

Vascular Plants of Williamson County

Hedeoma hispida – ROUGH FALSE PENNYROYAL [Lamiaceae]

Hedeoma hispida Pursh, ROUGH FALSE PENNYROYAL. Annual, short-taprooted and fibrous-rooted on decumbent lower stems, not rosetted, 1–several-stemmed at base (to 9), the lowermost branches short-decumbent and other lateral branches only from vegetative nodes ascending (1 or 2 per node), with a terminal inflorescence, ascending to erect, 7–30 cm tall; shoots with ephemeral basal leaves at a few nodes and to 7 nodes of cauline leaves below inflorescence, leaves at lower nodes abscising, with curved nonglandular short-hirsute hairs and scattered, sessile glandular hairs having colorless heads, aromatic when crushed; adventitious roots mostly nodal. **Stems:** \pm 4-sided, to 2 mm diameter, tough, internodes to 15 mm long, with faint ledges across node, often red-purple at nodes and along edges, short hairs arching downward especially conspicuous along edge, faces with fewer hairs and scattered sessile glandular hairs. **Leaves:** opposite decussate, simple, short-petiolate to subsessile, without stipules; petiole hemi-cylindric, short–2 mm long, sometimes blushed rose, sparsely puberulent on lower side; blade, narrowly elliptic to narrowly lanceolate or oblong, $< 7-17 \times < 2.5-4.5$ mm, tapered at base, entire and margins sometimes slightly inrolled, obtuse at tip, pinnately veined with midrib sunken on upper surface and midrib and sometimes principal veins somewhat raised on lower surface, with scattered glandular hairs, upper surface sparsely puberulent, lower surface with puberulent hairs along midrib and close to petiole. **Inflorescence:** leafy, racemelike panicle of condensed cymes paired at consecutive nodes, terminal on main shoot and lateral shoots, to 15 fertile nodes interrupted by internodes 6.5–17 mm wide, each axil with cyme 2–8-flowered and having only 1 flower open per day, bracteate, short-hairy and gland-dotted (sessile glandular hairs); bracts subtending panicle 2, opposite, leaflike and subsessile, to 15 mm long not noticeably decreasing upward; involucrelike set of pointed bracts and bractlets subtending ascending pedicels of flowers, the largest bract acuminate-triangular, 3–6 mm long, with or without a pair of pointed lateral lobes, green, $>$ axis and reaching calyx, with 1–3 raised veins on lower surface, hirsute-ciliate on margins, other bracts and bractlets spreading, somewhat stiff, shorter and narrower than the earliest bract; pedicel to 3 mm long, short-hairy with backward-arching hairs. **Flower:** bisexual, bilateral, 2.5–3 mm across; slightly elevated from horizontal; **calyx** 2-lipped, 5-lobed, at anthesis 4.5–5.5 mm long, green, conspicuously 13-ribbed over inflated lower portion, puberulent and sessile glandular hairs between ribs; tube distinctly saclike, 2–2.5 mm long, the inflated lower portion to 1.5 mm diameter and narrowing to near orifice, at orifice with a dense ring of stiff white hairs ca. 0.6 mm long concealing developing corolla, inner surface parallel-ribbed; upper lip bent upward 1.5 mm long, 3-lobed, ca. 2.5 mm wide, lobes acute-triangular, 1–1.2 mm long, sinuses V-shaped, often red-purple at tips; lower lip 2-lobed, the lobes tusklike projecting out and curved, as long as upper lip; **corolla** 2-lipped, 4-lobed, ca. 5 mm long; tube slender, initially 4-sided later finely ribbed, 2.5×0.3 mm, white, with a row of sessile glands between ribs, eventually expanded around ovary and pushed outward by growth of ovary; throat narrowly funnel-shaped, lower portion white to pale pink-purple above midpoint, white-puberulent, orifice ± 0.9 mm across; upper lip tongue-like notched at top, $0.9-1.0 \times 0.7$ mm, pale pink-purple lacking darker spots; lower limb 3-lobed, \pm descending, $1.3-1.5 \times 1$ mm, pale pink-purple, center lobe longer and

wider than nearly semicircular lateral lobes, lower surfaces white-puberulent; **stamens** 2, attached at top of corolla tube, included; filaments straight, 0.7–0.8 mm long, colorless, glabrous; anthers with linear sacs, dorsifixed, ca. 0.35 mm long, colorless aging with some pigment, longitudinally and downward dehiscent; pollen colorless; **nectary disc** beneath pistil, 0.25 mm long, light green; **pistil** 1; ovary superior, deeply 4-lobed, lobes short-oblong, 0.35–0.4 × 0.2 mm, greenish, each lobe with 1 ovule; style arising between lobes at base (gynobasic), included, 4 mm long, colorless after pollination short-curved tip aging reddish, glabrous, tiny stigma next to anthers. **Fruits:** nutlets, (3–)4, ± ellipsoid slightly 3-sided, in range ± 1.2–1.4 × 0.6–0.7 mm, brown not glaucous, rounded on top with scar at other end, glabrous, finely textured and cobblestonelike (domed cells) drying collapsed.

A. C. Gibson