

Vascular Plants of Williamson County

Salvia reflexa – LANCE-LEAVED SAGE, ROCKY MOUNTAIN SAGE [Lamiaceae]

Salvia reflexa Hornem., LANCE-LEAVED SAGE, ROCKY MOUNTAIN SAGE. Annual, taprooted, not rosetted, typically 1-stemmed at base (unless resprouted after pruned), the canopy having mostly of ascending, opposite decussate branches formed at most nodes, in range to 60 cm tall; shoots with only cauline leaves, the lower leaves absent during flowering, axes and foliage with curved nonglandular short hairs and glandular hairs having colorless, wide heads, when handled strongly aromatic ± like spearmint (*Mentha*). **Stems:** 4-ridged aging cylindric at plant base, to 6 mm diameter, edges broad and rounded, furrows often with faint, raised midvein, nonglandular hairs downward-curved. **Leaves:** opposite decussate, simple, petiolate, without stipules; petiole channeled, to 16 mm long, channel white, with upward-curved nonglandular short hairs and subsessile glandular hairs; blade elliptic or oblong to lanceolate, in range $< 10\text{--}45 \times 2.5\text{--}9$ mm, long-tapered at base, inconspicuously low-serrate to subentire on margins, obtuse to broadly acute at tip, pinnately veined with principal veins slightly sunken on upper surface and raised on lower surface, upper surface essentially glabrous with some nonglandular hairs along midrib, lower surface uniformly pubescent with upward-curved nonglandular short hairs and glandular hairs sunken in pits. **Inflorescence:** raceme, terminal, with to 12 nodes, flowers mostly in pairs at node and pairs opposite decussate but the upper portion with only 1 flower per node and sometimes a lower node with 3 flowers (axillary flower + axillary 2-flowered cyme), nodes 10–20 mm apart, at anthesis flowers ± horizontal, bracteate, green tissues with curved short nonglandular hairs and scattered sessile to short-stalked glandular hairs; peduncle and rachis stemlike, 4-ridged, short hairs downward-curved, subsessile glandular hairs abundant in furrows; bractlet subtending flower suberect, leaflike lacking petiole, attached by low ledges across node, acuminate-lanceolate, $2\text{--}6 \times 0.7\text{--}1.3$ mm, the largest at the lowest node decreasing upward, persistent; pedicel ascending, cylindric, at anthesis 1–1.5 mm long increasing 2× in fruit, puberulent and with minute, short-stalked glandular hairs, persistent. **Flower:** bisexual, bilateral, 3–4 mm across; white-flowered individuals reported in range; **calyx** 2-lipped, 3-lobed, at anthesis ± funnel-shaped, ca. 6 mm long increasing some in fruit, 13–14-veined with raised veins appearing somewhat pleated, green or some veins reddish, sinuses of lip ca. 1.5 mm long increasing 2× in fruit, outer surface with upward-curved nonglandular hairs mostly along veins and subsessile glandular hairs in furrows, inner surface with scattered puberulent hairs and minute, short-stalked glandular hairs (smaller, colorless heads); lips in fruit ca. 3 mm long, upper lip unlobed, lower lip 2-lobed with sinus ca. 2/3 of lip sinuses; **corolla** 2-lipped, appearing 4-lobed, in range ca. 9 mm long, easily abscised; tube stretched by ovary and compressed side-to-side, $3.5\text{--}4 \times 0.5 \times 1.5$ mm, white, mostly glabrous but with puberulent hairs approaching throat; throat short; upper lip hoodlike, weakly 2-lobed, ca. 2×2 mm, light pink-purple to lavender, outer surface densely puberulent and with subsessile glandular hairs; lower lip 3-lobed ± fan-shaped, ca. $4 \times 3\text{--}3.4$ mm, > upper lip, light lavender with white patches, lobes semicircular, central lobe ca. 1×1.5 mm, lateral lobes ca. 0.5×1 mm, outer surface puberulent and with subsessile glandular hairs; **stamens** 2, fertile but each only with 1 anther sac (monotheal) positioned on upper side of flower with a portion of anther sacs exposed, fused to corolla near base of lower lip below sinuses; filaments ca. 1.2 mm long, white, glabrous; fertile anther 1 sac on arching connective ca. 1.5 mm long

(resembling filament), fertile anther sac dorsifixed, 0.8–1 mm long, rose-red, longitudinally and downward dehiscent, lower portion of anther with sterile sac backward-pointing ca. 1 mm long; pollen golden; **nectary disc** beneath ovary but crownlike having 4 points between ovary lobes with the longest to 1.4 mm long on lower side of flower, greenish, points with glandular hairs; **pistil** 1; ovary superior, strongly 4-lobed united only at base, the lobes somewhat 3-sided, 0.7–0.9 mm long, glossy light yellow-green, smooth, glabrous, each lobe with 1 ovule; style attached in center near base of ovary (gynobasic), 7–7.5 mm long, oriented to upper side and exerted 1–1.5 mm from hood, within flower white, glabrous, lavender and unequally 2-branched at top of hood with short branch 0.5 mm long curved downward and long branch ca. 1.5 mm long hooking upward. **Fruits:** nutlets, mostly 3–4, 3-sided rounded on back and flattened on 2 sides, ca. 2–2.5 × 1.4 mm, tan mottled pale brown, light brown, and brown, ± smooth (minutely pitted).

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