Vascular Plants of Williamson County

Salvia farinacea – MEALY SAGE [Lamiaceae]

Salvia farinacea Benth., MEALY SAGE. Perennial herb, clonal, rhizomatous, fibrous-rooted, not rosetted, clone several-stemmed at base arising from rhizome tips, soon principal shoots with pairs of lateral shoots arising at nodes having unexpanded leaves, ascending to erect, in range 30–100 cm tall; shoots with only cauline leaves, axes and foliage puberulent and short-hairy and with sessile glandular hairs having colorless heads; rhizome formed from buried lower stems, shallow, horizontal, to 4 mm diameter, with dark brown periderm; adventitious roots only arising on rhizomes. Stems: 4-sided, to 5 mm diameter, green often tinged reddish to purple-red, rounded on edges, with a pair of straight ledges across node and on the internode a pair of opposite, channels below the ledges, puberulent and with sessile glandular hairs, ledges with denser hairs, foliage strongly aromatic when crushed. Leaves: opposite decussate, simple, petiolate, without stipules; petiole channeled, 5-30 mm long, green sometimes with purple-red edges; blade ovate to lanceolate, $(20-)30-95 \times (5-)11-33$ mm, tapered at base, serrate on margins each tooth with callus tip, acute to acuminate at tip, pinnately veined with principal veins usually somewhat sunken on upper surface and raised on lower surface, surfaces densely puberulent on immature blade less conspicuous on mature blade, glandular heads partially sunken. Inflorescence: interrupted panicle of paired axillary cymes (verticils), terminal, not leafy, many-flowered, 45–150 × ca. 35 mm, each cyme condensed and 10+-flowered, flower at anthesis horizontal, bracteate, densely covered with short hairs and sessile glandular hairs; peduncle 4-sidded, stemlike, to 100 mm long, often purple-red; bracts at each node 2, each subtending cyme, decussate at successive nodes, acuminate-ovate, 6–9 × 3–5 mm, decreasing upward, 5-veined or 7-veined at base, yellow-green or purplish on margins, short-hairy and with sessile glandular hairs, sometimes hairs on margin violet; bractlet subtending pedicel absent; pedicel elongating in bud, at anthesis erect and 3–5 mm long, not elongating in fruit. Flower: bisexual, bilateral, 8–11.5 mm across (lower lip flattened); of 2 morphs, 1 with "mealy" calyx having dense white hairs with few violet hairs and corolla blue to violet-blue with a pair of white blotches on the lower lip versus 1 morph with calvx having darkly pigmented violet hairs with white hairs mostly on lower side and corolla dark violet-blue lacking white blotches on the lower lip; calyx subtly 2lipped, in bud \pm bell-shaped, to 8×3.5 mm, at anthesis and in fruit strongly compressed side-to-side, lobes inconspicuous, with 10 raised ridges converging at tips of lips, covered on outer surface with dense canescent with short hairs and green and glabrous on inner surface, mealy form with green surface visible through white hairs, violet form with green surface not visible through hairs and on inner surface ridges purple; **corolla** 2-lipped, lower lip with a pair of lateral lobes recurved and a broad, cordate central lobe; tube + throat at anthesis strongly compressed side-to-side, ca. 9 mm long, whitish at base to pale violet above, at midpoint with constriction and saclike above midpoint, pinched throat exserted 2 mm from pinched calyx, with pigmented hairs mostly above midpoint; upper lip hoodlike (galea), somewhat elevated above horizontal, ca. 6 mm long, outer surface with dense, violet hairs; lower lip horizontal with recurved lateral lobes, 12–14 mm long, lateral lobes semicircular, ca. 3 mm long, notched central lobe ca. $6 \times 10-11.5$ mm, from upper throat to central lobes white blotches ca. 8×1.5 mm often having 3 violet-blue nectar lines (central and 2 lateral), upper surface glabrous, lower surface with pigmented hairs; stamens 2,

fused to upper throat, attached below sinuses defining lips, included in hood of corolla upper lip; filaments curved, ca. 3 mm long, white, hingelike at top, attached just above midpoint of anther apparatus 6–7 mm long, pale violet, having a pair of ascending curved arms, a downward-pointing, tonguelike projection with a violet medial groove, and a flaring, flat, triangular lobe 1 mm long between the upper and lower portion; anthers 2 with only 1 sac on arching connective (monothecal), 1.5 mm long, dark purple, longitudinally dehiscent; pollen yellow-orange; nectary disc beneath ovary with long back on lower side of ovary, chairlike, 1.2 mm long and white back, base ca. 0.3 long and greenish, producing thin nectar; **pistil** 1; ovary superior, strongly 4-lobed, lobes sausage-shaped, 0.8×0.4 mm, pale green, with several papillate hairs at top, 2-chambered, each lobe with 1 ovule; style exserted, attached to ovary base at center of ovary lobes (gynobasic), ± straight, ca. 14 mm long, white to midpoint and pale violet to light violet above midpoint, above midpoint with opposite rows of light violet, short-villous hairs, unequally 2-branched above the longest hairs, the stigmatic longer branch exserted from corolla hood and recurved, ca. 2.5 mm long and light violet, the shorter branch spreading to 0.8 mm and darker. Fruits: nutlets, (1-)4, ellipsoid compressed front-to-back (not flat), $2-2.3 \times 1.1 \times 0.8$ mm, brown and glaucous, smooth.

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