

Melica imperfecta Trin., LITTLE CALIFORNIA MELIC. Perennial herb, not rhizomatous, fibrous-rooted, many-stemmed at base, cespitose, spreading to erect, 50–120 cm tall; shoots with short basal leaves and several cauline leaves. **Stems (culms):** cylindric slightly compressed, to 2 mm diameter, tough, with internodes short at base and to 75 mm long at midculm, glabrous; internodes hollow. **Leaves:** alternate distichous, simple with sheath; sheath closed mostly to top of sheath but sometimes open on short sheaths of basal leaves, 30–210 mm long, ridged with the most conspicuous ridge descending from midrib, pilose to pubescent (basal leaves) to glabrous (cauline leaves), without lobes (auricles) at top; ligule membranous and obtuse, in range 2–3.5 mm long, cut or jagged, continuous with 1 margin, glabrous; collar pale yellow turning purplish red and with a patch of pilose hairs near margin; blade linear, 45–175 × 2.5–6 mm, the widest at base, mostly folded, slightly keeled, with inrolled margins, narrowly tapered with upturned margins at tip, parallel-veined with well-defined midrib, upper surface pilose to sparsely pubescent, lower surface pubescent to glabrous. **Inflorescence:** spikelets, in terminal, open panicles, panicle lanceoloid to ovoid in outline, mostly 200–300(–360) × 50–100 mm long, with erect, ascending, and spreading (reflexed) lateral branches often on the same panicle, lateral branches helically alternate, at each node with 3–4 spikelets per node (fewer approaching tip), spikelets spaced ca. length of spikelet, with 2(3) florets having lower 1–2 florets bisexual and the upper floret sterile and rudimentary (staminate), bracteate, lacking awns; rachis ridged and slightly twisted, smooth at base to minutely scabrous approaching tip, glabrous; lateral branches slender and straight, 8–90 mm long decreasing upward, minutely scabrous or with fine, short, ascending hairs; stalks of spikelets 0.4–4 mm long. **Spikelet:** lanceolate, 3.5–4.5 × ± 1 mm, breaking above glumes; rudimentary flower = inrolled lemma narrowly sausage-shaped or club-shaped appearing terminal on rachilla, rachilla whitish or purplish at tip; **glumes** 2, lower glume lanceolate, 2.2–3.3 mm long and 1-veined or 3-veined and weakly keeled, upper glume narrowly ovate, 2.7–4.2 mm long and 3-veined, lower glume < upper glume, acute at tip, widely membranous on margins and at tip, glabrous and minutely scabrous on veins; callus of fertile floret < 1.5 mm long, blunt, glabrous; **lemma** of fertile floret lanceolate, 3.5–4.5 mm long, greenish becoming purplish red, rounded on back or weakly keeled, 5-veined, membranous on margins, 2-toothed at tip, glabrous or sometimes minutely scabrous; **palea** of fertile floret ca. = lemma, 2-veined, 2-keeled, pigmented like lemma, glabrous, keels minutely scabrous above midpoint. **Flower: peianth (lodicules)** 2 but fused, collarlike and opposite palea partially cupping bases of stamens and pistil, 0.2–0.3 mm long, fleshy, semi-translucent; **stamens** 3, free; filaments threadlike, 1.7–2 mm long, colorless or white; anthers basifixed, dithecal, narrowly oblong, 1.6–2.2 mm long, light yellow becoming reddish, longitudinally dehiscent; pollen whitish to light yellow; **pistil** 1; ovary superior, obovoid truncate at top, ca. 0.5 mm long, light transparent-green, 1-chambered with 1 ovule; styles 2, exserted at midpoint of lemma, 1.5–2 mm long, whitish (colorless), stigmatic and conspicuously feathery (plumose) above midpoint. **Fruit:** achene (caryopsis), narrowly ovoid-ellipsoid, ca. 2 × 0.8 mm, glossy light brown, smooth with faint depressed on 1 side, with short point at tip. Early March–early June.

Native. Perennial herb common throughout the range growing in sunny to shady habitats in native or somewhat undisturbed communities. *Melica imperfecta* actually is so

comfortable growing with introduced plants that many observers do not realize it is a native perennial grass, and therefore worthy of greater respect. Commonly one finds this plant with lateral branches of spikelets that are essentially perpendicular to the main axis. The achene is retained tardily within the spikelet, often held in place by the persistent rachilla and the rudimentary floret pressing against the palea. In range it appears that fruit formation is somewhat difficult, because relatively few spikelets per branch contain ripe fruits.

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