

Cynosurus echinatus L., BRISTLY DOGTAIL. Annual, fibrous-rooted, 1–several-stemmed at base, sometimes branched at lower nodes, erect, 90–150 cm tall; shoots with basal leaves and cauline leaves, glabrous. **Stems (culms):** cylindric, to 2.8 mm diameter, with ca. 6 internodes, internodes 60–270 mm long, glabrous; internodes hollow. **Leaves:** alternate distichous, simple with sheath; sheath open, 38–100 mm long, rounded, smooth, without lobes (auricles) at tip; ligule continuous with membranous margins, arched and narrowly rounded, 5–7.2 mm long, sometimes minutely scabrous; blade linear, 30–130 × 4.5–14 mm, flat, entire or sometimes scabrous on margins, narrowly acute at tip, upper surface scabrous approaching tip. **Inflorescence:** spikelets, in terminal, condensed, ± 1-sided panicles, panicle narrowly ovoid to subspheroid, 30–60 × 10–25 mm (including awns), having 1 principal lateral branch per node from 5–9 nodes, with fertile spikelets and sterile spikelets, spikelet with (1–)3(–5) florets, bracteate, glabrous, awned; lateral branches ascending, short and commonly branching again in basal portion, bearing stalked spikelets generally with the lower spikelets along a branch fertile and the other spikelets (distal ones) paired by having an inner spikelet fertile and the outer spikelet sterile; stalks of spikelets 0.4–1 mm long. **Sterile spikelet:** neuter, flat-ovate, 10–13.5 × 12–25 mm, with 6–18 bracts (= 2 glumes + lemmas), bracts initially ascending, linear-lanceolate to 11 mm long + awn ca. 2/3 length of bract (glumes and the lowest lemmas) to lanceolate and 5 mm long + awn 1/2 length of bract (upper lemmas), bracts aging spreading and bent at base, spikelet not breaking apart. **Fertile spikelet:** 8–12 mm long (excluding awns), breaking above glumes and between florets; **glumes** 2, equal to subequal, narrowly lanceolate compressed side-to-side, (5.5–)8.5–10.5(–12) × (0.4–)0.9–1.3 mm, lower glume ≤ upper glume, membranous, 1-veined, glabrous; rachilla 0.8–1.1 mm long; **lemma** awned, lanceolate, 12.8–17 × 0.8–1.1 mm (including awn), rounded on back, 5-veined, scabrous above midpoint, 2-toothed with acute to needlelike tips 0.5–2 mm long (bifid), the awn arising from notch and 7.5–12 mm long; **palea** ≅ lemma, 4.5–6 × 1 mm, 2-veined, bifid. **Flower:** bisexual; **perianth (lodicules)** 2, ± mitten-shaped, ca. 1 × 0.5 mm, translucent; **stamens** 3, free; filaments ca. 1 mm long, translucent; anthers dorsifixed, dithecal, linear, 1.4–4 mm long, light yellow, longitudinally dehiscent; pollen light yellow; **pistil** 1; ovary superior, ovoid to ellipsoid, ca. 1 mm long, glabrous, 1-chambered with 1 ovule; styles 2 separate to base, 2.6–2.8 mm long, the lowest portion smooth, most of length feathery-stigmatic. **Fruit:** achene (caryopsis), adherent to lemma and palea, ellipsoid to oblongoid, 3–4 × 1–1.3 mm, broadly grooved on palea side. May–early July.

Naturalized. Annual first collected in range in summer, 2012 by Tarja Sagar along a drainage bottom on the backbone trail west of Castro Peak (SMM), growing in association with *Quercus agrifolia*, *Salix lasiolepis*, and *Baccharis salicifolia*. *Cynosurus echinatus* is an undesirable addition to the flora, and will be eradicated. This grass has a curious inflorescence, producing neuter spikelets with awned lemmas and awned fertile spikelets.
B. A. Prigge & A C. Gibson