## **Vascular Plants of Williamson County**

Salvia greggii – CHERRY SAGE, GREGG'S SAGE, AUTUMN SAGE [Lamiaceae]

Salvia greggii A. Gray, CHERRY SAGE, GREGG'S SAGE, AUTUMN SAGE. Suffrutescent perennial, in range semi-evergreen dieback with woody lower stems, not rosetted, manystemmed at base, at many nodes with pairs of unexpanded axillary shoots having 2 or 4 diminutive leaves, in range to 60 cm tall; shoots with cauline leaves, axes short-hirsute and with scattered subsessile glandular hairs having large, cloudy heads, foliage blades not short-hirsute but with densely dotted with sessile glandular hairs sunken in pits. Stems: 4sided, tough, green or tinged red, edges rounded, nodal ledges short-ciliate, the pair of faces of internode beneath shallowly channeled; older stems with pairs of persistent leaf bases, with brown periderm having splitting internodes. Leaves: opposite decussate, simple, petiolate with a pair of ledges across node, without stipules; petiole shallowly channeled, to 15 mm long; blade ovate or elliptic (oblanceolate), 8–48 × 3–22 mm, tapered at base,  $\pm$  low-crenate on margins, rounded at tip, pinnately veined with principal veins sunken on upper surface and raised on lower surface, surfaces minutely pitted, each pit with a sunken glandular hair. Inflorescence: raceme, terminal, having a pair of flowers at each node opposite decussate at successive nodes, flowers ascending, bracteate, with dense short-stalked glandular hairs having clear, spheric heads and scattered sessile glandular hairs with larger, cloudy heads; peduncle 4-sided and stemlike, to 15 mm long; rachis stemlike with rounded edges, for each internode 1 pair channeled, 9–12 mm long, striped with rose to crimson or purple-red and green, with a pair of green persistent bractlet bases; bractlet sessile, abscised before anthesis (truncate), blade acute-obovate and strongly cupped,  $4-5.2 \times 3-4$  mm, mostly green below midblade and purple-red above midblade, ca. 7-veined at base, lower surface glandular-hairy, upper surface without hairs; pedicel suberect to ascending,  $\pm$  cylindric, at anthesis  $4-5 \times 0.7-0.9$  mm, purple-red or with some green, densely glandular-hairy. Flower: bisexual, bilateral, 12–15 mm across, vertically to 20 mm across; calvx 2-lipped, 3-lobed, in range 11–12 mm long, green at base to purple-red or crimson at or below midpoint, 14-veined conspicuously ribbed, outer surface densely glandular-hairy with short-stalked and sessile hairs, inner surface green with sunken veins and short, ampulelike glandular hairs; tube funnel-shaped compressed sideto-side, ca. 5 mm wide at orifice, with 7 ribs to each lip; upper lip unlobed, acute, deltate, ca. 3.5 mm, somewhat folded, purple-red; lower lip 2-lobed, lobes asymmetrically ovate, ca.  $2 \times 3 - 3.5$  mm, purple-red, each lobe 2-ribbed and with 1 rib to sinus; **corolla** 2-lipped, 4-lobed, ca. 25 mm long, crimson or scarlet to rose-red or dark rose (cultivated plants = sources of escaped plants, but white-flowered forms not observed in wild); tube expanded around ovary and nectary compressed side-to-side, 3–3.5 mm long, white, without hairs; throat straight on upper side and narrowly saclike on lower side, ca. 12 mm long, compressed side-to-side and 4.5–5 mm wide at orifice, rose to rose-red, lacking hairs; upper lip strongly hooded 4.5–5 mm wide, obovate (flattened), ca. 9 mm long, outer surface with red to purple-red hairs (darker than the lip); lower lip 3-lobed, lateral lobes to midpoint, ear-shaped, ca.  $6 \times 2.5-3$  mm, glabrous, central lobe widely spreading and semicircular in outline, ca. 7 × 14 mm, darker than throat, crimson or scarlet to rose-red, with 3 broad, shallow lobes to deeply cleft with 2 large sublobes, without hairs; **stamens** 2, attached near corolla orifice attached to floor near lower corolla lip, with anthers in upper

corolla lip (not exserted); filaments oriented upward, 3.5–4 mm long, translucent white, glabrous; anther with 1 sac on straight connective ca. 14 mm long (resembling filament), the connective hinged to filament at midpoint with the 2 connectives fused on the sterile half and free on the fertile half, having a deltate lobe next to filament 1 mm, connective and lobes white to pale rose, on sterile half rose in furrow, with reddish short hairs on downward side, sac 2 mm long, rose-red, longitudinally and downward dehiscent; pollen light yellow; **nectary disc** below ovary ca. 0.5 mm long + ovate flange on 1 side 1.5 mm long, pale green; **pistil** 1; ovary deeply 4-lobed, obovoid, 1 mm long, light green, glabrous, 2-chambered, each lobe with 1 ovule; style attached to ovary ase at center of ovary lobes (gynobasic), exserted, ca. 25 mm long, 2-branched, white at base becoming rose below fork, the branches fully exserted, the upper branch acuminate and curved upward backward, ca. 3.5 mm long, having rose-colored, short-pilose hairs on upper side comblike, the lower branch acute, 2 mm long. **Fruits:** nutlets, 0–2(–4), often not forming and not observed in wild (individual plants apparently self-incompatible), oblong 3-sided with rounded outer side and top and  $2 \pm$  flattened inner sides,  $2.6-3.3 \times 1.3-1.7(-2)$  mm (cultivated plants), satiny brown to dark brown or grayish dark brown sometimes subtly mottled (tan), glabrous.

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