

*Festuca rubra* L. (Poaceae)

**SPIKELET**

Multiple floret spikelet with 5 – 8 similar looking florets with distal floret usually sterile and slightly smaller in size; disarticulation generally above the glumes and between the florets

**FLORET**

**General shape:** dorsal-ventrally compressed; lanceolate, widest near mid-point, not dorsally keeled

**Normal size:** 4.0 – 9.0 mm long x 1.0 – 1.5 mm wide

**Color:** straw color to light brown with green or purple tinge

**Texture:** lemma papery and smooth glabrous or with short stiff or soft hairs near apex; palea papery, coarsely granular and with short hairs near apex

**Distinguishing features:** callus blunt and thick; awn up to 4.5 mm long; palea slightly shorter than lemma, keels two, with short stiff hairs along the keels and with short soft hairs near apex; rachilla slender, round in cross-section with flared disk at apex, +/- covered with short hairs

**CARYOPSIS**

**General shape:** narrowly oblong, oval, or obovate, dorsal-ventrally compressed

**Normal size:** 2.5 – 4.0 mm long x 1.0 – 1.5 mm wide

**Color :** reddish-brown, sometimes with purplish tinge

**Texture:** smooth to slightly rough, lemma and/or palea may be adherent

**Embryo:** 1/5 - 1/3 the length of caryopsis

**Endosperm:** solid

**Hilum:** linear, nearly as long as caryopsis, located in longitudinal depression

Description by Deborah Meyer  
California Department of Food & Agriculture



Florets and caryopses of *Festuca rubra*. A. Ventral view showing palea (1) and rachilla (2). B. Dorsal view showing lemma (3). C. Round, slender rachilla (4) covered with hairs and with slightly flared apex. D. Thick, blunt callus (5). E. Short soft hairs (6) near palea apex. F. Granular palea texture between keels (7). G. Caryopses, dorsal view showing embryo (8) and ventral view showing linear hilum (9) in a longitudinal depression.

Images by Deborah Meyer & Jim Effenberger