

***Bothriochloa barbinodis*** (Lag.) Herter, CANE BLUESTEM. Perennial herb, rhizomatous, fibrous-rooted, cespitose, many-stemmed at base, erect, in range 55–120 cm tall; shoots with basal leaves and cauline leaves, typically not branched above base; rhizomes short with condensed shoots. **Stems (culms):** subcylindric with a broad channel on 1 side, to 2 mm diameter, tough, nodes not swollen, with a conspicuous, dense ring of ascending soft hairs 1.5–5 mm long on nodal ledge; lower internodes solid with white center. **Leaves:** alternate distichous, simple with sheath; prophyll membranous, narrowly acuminate in outline, mostly 15–35 × 1–1.6 mm, strongly 2-keeled and depressed between keels, keels ciliate below midpoint and then short-ciliate to tip; sheath open with overlapping margins, smooth, glabrous, with lobes (auricles) at top; ligule membranous, arching to broadly triangular, 1.5–2(–3) mm long, ciliate on margins; blade long-tapered linear, 80–300 × 2.5–6.5 mm, the widest ca. 1/4 from the base, flat, minutely toothed on margins, parallel-veined with midrib raised on lower surface, veins translucent pale green becoming purplish red, upper surface pilose at base above ligule with a mixture of short hairs 0.5 mm long to long hairs 4.5–7 mm long. **Inflorescence:** spikelets, in terminal panicles, panicle exerted or initially partly enclosed in sheath of flag leaf, narrowly funnel-shaped but later spreading, in range 50–110 mm long, of several–10 lateral branches from a rachis and 2–4+ secondary branches (rames) from lower nodes of each branch, spikelets sessile and fertile with 2 florets as well as stalked and sterile, bracteate, awned; rachis glabrous at base to long-pilose above; secondary branchlets ascending, 20–80 mm long, breaking into segments (spikelet unit = rame internode + 1 sessile and 1 stalked spikelet), rame internode 3.4–4 mm long, breaking below sessile spikelet, channeled on 1 side and membranous within, conspicuously and densely pilose on green margins with hairs to 8 mm long; stalk of sterile spikelet 3.2–4 mm long, densely pilose like rame internode. **Sterile spikelet (stalked): glume** 1, narrowly elliptic, 3.3–3.8 mm long, 5-veined or 7-veined; **lemma** ± oblong to ovate 3–4 × 0.7 mm, translucent, glabrous, with margins partially clasping ovary of fertile flower; **palea** absent. **Fertile spikelet (sessile):** > sterile spikelet, lower floret sterile, upper floret fertile and bisexual; **glumes** 2, equal, 4.5–5(–6) mm long, > florets, lower glume with inrolled margins, 7-veined or 9-veined, with scattered ascending short hairs on outer surface, submarginal vein minutely scabrous above midpoint; upper glume keeled, 3-veined, glabrous; **lemma** awned, narrow, ca. 3 mm long + awn 17–22 mm long, the awn twisted, bent below midpoint; **palea** ovate to 2-toothed, ca. 1 mm long, flat, translucent, glabrous or ciliate. **Flower: perianth (lodicules)** 2, trapeziform, ± 0.7 mm long, ± 2-toothed and the widest at top; **stamens** 3, free; filaments threadlike, to 2 mm long, translucent-white; anthers only sometimes exerted, basifixed, dithecal, arrow-shaped, to 1 mm long, pale yellow, longitudinally dehiscent; pollen pale yellow; **pistil** 1, to 5 mm long; ovary superior, narrowly ovoid to lanceoid, 1–1.6 mm long, yellowish to yellowish white, glabrous, 1-chambered with 1 ovule; styles 2, erect, to 2.5 mm long, translucent; stigmas fully exerted from above midpoint of glumes, feathery (plumose), 1.5–2 mm long, purple, persisting dry in maturing inflorescence. **Fruit:** achene (caryopsis) enclosed within straw-colored spikelet with long hairs and a long, twisted awn on lemma, narrowly obovoid, ca. 2.2 × 0.8 mm, light brown but darker at tip, somewhat 3-sided, with a shallow longitudinal groove on side facing palea to midpoint. Late December–early May.

Native. Perennial herb growing in sandy soil on the coastal side of SMM from Sepulveda Canyon westward to Point Mugu. *Bothriochloa barbinodis* is easily identified in vegetative condition because it has conspicuous hairs on stem nodes and then also long hairs on the inflorescence, which can be seen from a distance. This species has a peculiar “spikelet unit” consisting of a sessile, larger spikelet having one fertile and one sterile floret, plus a stalked (“pedicellate”) and smaller sterile spikelet positioned to the side. One can determine the fertile spikelet as the one with the awned lemma. The fertile, sessile spikelet, surrounded by long hairs on the same internode, is easily dispersed by wind, but in range few of those spikelets ever seem to contain a fruit.

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