

Muhlenbergia asperifolia (Trin.) Parodi, SCRATCH GRASS, ALKALI MUHLY. Perennial herb, rhizomatous, stolon-bearing, fibrous-rooted, several-stemmed at base, with flowering shoots arising from long, scaly rhizomes or leafy stolons, decumbent (creeping to pendent), < 50 cm tall, spreading to 100 cm long; shoots with tough, persistent cauline leaves, glabrous; adventitious roots nodal. **Stems (culms):** compressed, to 1.5 mm diameter, glossy, internodes 15–45 mm long, with surface layer separating from and then loosely enveloping stem (\pm persistent), sparsely wrinkled, longitudinally creased or split. **Leaves:** alternate distichous, simple with sheath; sheath open with margins overlapping at base, 10–45 mm long, < to slightly > internode, somewhat compressed but not keeled, low-ridged, without lobes (auricle) at top; ligule membranous, truncate, in range 0.2–0.8 mm long, jagged and minutely ciliate on margin, continuous with sheath margin; blade long acuminate-linear, 10–50(–70) \times 1–2.5 mm, widened and puckered at collar, flat to somewhat folded upward from midrib, minutely toothed and colorless on margins from base to tip, parallel-veined with a weakly defined midrib and principal veins slightly raised on lower surface, upper surface minutely puberulent along veins. **Inflorescence:** spikelets, in terminal, open, wispy panicles, panicle ovate in outline, 50–210 mm long (including peduncle), spikelet with 1(–2) floret, bracteate, lacking awns; basal axis 10–20 mm long; principal branches ascending to widely spreading, typically 1 branch per node (rarely opposite), axes minutely scabrous, each with a greenish yellow pulvinus at base; stalk of spikelet 6–13(–18) mm long. **Spikelet:** narrowly lanceoloid, 1.5–1.7 mm long, not compressed, often purplish, glabrous, breaking above glumes; **glumes** 2, < spikelet length, subequal (equal), 0.7–1.4 mm long, lower glume usually < and narrower than upper glume, membranous but often purplish below midpoint, typically 1-veined, minutely scabrous along vein, acute at tip; **lemma** \pm 1.5 mm long, membranous often purplish, sometimes keeled, 3-veined with veins not convergent at tip, minutely fringed or with a slight midrib extension at tip, inconspicuous scabrous along midvein (keel) above midpoint or only just below tip; **palea** ca. length of lemma, membranous often purplish, 2-keeled along veins or simply 2-veined, grooved between veins below midpoint, inconspicuously scabrous along veins above midpoint. **Flower:** bisexual; **perianth (lodicules)** 2, free, fan-shaped, < 0.2 mm long, \pm fleshy, translucent-white; **stamens** 3, free; filaments threadlike, 0.8–1 mm long, whitish; anthers exserted, versatile, dithecal, 0.8–1.7 mm long, yellow aging with purple, longitudinally dehiscent; pollen light yellow; **pistil** 1; ovary superior, ovoid to spheroid, 0.2–0.3 mm long, greenish or yellowish green, 1-chambered with 1 ovule; styles 2, at anthesis exserted from near lemma midpoint, touching at base, 0.6–0.8 mm long, threadlike and white to midpoint, feathery (plumose) and purple above midpoint. **Fruit:** achene (caryopsis), released with lemma and palea, lanceoloid to narrowly fusiform or ellipsoid, 0.8–1 \times 0.3 mm, dark brownish to blackish, finely textured. Early September–early October.

Native. Perennial herb first collected in range by Carl Wishner in the early 2000s and known from south of Rindge Dam in Malibu Canyon (SMM), but expected elsewhere on similar wet rock faces. *Muhlenbergia asperifolia* is a creeping, C₄ plant with long stolons, from which arise shorter shoots. During late summer a shoot produces a terminal inflorescence. The open, wispy inflorescence of scratch grass superficially resembles *Panicum*, but the glumes are very different.

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