Setaria adhaerens (Forssk.) Chiov., BUR BRISTLE GRASS, TROPICAL BARBED BRISTLE GRASS. Annual, fibrous-rooted, 1 -several-stemmed at base, decumbent to ascending, 1660 cm tall; shoots with cauline leaves, typically bent (geniculate) at each node; adventitious roots at basal nodes. Stems (culms): compressed, to 1.5 mm diameter, tough, smooth (lower stem) and shallowly ridged and rough (upper stem), glabrous; internode hollow. Leaves: alternate distichous, simple with sheath; sheath open, compressed-keeled, with wide membranous margins, glabrous, without lobes (auricles) at top; ligule ciliate and densely fringed, $\pm 1 \mathrm{~mm}$ long; blade linear-elliptic, $80-110 \times(2.5-$ )5-12(-17) mm, the widest at midblade and somewhat constricted at base, thin, folded and keeled to midblade, minutely toothed and scabrous on margins, parallel-veined, sparsely pilose. Inflorescence: spikelets, in terminal, spikelike panicles, panicle densely flowered, with conspicuous bristles ( $=$ reduced branchlets) $>$ spikelets, panicle cylindric, $25-85 \mathrm{~mm}$ long, $8-9 \mathrm{~mm}$ diameter (excluding bristles) and $11-15 \mathrm{~mm}$ diameter (including bristles), spikelet with 2 florets, with lower one sterile and vestigial and upper one bisexual, bracteate, lacking awns; principal rachis ridged, pubescent with soft, erect to mostly ascending hairs along ridges; lateral branches $\pm$ pseudowhorled, each with 1 spikelet at tip and to 11-flowered below, $2.5-6 \mathrm{~mm}$ long, with glossy, pulvinuslike swelling on upper side at base; stalk of spikelet $<0.5 \mathrm{~mm}$ long, each bearing $1(-2)$ bristle; bristles scabrous with downward-pointing barbs (retrorse), ascending at anthesis, spreading in fruit, 3.5-4.5 mm long, with 2 , greenish veins at base and generally purple at tip. Spikelet: ellipsoid with 1 flattish side, $1.6-2 \mathrm{~mm}$ long, glabrous, easily deciduous, breaking below glumes and leaving a whitish disc ca 0.3 mm across; glumes 2 , unequal, dimorphic, lower glume sheathing, $0.5-0.7 \mathrm{~mm}$ long and 1(3)-veined, membranous, broadly obtuse at tip, upper glume slightly shorter than spikelet, rounded at tip, green, $7-9$-veined, $\pm$ rounded at tip; lower lemma (sterile floret) similar to upper glume, with inrolled margins (clasping upper floret), 5 -veined but only 2 apparent approaching tip; lower palea membranous and ovate, $<1 / 2$ lemma and 2-veined; upper lemma (fertile floret) ovate, $1.6-1.7 \mathrm{~mm}$ long, with inrolled margins and clasping upper palea, translucent-green, bumpy and netlike below midpoint (appearing reptilean); upper palea nearly as long as lemma and 2-veined, smooth and folded outside of veins and eventually clasping fruit, bumpy and netlike with transverse ridges between veins. Flower: bisexual; perianth (lodicules) 2, fan-shaped to heart-shaped, ca. 0.25 mm long, at anthesis turgid, glossy, colorless; stamens 3, free; filaments threadlike, $1-2 \mathrm{~mm}$ long, translucent-white; anthers versatile, dithecal, exserted, oblong, $0.7-0.9 \mathrm{~mm}$ long, orangish, longitudinally dehiscent; pollen orangish; pistil 1 ; ovary superior, ovoid to flask-shaped, $0.5-0.8 \mathrm{~mm}$ long, translucent-white, glabrous, 1chambered with 1 ovule; styles 2 , erect, $\geq$ ovary length, translucent-white; stigmas exserted near tips of lemma, feathery (plumose), $0.3-0.5 \mathrm{~mm}$ long, purple. Fruit: achene (caryopsis), enclosed within spikelet with loose glumes and hidden by lemmas and paleae, mostly abscising from bristles, spikelet $1.8-2 \mathrm{~mm}$ long; achene ovoid compressed front-toback, ca. $1.3 \times 0.7 \mathrm{~mm}$, pale yellowish green, lacking defined edges, obtuse at tip. Mid-July-late August.

Waif. Annual first observed on the edge of the range on Hill Canyon Road near Santa Rosa Road at the edge of a plant nursery and citrus orchard, but not observed further along the road. Setaria adhaerens has one, or less commonly two, bristles beneath each spikelet.

Its bristles have downward-pointing barbs (retrorse), and the width of the inflorescence is wider than other species in range. This species is similar to $S$. verticillata, and local materials could also be hybrids involving $S$. viridis, presumably brought in with nursery stock from out of range.
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