

*Digitaria* Haller CRABGRASS

*Digitaria ischaemum* (Schreb.) Muhl., SMOOTH CRABGRASS. Annual (if persisting forming dense clump), fibrous-rooted, several-stemmed at base, branched at lower nodes, spreading and decumbent, to 25 cm tall; shoots mostly glabrous but pubescent and pilose on inflorescence and sometimes sparsely pubescent on leaves; adventitious roots at nodes.

**Stems (culms):** cylindrical but D-shaped at base of lateral branch (superficially appearing flattened with sheath enveloping both branches), 1.5–2.5 mm diameter (nodes 3–5), often purplish red, internodes 3–55 mm long increasing from base to tip, slightly bent at nodes.

**Leaves:** alternate distichous, simple with sheath; sheath open, 10–35 mm long (of flag leaf 42–64 mm long), commonly > internode, green but sometimes purplish above node, angled along midrib, compressed side-to-side, membranous on both or only exposed margin when young, glabrous or sparsely and finely puberulent; ligule membranous, (0.6–)1–1.8(–2.5) mm long, semi-translucent and whitish to pale green, continuous with sheath margins, entire or irregularly jagged on curved margin, glabrous or with a 1–3 pilose hairs on sides; blade narrowly lanceolate, 13–67 × 3.5–8 mm, (flag leaf 36–45 × 5–7 mm), glabrous (with several papillate-based hairs). **Inflorescence:** spikelets, in terminal and axillary, ± umbel-like (digitate to subdigitate) arrays with 2–6 branches (terminal flowering axis + 1–5 lateral branches), the branches (17–)35–53 × 1 mm, 1-sided with 2 or 3 stalked spikelets per node on lower side, bracteate; peduncle 95–175 mm long, with pulvinus at top; rachis 1 mm long (1-branched) or 2.5–13 mm long (with 2–5 lateral branches), with sparsely pilose nodes, with pulvinus in axil of each lateral branch, the pulvinus bulbous, yellowish green, ± pilose, larger on basal branches; branches with raised whitish midvein and green winged margins, ± wavy on margins; stalks at each node unequal, 0.3–0.6 mm, 0.7–1.2 mm, and 1.5–1.8 mm long, with the longest partially fused at base to midrib.

**Spikelet:** of 2 florets but only upper floret fertile, ovate, compressed top-to-bottom, breaking below glumes; **glumes** 1 or 2, lower glume absent or reduced, appressed, semi-encircling, 0.1–0.3 mm long, membranous-translucent, veinless; upper glume ovate, 1.8–2 mm long, membranous, 3-veined, sericeous to short-pilose in fruit; **lemmas** 2, of sterile lower floret similar to upper glume but 5-veined; of fertile upper floret lanceolate, 1.8–1.9 × 0.8–0.9 mm, brown, glabrous, with colorless margins wrapped around palea and fruit, becoming very hard, finely striped; **palea** of upper floret ovate-lanceolate, 1.65 × 0.85, brown, not keeled, partially enveloping fruit, faintly 2-veined, finely striped; **Flower:** bisexual; **perianth (lodicules)** 2, fan-shaped, 0.2 × 0.2 mm; **stamens** 3, free; filaments ca. 1.8 mm long, white; anther exerted, versatile, dithecal, 0.6 mm long, light yellow, arrow-shaped at base, longitudinally dehiscent; pollen light yellow; **pistil** 1; ovary superior, lanceoloid, 0.5–0.8 × 0.2–0.3 mm, semi-translucent, 2-forked at top; styles 2, 1.5–1.7 mm long, threadlike on basal 2/3, plumose stigmatic and reddish from 0.6 mm to tip. **Fruit:** achene (caryopsis), enclosed within spikelet bracts, ellipsoid compressed slightly top-to-bottom, 1.4–1.5 × 0.7–0.8 mm, creamy white to pale grayish green, opaque; upper glume short-pilose, lemma and palea brown. Early August–mid-September.

Naturalized. Annual long-listed from range but first vouchered in 2009 from a wet roadside habitat on Mulholland across from SMMNRA Peter Strauss Ranch. *Digitaria ischaemum* has a darkly pigmented lemma of the fertile floret, which is easy to observe when in blooming, and dark brown when covering the fruit.

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