Vascular Plants of Williamson County

Veronica arvensis – COMMON SPEEDWELL [Plantaginaceae]

Veronica arvensis L., COMMON SPEEDWELL. Annual, taprooted and fibrous-rooted (along lower internodes), 1-several-stemmed at base, ascending to suberect, larger plants with decumbent longer branches, in range mostly to 12 cm tall; shoots with only cauline leaves, sparsely to moderately soft-hairy and also glandular-hairy in inflorescence. Stems: cylindric, ca. 1 mm diameter, lower stem often purple-red, internodes to 20 mm long, hairs mixed, having scattered pilose hairs to 2 mm long and a shorter, denser cover of strongly curved nonglandular hairs. Leaves: opposite decussate with pair often fused across nodes forming narrow ledges, having helically alternate leaflike bractlets in canopy, simple, petiolate grading to subsessile just below inflorescence (bractlets of inflorescence sessile), without stipules; petiole to 20 mm long, sparsely pilose on lower side and along edges; blade ovate, $< 5-14 \times < 4-9$ mm, broadly tapered to rounded or truncate at base, crenatedentate to crenate-serrate on margins, obtuse to rounded at tip, with 3–5 veins from base slightly sunken on upper surface and conspicuously raised on lower surface, surfaces with hairs curving toward tip aging sparsely hairy, lower surface often purple-red. **Inflorescence:** leafy raceme or panicle with a shorter raceme later forming at the lowest node, terminal, to 50 mm long, with strongly curved nonglandular hairs and other hairs glandular but heads often short-lived; peduncle short-several mm long; rachis glandularpilose and with shorter, dense, strongly curved nonglandular hairs; bractlet subtending pedicel leaflike and ca. half as long as cauline leaves, elliptic to lanceolate, at anthesis 4–5 mm long increasing to 7 mm long in fruit, decreasing upward and with fewer teeth on margins or sometimes entire at upper nodes, sessile, 3-veined at base, glandular short-hairy but heads often missing; pedicel inconspicuous, sometimes with axis < 1 mm long below each bractlet. Flower: bisexual, bilateral, in range ca. 3 mm across; calyx 4-lobed, glandular short-hairy on free surfaces; tube cuplike, 0.5 mm long; lobes unequal, narrowly elliptic, at anthesis the longest lobe $\pm 2.8 \times 0.7$ mm, another lobe ca. 2.3 mm long, two lobes $\pm 1.5 \times 0.5$ mm, lobes increasing $2 \times$ in fruit, green, obtuse and blunt at tip, with 1 principal vein and larger lobes with 2 minor veins at base; corolla 4-lobed, ca. 2 mm long, lacking conspicuous nectar lines; tube ± 0.5 mm long, white, lacking colorless short hairs at orifice; lobes overlapping, widely spreading, ca. 1.5 mm long, tapered at base, rounded at tip, the upper lobe ca. 2 mm wide, the other lobes more narrow, with lateral lobes equal and intermediate in width and the basal lobe the narrowest; stamens 2, fused to corolla tube near midpoint; filaments fusiform and slightly sigmoidal, 0.6-0.8 mm long, white, conspicuously slender at anther attachment; anther basifixed, dithecal, 0.35–0.4 mm long, dark blue-violet or dark blue, arrow-shaped at base, longitudinally dehiscent; pollen white; pistil 1, ca. 1.2 mm long; ovary superior, nearly circular in outline compressed side-toside, 0.5×0.5 mm, truncate and lacking at notch at tip, green, glandular short-ciliate from below midpoint to tip initially with curved hairs aging straight, 2-chambered, each chamber generally with 5–6 ovules; style of even diameter base-to-tip, 0.6–0.7 mm long increasing slightly in fruit, initially white, persistent and aging reddish in fruit; stigma capitate, light lavender. Fruit: capsule loculicidal and septicidal, 2-valved, often 8seeded, with 2 spreading lobes, compressed symmetrically heart-shaped, $2.2-2.4 \times 2.6-3$ mm, 0.8-1 mm thick, light brown, with notch ca. 0.3 mm deep, mostly glabrous and smooth on surfaces, glandular-hairy along edges except at base, the hairs with swollen

bases; style persistent; persistent calyx lobes spreading. **Seed:** elliptic in outline, ca. 1×0.7 mm, flattened top-to-bottom, pale brown, bumpy on sides (rugulose). A. C. Gibson