

Salvia L. SAGE

Salvia mellifera Greene, BLACK SAGE. Shrub, drought-deciduous to semi-evergreen (unexpanded leaves present) or evergreen (moister microhabitat), with ascending to erect branches, 50–200 cm tall; shoots green, appressed-canescenscent and sparsely glandular with colorless spheric hairs aging milky, strongly aromatic. **Stems:** conspicuously 4-sided with rounded edges aging cylindrical, internodes 20–80 mm long, the shorter ones = first-formed leaves of spring growth and on lateral branches. **Leaves:** opposite decussate, simple, petiolate with pair connected by 2 low, archlike ledges across node, without stipules; petiole crescent-shaped in \times -section, 2–13 mm long, winged and grading into blade, upper side minutely capitate-glandular, lower side puberulent and glandular-hairy; blade narrowly elliptic to oblong or oblanceolate, 18–75 \times 4.5–18 mm, tapered at base, short-crenate on margins, acute or obtuse to narrowly rounded at tip, pinnately veined with all veins sunken on upper surface and principal veins raised on lower surface, upper surface green, low-cobblestonelike, initially minutely capitate-glandular aging without hairs, lower surface grayish puberulent and glandular, with veins forming network outlining sunken tissue. **Inflorescence:** condensed cymes, axillary, in congested, headlike clusters (verticils) of 2 per node, produced as a flowering axis terminating each spring shoot, ascending to erect, 55–400 mm long (including peduncle), forming 1–2 vegetative nodes with diminutive leaves and then to 5 spaced or somewhat crowded verticils (sometimes with pairs of secondary axillary branchlets at node above the leaves; verticil spheroid or somewhat flattened top-to-bottom, 7–34 mm across + spreading corollas, many-flowered, flowers \pm sessile, bracteate, densely glandular-hairy like shoot and resinous; peduncle stemlike, to 160 mm long, short-strigose with downward-pointing hairs; axis 4-sided, in internode with 2 opposite sides grooved, lower axis mostly short-strigose changing to upper axis mostly glandular-hairy and resinous; verticil bract subtending each cyme leaflike, spreading to reflexed, oblong to ovate, 4.5–15(–22) \times 3–9 mm, larger and more leaflike on lower cymes decreasing upward; bract subtending each branch and bractlet subtending flower ovate to oblanceolate or linear, $< 9 \times 3$ mm, decreasing and more narrow from bracts to bractlets. **Flower:** bisexual, strongly bilateral, 4–4.5 mm across; **calyx** obliquely 2-lipped, 5–6 mm long increasing slightly in fruit, densely glandular-hairy and resinous, internally lips with minute hairs; tube straight funnel-shaped, 10–11-veined; upper lip \pm hooded and slightly compressed side-to-side, 2–3 mm long, with short point; lower lip 2-lobed, ± 1.3 mm long, lobes acuminate to acute with fine tip, 1 mm long; **corolla** 2-lipped, 9–14.5 mm long, moderate or light purple to pale lavender (nearly white) on lips (1 shade per plant) and fading into tube; tube + throat gradually enlarging, 5.5–9.5 mm long, straight with \pm curved-expanding throat; tube white at base to \pm lavender above, internally with dense ring of ascending pale lavender to whitish hairs separating tube from throat; upper lip 2-lobed, slightly ascending or only lobes curved upward to bent upward 90° at midpoint, heart-shaped, 2.7–7 \times 2.2–4.8 mm, nearly white or pale blue to lavender, lobes overlapping, equal, rounded, separated by sinus 0.6–1.3 mm deep; lower lip descending 90° to axis of tube, 3-lobed, 3.7–6 \times 3–4 mm, lateral lobes ca. 1.5 \times 1.7–2.5 mm wide, rounded at tip, central lobe 2.1–2.6 \times 2.9–4 mm, with a short but wide whitish base, distinctly 2-lobed with sinus 0.3–0.8 mm deep and having cupped sublobes; **stamens** 4, fused to upper throat, dimorphic, the upper 2 sterile, attached below

sinus between lips, rudimentary and inconspicuous, 0.7–0.8 mm long, the lower 2 fertile, fused to top of throat at orifice attached below sinus of lower lip, exerted; filaments of fertile stamens 1.7–2.5 mm long, pale lavender to white, glabrous; anther with 1 sac on arching connective 2–2.2 mm long resembling filament color, sac oblong-elliptic, 3–4 mm long, dark lavender, along back olive green and purplish red along back and aperture to lavender, with colorless glandular hairs along connective to midpoint, longitudinally dehiscent; pollen lavender, sticky; **nectary disc** = base beneath ovary, 0.7 mm across increasing to 1.2 mm in fruit, white; **pistil** 1; ovary superior, strongly 4-lobed, the lobes compressed sausage-shaped, ca. 0.5 mm long, each lobe with 1 ovule; style attached to base and in center of ovary lobes, exerted straight next to upper lip, 8–10 mm long, white at base grading to light lavender or dark violet, glabrous, unequally 2-branched, the branches initially appressed, lower branch spreading to recurved, 1–2 mm long, the upper branch \pm 0.6 mm long. **Fruits:** nutlets, 1–4, ellipsoid to obovoid or oblong, (1.9–)2.2–2.8(–3.2) \times 1–1.3(–1.4) mm, mottled black and brownish gray and with dark raised dots, rounded on outer side. Mid-January–early September.

Native. Aromatic shrub and the most common sage of coastal sage scrub throughout the range, but also common in many forms of chaparral. *Salvia mellifera* becomes dormant during summer drought and tends to lose its leaves, but small leaves often persist on unexpanded axillary shoots, and there are always some individuals in moister microhabitats that retain some green leaves year-round. Black sage has light purple flowers, but at some populations individuals have flowers that are nearly white and at other sites much darker than average, but one can also find a pale lavender individual growing next to a plant with much darker flowers.

B. A. Prigge & A. C. Gibson