

Bromus hordeaceus L. (Poaceae)

SPIKELET

Multiple floret spikelet with 5 – 10 similar looking florets with distal florets usually sterile and slightly smaller in size; disarticulation generally above glumes and between florets

FLORET

General shape: elliptic to obovate; dorsal-ventrally compressed

Normal size: (6.5) 8.0 – 11.0 mm long x 2.5–5.0 mm wide; sub-apical awn 3.0 – 10.0 mm, straight to slightly curved

Color: pale straw-colored

Texture: lemma papery, +/- with transverse wrinkles, surface usually covered with soft hairs, especially in upper half; palea hyaline

Distinguishing features: lemma 7.0 – 9.0 veined, veins +/- visible, back rounded, apex bifid, teeth 0.5-1.5 mm long; callus short, blunt and glabrous, attachment point +/- circular; awn attached slightly below lemma apex, 3.0 – 10.0 mm long, straight or curved, scabrous; palea shorter than lemma, +/- hairy between keels, keels with long, wide-spaced hairs; rachilla covered with short stiff hairs, round in cross-section and flattened at apex, attachment point circular

CARYOPSIS

General shape: Fusiform to oblanceolate, dorsal-ventrally flattened to slightly U-shaped in cross-section

Normal size: 4.5 – 7.0 mm long x 1.5 – 2.0 mm wide

Color: light reddish-brown.

Texture: Smooth, lemma and palea +/- adherent.

Embryo: at base of caryopsis, about 1/8 the length of the caryopsis, small and slim root-shoot axis, scutellum outline visible.

Endosperm: bulk of caryopsis filled with solid endosperm.

Hilum: linear, as long as caryopsis.

Description by Deborah Meyer
California Department of Food & Agriculture



Bromus hordeaceus florets and caryopses.



Floret in dorsal view (top) showing lemma (1), callus (2), lemma teeth (3) and awn (4). Ventral view (bottom) showing rachilla (5) and palea (6) with long, widely spaced hairs along the keels.



Caryopses: in ventral view (top) with portions of the palea adhering (7) obscuring the view of the linear hilum; dorsal view (bottom), with exposed embryo (8) and portion of lemma adhering (9).

Images by Jim Effenberger & Deborah Meyer