## Vascular Plants of Williamson County

Salvia coccinea - TROPICAL SAGE, SCARLET SAGE [Lamiaceae]

Salvia coccinea Murray, TROPICAL SAGE, SCARLET SAGE. Annual, taprooted, not rosetted, 1 -several-stemmed at base, with ascending branches, to 60 cm tall; shoots with only cauline leaves, foliage velvetine, short-villous and with scattered, colorless, subsessile glandular hairs. Stems: 4 -sided, to 4 mm diameter, 4 -angled, tough, mostly green, faces grooved to recessed-flat, short-hairy with downward-curved hairs and sessile to subsessile glandular hairs. Leaves: opposite decussate, simple, petiolate, without stipules; petiole channeled, $8-50 \mathrm{~mm}$ long, green, short-villous especially in channel; blade triangular or ovate to deltate, $16-70 \times 11-50 \mathrm{~mm}$, tapered to truncate at base often slightly oblique, serrate on margins, acute to obtuse at tip, pinnately veined with principal veins sunken on upper surface and raised on lower surface, basal lobes rounded, upper surface puberulent to short-hairy and sessile glandular hairs, lower surface densely short-villous. Inflorescence: interrupted panicle of paired, opposite cymes = loose clusters of flowers at consecutive nodes (verticils), principal panicle to 200 mm long and often with a pair of lateral branches at base, cyme $2-4$-flowered, flowers $\pm$ horizontal at pollination, bracteate, with shortvillous and glandular-hairy; peduncle stemlike; internodes of rachis to 25 mm long, conspicuously short-hairy; bract subtending cyme sessile, leaflike, paired at node, acuminate-ovate, the lowest to $11 \times 5 \mathrm{~mm}$, decreasing upward, cupped at base, short-ciliate on margins, surfaces short-villous and glandular-hairy; bract subtending pedicel acuminate; pedicel slender, at anthesis $2-3.5 \mathrm{~mm}$ long increasing somewhat and spreading in fruit, densely short-hairy with radiating hairs; flower when abscised from top of pedicel.
Flower: bisexual, bilateral, ca. 5 mm across (calyx), 28-30 mm long; calyx 2-lipped, 3lobed, ca. 10 mm long, lip sinuses equal to unequal; tube $\pm$ bell-shaped, $6.5-7.5 \mathrm{~mm}$ long, with 13 raised veins, orifice $4-4.5 \mathrm{~mm}$ across, veins on upper side $\pm$ purple and lower side green, short-hairy along veins and furrows with colorless glandular hairs, veiny in fruit, inner surface with sunken veins and puberulent above midpoint; upper lip ascending, unlobed, ca. $3 \times 4 \mathrm{~mm}$, 5 -veined, not sharply pointed at tip; lower lip lobes projecting forward, deltate, ca. $3 \times 3 \mathrm{~mm}$, hairs with red bases; corolla 2-lipped, in bud with sessile glandular hairs; tube ca. 15 mm long, lower portion flattened side-to-side, flared at base around ovary ( 2.5 mm wide), white at base to pale rose at top, upper portion ca. 6 mm long and short-pilose; throat funnel-shaped, ca. $12 \times 5.5-6 \mathrm{~mm}$, scarlet; upper lip ascending, hoodlike, $4-4.5 \mathrm{~mm}$ long, nearly keeled; lower lip descending and 3 -lobed, $7-8 \mathrm{~mm}$ long and $>$ upper lip, lateral lobes semicircular, central lobe notched and somewhat heartshaped; stamens 2 , fused to corolla on lower side, diverging upward from near the orifice to upper lip; stalk below anther fork ca. 5 mm long and mostly colorless (reddish at base), diverging axes 6 mm long and included (sterile and scarlet at tip) and fertile portion exserted and ca. 10 mm long and pink-rose; anther sac 2 mm long, crimson, longitudinally dehiscent; pollen colorless; nectary disc beneath ovary, with ovate lobe next to ovary on lower side, light green; pistil 1; ovary superior, deeply 4-lobed, lobes oblong-elliptic in outline, ca. $0.7 \times 0.4 \mathrm{~mm}$, glossy green, glabrous, each lobes with 1 ovule; style arising between ovary lobes at base (gynobasic), exserted on upper side ca. 7 mm from upper corolla lip, to 29 mm long, colorless at base and exserted portion rose, unequally 2branched, upper branch ca. 1.2 mm long and lower branch ca. 2.2 mm long, branches
stigmatic, slender, $0.4-0.45 \mathrm{~mm}$ diameter. Fruits: nutlets, $1-4$, elliptic in outline 3 -sided, $2.3-2.8 \times 1.1-1.3 \mathrm{~mm}$, pale gray (pale brown) with many black spots, rounded on back and with 2 flattish faces, rounded on base and top, smooth.
A. C. Gibson

