

Bromus arenarius Labill., AUSTRALIAN BROME, AUSTRALIAN CHESS, SAND BROME.

Annual, fibrous-rooted, 1–several-stemmed at base, erect to ascending, 15–65 cm tall; shoots with only cauline leaves, soft-pilose with ascending to backward-pointing hairs.

Stems (culms): cylindric, to 2.2 mm diameter, internodes 12–105 mm long, nodes generally concealed by leaf sheaths, glabrous; internodes hollow. **Leaves:** alternate distichous, simple with sheath; sheath closed most of length but later often splitting, 25–95 mm long, open portion 4–22 mm long, finely pilose, without lobes (auricles) at top; ligule membranous, truncate and jagged with teeth, 1.2–5 mm long, pilose on outer surface; blade linear, 45–250 × 1.3–4 mm, inrolled on margins, parallel-veined, finely pilose.

Inflorescence: spikelets, in terminal, open panicles, panicle pyramidal, 50–190 × 25–90 mm, spikelet with (5–)7–9(–14) florets, bracteate, soft-hairy, awned; peduncle 20–220 mm long, glabrous; rachis with 2–6 nodes and 1–6 lateral branchlets or stalked spikelets per node, sparsely pubescent to pilose at nodes; lateral branches arching to spreading or drooping, 15–40 mm long, with ascending hairs; stalk of spikelet 5–20 mm long, arching to S-shaped, 5–20 mm long, pubescent like branches. **Spikelet:** lanceoloid compressed side-to-side, 14.8–17 × 4.5–7.2 mm (excluding awns), breaking above glumes and between florets; **glumes** 2, unequal, folded-lanceolate, lower glume folded along midvein or narrowly convex, 6.7–9 × 0.6–0.9 mm and 3-veined, upper glume asymmetrically folded or narrowly convex, 8.5–10.2 × 0.8–1 mm and 7-veined, 1.3–2.1 mm difference in length, narrowly acute at tip, membranous on margins and at tip, green along and between veins to whitish semi-translucent becoming reddish tinged on margins, lower glume pilose at base and on margins and finely pubescent near tip, upper glume pubescent to strigose with soft, ascending hairs; rachilla 1.2–2.8 mm long, glabrous on flat to slightly concave side and convex side with ascending hairs; **lemma** awned, lanceolate (folded), 9.5–11.2 × 1.2–2 mm (= folded, midrib to margin), symmetrically or asymmetrically folded but narrowly convex medially, green and 5–7-veined with membranous margins (veins darker), 2-toothed at tip, with awn arising 1–2 mm below tip, short-pilose with ascending hairs, the awn generally arching outward, 10.5–16 mm long, rigid, scabrous with upward-pointing teeth; **palea** membranous, narrowly elliptic, 7–8.3 mm long, 2-veined, 2-keeled along veins, narrowly rounded to slightly indented (retuse) at tip, pilose-ciliate along keels, with margins folded inward and partially enveloping ovary, whitish or pale green between keels and transparent on margins, narrowly rounded to retuse at tip. **Flower: perianth (lodicules)** 2, asymmetric semi-lanceolate to semi-ovate, ± 1 × 0.25 mm, membranous; **stamens** 3, free, included; filaments ca. 2.5 mm long; anthers dithecal, 0.6–1 mm long, light orange-brown, longitudinally dehiscent; pollen light yellow; **pistil** 1; ovary superior, narrowly oblanceoloid, at anthesis ± 2.5 mm long, having an erect, hairy, obtuse flap at tip, 1-chambered with 1 ovule; styles 2, ca. 1.5 mm long, with stigmatic hairs most of length. **Fruit:** achene (caryopsis), narrowly ellipsoid to oblong, 6.5–7.2 × 1–1.2 mm, tapered at base, rounded at top, next to palea slightly concave and medially ridged, on lemma side convex, tannish, with persistent styles forming a cobwebby mass at tip of fruit.

Naturalized. Annual historically known from sandy areas near Malibu.

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