

Verbena pulchella Sweet, MOSS VERBENA. Annual or perennial herb, taprooted and fibrous-rooted at base of the shoot, many-stemmed at base, decumbent (ascending), in range 10–25 cm tall, spreading to 40 cm from taproot; shoots somewhat 2-dimensional (plagiotropic), appearing tufted by forming leaves on short axillary shoots, sparsely strigose with upward-pointing white hairs; adventitious roots at nodes of basal stems. **Stems:** initially 4-angled aging cylindric, to 4 mm diameter, with purplish red angles, becoming glabrescent. **Leaves:** opposite, 1–2-pinnately dissected, petiolate with pair connected by low ledges across node, without stipules; petiole winglike and indistinct from blade, to 8 mm long; blade broadly ovate to obovate in outline, 8–40 × 5–40 mm, segments linear to narrowly lanceolate or oblanceolate, 2–12 × 1–2 mm, often drying inrolled under (revolute), pinnately veined with principal vein of each segment raised on lower surface. **Inflorescence:** spike, terminal, densely flowered, at anthesis appearing flat-topped, axis elongating in fruit, flowers opposite decussate, bracteate, strigose; peduncle 10–40 mm long; rachis at anthesis 18–30 mm long increasing to 95 mm long in fruit by forming internodes; bractlet subtending flower awl-shaped to lanceolate, 3–5 × 1–1.3 mm, green with white strigose hairs, ciliate-strigose on margins, commonly with 1–several widely spaced glands exserted from strigose pubescence, the glands circular and thick-rimmed, purplish red to brownish on rim with depressed green center; pedicel short or absent, aging amber to brownish or dark purplish red. **Flower:** bisexual, slightly bilateral, 7–14 mm across with oblique limb, 11–16 mm long; **calyx** 5-lobed (toothed); tube cylindric, 6.5–8 × 1.1–1.7 mm, expanding slightly above midpoint, ± pleated, greenish and ribbed and whitish to translucent-purple in furrows, with several glands like those on bractlet; teeth unequal, narrowly tapered, 0.3–1.8 mm long; **corolla** 5-lobed, narrowly trumpet-shaped (salverform), > calyx, generally reddish purple (magenta) or deep purple to blue-purple (all-white cultivars); tube 6.5–8.5 × 0.7–1 mm, internally glabrous to midpoint and hairy above midpoint, the hairs varying from upward-pointing to downward-pointing or spreading, fading to white at base; throat slightly expanding from tube, 2.5–3.5 mm long, internally white-hairy with downward-pointing hairs on lower part opposite lower anthers to upward-pointing hairs on upper part; lobes unequal, 4.5–5 × 2.5–4.5 mm, wider and notched at tip or shallowly 2-toothed, brilliantly colored but paler on lower surface; **stamens** 4, all fertile, pairs fused to corolla at different levels, 2 stamens arising at top of corolla throat and barely visible and 2 stamens at base of throat and not visible, upper stamens 1–1.5 mm long and lower stamens ± 1 mm long; filaments ± 0.7 mm long (upper stamens) and 0.5 mm long (lower stamens), yellowish green, anthers basifixed, dithecal, ± heart-shaped, having equal sacs but obliquely positioned or unequal and having a subterminal appendage (upper stamens) and equal or subequal sacs lacking appendage (lower stamens), ± 1 mm long, yellowish green, longitudinally and inwardly dehiscent, the appendage = a fingerlike extension of connective ± 0.5 mm long, purple and resembling cluster of grapes (colliculate); pollen whitish to pale yellow; **pistil** 1; ovary superior, 4-lobed, ± 1 mm × 0.6 mm, 4-chambered, each chamber with 1 ovule; style nearly = corolla tube-throat (typically 9–10 mm long), light green, compressed side-to-side approaching 2-forked tip, light green, with stigma in crotch, the longer fork surpassing stigma, ± conic, arched outward and compressed side-to-side, the shorter fork triangular and < stigma; stigma at same level as upper anthers, ± spheroid, dark green at base to pale green above, papillate. **Fruits:** schizocarp (microbasarium), of 4 dry, 1-seeded mericarps (nutlets),

nutlets oblong-linear, 3–4 × 0.7–1 mm, the widest and slightly flaring at base, brown on outer faces, angled with fine, warty growths (muricate) on inner faces, longitudinally 4-veined on outer face but with cross veins and appearing pitted above midpoint; persistent calyx with several purple stripes before drying. Mid-April–late September.

Naturalized. Annual or perennial herb used in landscaping but during wet years appearing naturalized in dry disturbed fields and along roadsides or trails near homes where they may receive supplemental water, e.g., along the perimeter fence of the Chatsworth Reservoir and in Thousand Oaks (SH). *Verbena pulchella*, formerly known locally as *V. tenuisecta*, has leaves that are deeply 1–2-pinnately dissected, and green organs are strigose with white hairs. This species has a very showy, vibrant purple corolla with a tube-throat longer than the calyx and the flower is generally at least ten millimeters across. Flowers of the cultivars come in several shades of purple but may be white, and any of these forms can be expected in range.

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