

*Digitaria sanguinalis* (L.) Willd. (Poaceae)

**SPIKELET**

One sterile floret and one fertile floret, disarticulation below the glumes, falling as a unit from the plant

**General shape:** Elliptic to lanceolate, dorsal-ventrally compressed

**Normal size:** 1.7 – 3.4 mm long x 0.7 – 1.1 mm wide

**Color:** Glumes and sterile floret straw-colored to light brown, +/- with purple tinge

**Texture:** Glumes and sterile floret membranous to papery

**Distinguishing features:** lower glume 0.2 – 0.4 mm long, triangular; upper glume lanceolate,  $\frac{1}{3}$  –  $\frac{1}{2}$  the length of the spikelet, 3-veined, covered with long hairs; sterile lemma equal in length to spikelet, 7-veined, the middle three veins forming wide spaced raised ridges, hairy along margins, short stiff hairs on veins in the upper half of the lemma

**FERTILE FLORET**

**General shape:** elliptic to lanceolate, dorsal-ventrally compressed

**Normal size:** 1.7 – 3.3 mm long x 1.0 mm wide

**Color:** yellow, grayish-green, light brown, +/- purple tinged

**Texture:** lemma cartilaginous (tough and firm, but flexible), thinning along margins, surface finely striate (covered with longitudinal rows of very minute tubercles); palea similar

**Distinguishing features:** lemma apex tapering to a point, lemma margins flat and overlapping the palea, both completely enclosing the caryopsis

**CARYOPSIS**

**General shape:** elliptic to oblong, dorsal-ventrally compressed

**Normal size :** 1.5 – 2.0 mm long x ca. 0.7 mm wide

**Color :** pale yellow, +/- transparent

**Texture:** smooth

**Embryo:**  $\frac{1}{3}$  -  $\frac{1}{2}$  the length of the caryopsis

**Endosperm:** solid

**Hilum:** oval

Description by Deborah Meyer

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*Digitaria sanguinalis* spikelets and caryopses.



Spikelets consist of a very short lower glume (1), an upper glume that is about  $\frac{1}{2}$  the length of the spikelet (2), sterile lemma (3), fertile lemma (4) and palea (not shown). Note the short stiff hairs along the veins of sterile lemma (5).



Caryopsis in dorsal view showing embryo (6) and ventral view showing hilum (7).

Images by Jim Effenberger & Deborah Meyer