

*Holcus lanatus* L. (Poaceae)

**SPIKELET**

Multiple floret spikelet in which the florets are completely enclosed by the glumes. Disarticulation occurs below the glumes and the spikelet falls from the plant as a unit. The basal floret is fertile and the distal floret sterile

**General shape:** ovate to lanceolate, laterally compressed, strongly keeled, lower glume shorter and narrower than upper glume

**Normal size:** 3 – 6 mm long

**Color:** whitish-straw colored, very pale green, sometimes with purplish tinge near apex

**Texture:** glumes papery, generally covered with short hairs and with long hairs on keels

**Distinguishing features:** both glumes strongly keeled, upper glume with prominent lateral veins

**FLORET**

**General shape:** fertile floret laterally compressed and keeled, lanceolate in ventral view, in lateral view ventral edge nearly straight and dorsal edge arched at or slightly below mid-point

**Normal size:** fertile lemma 1.7 – 2.5 mm long x 0.5 – 0.75 mm wide, palea equal in length to lemma

**Color:** whitish-straw colored, sometimes darker near apex

**Texture:** fertile lemma cartilaginous, smooth and glossy, with short hairs along upper portion of keel

**Distinguishing features:** fertile floret awnless; rachilla of fertile floret long and thread-like, glabrous; palea with two keels; sterile lemma with hook-shaped awn

**CARYOPSIS**

**General shape:** laterally compressed, ovate to lanceolate

**Normal size :** 1 – 1.5 mm long x 0.4 – 0.5 mm wide

**Color :** light brown

**Texture:** smooth

**Embryo:** ¼ – ⅓ the length of caryopsis

**Endosperm:** soft

**Hilum:** oval, in shallow longitudinal depression



*Holcus lanatus* spikelet showing lower glume (1), upper glume (2), and awn of sterile floret (3).



A – Fertile floret in ventral view showing palea (4) and rachilla (5). B – lateral view of fertile floret showing glossy lemma (6) and sterile floret (7) with hook-shaped awn (8).



Caryopses in dorsal view (left) showing embryo (9) and ventral view (right) showing hilum (10) in shallow longitudinal depression.

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