

**Vascular Plants of Williamson County**  
*Lamium amplexicaule* – HENBIT [Lamiaceae]

*Lamium amplexicaule* L., HENBIT. Annual, taprooted, several-stemmed at base, decumbent to ascending, 10–30(–40) cm tall; shoots vegetative and leafy at lower nodes, reproductive with leaflike bracts at upper nodes, with nonglandular hairs, not aromatic. **Stems:** 4-sided with raised, cordlike edges, < 3 mm diameter, flexible, green aging purplish especially along edges, puberulent to glabrate, typically sparsely short-strigose with hairs bent downward, internodes to 150 mm long; hollow. **Leaves:** opposite decussate, simple, petiolate with pairs conspicuously fused across node (amplexicaulous), without stipules; petiole channeled, 5–45 mm long,  $\geq$  blade, puberulent, with hairs spreading to slightly downward-pointing and of varying lengths; blade widely ovate or kidney-shaped to  $\pm$  roundish, 6–25 mm long and wide or length < width, truncate to subcordate at base, crenate and sometimes shallowly 3–5-lobed on margins, rounded at tip, palmately veined at base with veins sunken on upper surface and conspicuously raised on lower surface,  $\pm$  hirsute. **Inflorescence:** condensed cyme, axillary and paired at node (verticil), each cyme 12–20-flowered, flowers either outcrossing (chasmogamous) or cleistogamous, sessile on a green mound fused to bract base; bract subtending cyme leaflike, sessile, fused to stem,  $\pm$  kidney-shaped to hemi-circular, 10–24  $\times$  15–35 mm, typically 3–5-lobed and short-crenate,  $\pm$  hirsute, with hair bases often purple, having minute, inconspicuous glandular hairs on bracts and axis. **Chasmogamous flower:** bisexual, bilateral, 2.5–4 mm across, **calyx** 5-lobed, 4–6.5 mm long, light green, short-hirsute; tube  $\pm$  bell-shaped, 2.5–3 mm long, minutely glandular-hairy; lobes subequal, acuminate, 1.7–3  $\times$  0.8–1 mm, hairy on both surfaces; **corolla** 2-lipped, ascending to erect, 10–21 mm long, dark rose-lavender to strong purplish red; tube cylindrical, straight, 7–12 mm long, paler than throat and upper lip, pubescent with straight hairs pigmented purplish red or colorless; throat funnel-shaped, slightly compressed side-to-side, short-hairy; upper lip ascending, hood-shaped, 3–4.5  $\times$  2.5–3 mm, enclosing anthers and style, densely hirsute and in bud strong purple; lower lip 3-lobed, with lateral margins abruptly curved outward to form short but wide lateral lobes  $\pm$  confluent with central lobe at lower tip of throat, the central lobe constricted at base and deeply notched, 2–2.5  $\times$  2.5–4 mm, pale or light purple to whitish with purplish red margins, spotted purplish red (commonly with a dark spot at base and a spot on each lobe), the lateral lobes pale lavender to white, with 1–2 deep purple spots; **stamens** 4, dimorphic, outer 2 longer and fused to lower throat 3.5–5 mm long (lower stamens), with anthers elevated above those of inner stamens, the 2 inner stamens fused to upper throat, 2–3 mm long (upper stamens); filaments white to pale lavender, sparsely short-villous, some with papillate hairs near the base; anthers positioned against roof of upper lip, basified, dithecal,  $\pm$  0.5 mm long, purplish with orange margins, conspicuously short-hairy, longitudinally dehiscent; pollen orange; **nectary disc** beneath ovary, ringlike, 5-lobed, greenish yellow, with copious nectar; **pistil** 1; ovary superior, strongly 4-lobed, each lobe pie-shaped in  $\times$ -section, fused only at base, 2-chambered, each lobe with 1 ovule; style attached to ovary base at center of ovary lobes (gynobasic), 14–20.5 mm long, whitish to pale lavender, glabrous, 2-branched, the branches 0.5–0.8 mm long, tapered toward tip; stigmas small, at level of anthers, papillate. **Cleistogamous flower:** bisexual, appearing radial, ca. 2 mm across; **calyx** resembling chasmogamous flower but smaller, 3–5 mm long; tube 1.7–2.5 mm long; lobes acuminate to narrowly

triangular, 1–2.5 mm long; **corolla** closed and abscising before lips open, appearing tubular, 2.7–3.5 mm long; upper lip a hemispheric cap completely enveloping lower lip, covered with bristly purplish red hairs centrally and white hairs peripherally; lower lip 4-lobed with 2 lobes terminal forming a heart-shaped tip, with a purplish red between base of terminal lobes and lateral lobes; **stamens** 4, unequal; filaments to 1 mm long (longer stamens) and 0.5 mm long (short stamens); anthers at same level, dark purple with orange margins, conspicuously hairy, longitudinally dehiscent; pollen orange; **nectary disc** beneath ovary but no nectar present; **pistil** 1; ovary like open flower but style only 2.5–4.5 mm long, straight to  $\pm$  helical when long. **Fruits:** nutlets, 4, obovoid,  $1.7\text{--}2 \times 1$  mm, brown or brownish with whitish spots or not, 3-sided in  $\times$ -section, flat on 2 sides and convex on outward-facing side,  $\pm$  obliquely truncate; base initially with aril-like cover of fleshy, whitish tissue, drying amber or falling off.

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