

Bromus diandrus L. (Poaceae)

SPIKELET

Multiple floret spikelet with 4 – 11 similar looking florets with distal florets usually sterile and slightly smaller in size; disarticulation generally above glumes and between florets

FLORET

General shape: linear-lanceolate, slightly arched backwards

Normal size: 18.0 –35.0 (45.0) mm long x 1.5–2.8 mm wide; sub-apical awn 30.0 –75.0 mm

Color: straw-colored to light brown, margins of lemma lighter in color compared to main body

Texture: lemma surface covered with short stiff hairs that are rough to the touch; hairs above callus slightly longer than those on lemma back

Distinguishing features: lemma 7-veined, mid-vein more visible than others, back rounded, apex bifid, teeth 3.0 – 7.0 mm long, margins and teeth hyaline; callus sharply pointed and glabrous, attachment point oval; palea shorter than lemma, +/- glabrous between keels, keels with stiff, wide-spaced hairs; rachilla covered with short stiff hairs, round in cross-section and flattened at apex, attachment point +/-oval

CARYOPSISIS

General shape: Linear, dorsal-ventrally compressed, flat to U-shaped in cross-section

Normal size : 11.0 –14.0 mm long x 1.0 – 2.8 mm wide.

Color : brown

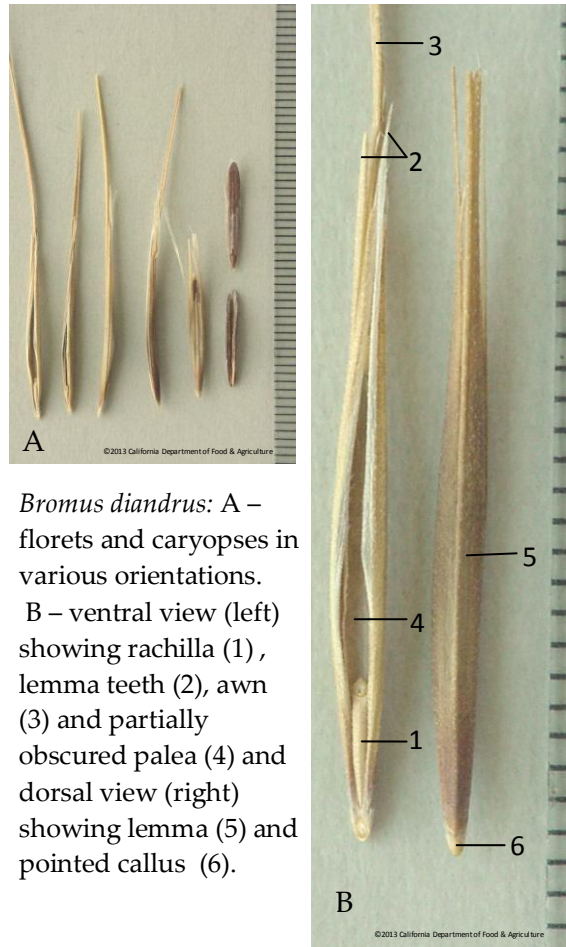
Texture: Smooth, apex fleshy and hairy, lemma and palea +/- adherent

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

Endosperm: bulk of caryopsis filled with solid endosperm

Hilum: linear, extending nearly the full length of the caryopsis

Description by Deborah Meyer
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Bromus diandrus: A – florets and caryopses in various orientations.

B – ventral view (left) showing rachilla (1), lemma teeth (2), awn (3) and partially obscured palea (4) and dorsal view (right) showing lemma (5) and pointed callus (6).



Caryopses: dorsal view (top) with portions of lemma adhering above the exposed embryo (7); ventral view (bottom) with attached palea, with stiff keel hairs (8), obscuring the view of the linear hilum (note embryo tip broken off).

Images by Deborah Meyer