interspecific hybrid of *Mentha aquatica* × *M. spicata*), PEPPERMINT. Perennial herb, rhizomatous, fibrous-rooted (rhizome only), 1–several-stemmed at base (many-stemmed if mowed), ± erect to ascending from trailing principal axes, in range < 50 cm tall; shoots with only cauline leaves, appearing glabrous but gland-dotted with conspicuous, sessile glandular hairs having colorless or aging amber, spheric heads and minute and inconspicuous stalked glandular hairs, strongly aromatic when handled or crushed. **Stems:** 4-sided, 4-angled, to 2.5(4) mm diameter, tough, green to purple-red, 2 faces flat alternating with slightly convex faces, the edges ridgelike, with projecting leaf bases at nodes conspicuous on basal stems, with abundant, minute, stalked glandular hairs and some sessile glandular hairs on faces; internodes initially solid with spongy, white pith splitting on woody old stems. **Leaves:** opposite decussate, simple, petiolate with pair connected by low ledges across node, without stipules; petiole folded upward (channeled), in range 4–6+ mm long; blade ovate, in range < 20–45 × < 12–17 mm, broadly tapered at base, low-serrate on margins, acute at tip, pinnately veined with principal veins sunken on upper surface and raised on lower surface, glabrous or nearly so and gland-dotted, the sessile spheric glandular hairs in shallow pit especially conspicuous on lower surface, lower surface sometimes with scattered puberulent hairs along especially midrib. **Inflorescence:** spikelike panicle of condensed umbel-like cymes paired at nodes (verticils), nodes 5–11+, in bud rachis with short internodes later more elongated, to 75 × 12–15 mm, each cyme highly condensed, ca. 15-flowered, bracteate; peduncle of panicle < 20 mm long; rachis visible at lower internodes in fruit to 22 mm long decreasing upward and concealed in upper portion of panicle, distinctly 4-sided and 4-angled, with a pair of ledges across each node connecting leaves, having glandular hairs like stem; paired bracts subtending cymes at the lowest node miniature leaflike, widely spreading or somewhat twisted, slightly > cymes and subsessile with several teeth on margins, decreasing upward, < cyme and narrower and at node 3 entire becoming acuminate-oblongate (e.g., 3.5 × 0.7 mm) and 1-veined, upward always shorter and linear, sometimes with several puberulent hairs on margins; stalk of cyme short below 2-fork, each branch mostly to 7-flowered with ca. 14 flowers per cyme (< 30 flowers per node) with pedicels subequal spreading from the shorten stalk; bracts within cyme (bractlets subtending pedicel) mostly < 4; pedicel ± 1.5 mm long, with minute stalked glandular hairs and sometimes a larger spheric glandular hair. **Flower:** bisexual, bilateral, 2 mm across; **calyx** 5(–6)-lobed, in range 2.5–3 mm long; tube somewhat bell-shaped slightly expanding approaching orifice, 10–12(–13)-veined, light green, between raised veins paler with sessile glandular hairs; lobes ± equal, acuminate, 0.6–0.8 mm long, green, sometimes 2-forked, having 2–3 veins per lobe, sparsely puberulent-ciliate or not on margins; **corolla** 2-lipped, 4-lobed, in range 3.5–5 mm long; tube tapered funnel-shaped, ca. 1.5 mm long, white, throat to 1 mm long; upper lip shallowly 2-lobed, in range ca. 1.2 × 1.2 mm, notch to 0.3 mm deep; lower lip distinctly 3-lobed, lobes ovate and spreading, 1–1.3 × 1–1.2 mm, rounded, to light pink-purple approaching margins, with a few sessile glands on outer (lower) surfaces and nearly obscure, minute stalked glandular hairs along inconspicuous veins; **stamens** 5, fused to upper corolla tube alternate with lobes, equal, included, sterile; filaments triangular, 0.2–

0.3 mm long, whitish; anthers dorsifixed, dithecal, roundish, ca. 0.3 mm, reddish aging darker, longitudinally dehiscent and inwardly dehiscent; pollen not evident; **nectary disc** surrounding base of ovary, appearing barrel-shaped, 0.4 mm, green; no nectar observed; **pistil** 1, 4.5–5 mm long; ovary superior, strongly 4-lobed, lobes ellipsoid, ca. 0.3 mm long, greenish, 2-chambered, each lobe with 1 ovule; style attached to ovary base at center of ovary lobes (gynobasic), arched above midpoint and exerted from corolla orifice, 4.5–5 mm long, white, 2-branched near tip, the branches 0.2–0.25 mm long, slightly unequal and spreading or 1 erect and the other spreading. **Fruits:** nutlets, typically abortive; persistent calyx papery enclosing withered ovules and persistent nectary disc.

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