

*Avena sativa* L. (Poaceae)

Spikelet

Multiple floret spikelet, with 2 - 3 (7) similar looking florets, with distal florets usually slightly smaller in size; glumes papery, longer than florets; disarticulation by fracture above the glumes and between the florets

Floret

**General shape:** plump spindle shaped (fusiform), cylindrical

**Size:** 8.0-18.0 L x 1.5-3.5 W x 1.4-3.0 D mm

**Color:** straw, white to grey, reddish yellow or brown to black

**Texture:** lemma leathery, smooth and glossy, usually without hairs

Distinguishing features: indistinct basal scar (formed by fracture); rachilla narrow and short with irregular tip; lemma teeth 0.2 – 0.5 mm long; usually unawned, but when present 15 – 30 mm long attached in the upper 1/3 of lemma, straight or weakly twisted and bent, often broken in commercial samples and only the base visible at the tip of the lemma

Caryopsis

**General shape:** elongated spindle, dorsal-ventrally compressed, ventral side with longitudinal groove

**Size:** (4.0) 8.0-12.0 L x 1.3-3.2 W x 1.2-2.8 D mm

**Color:** white to straw yellow

**Texture:** smooth with some light-colored silky hairs

**Embryo:** at base of caryopsis, small and slim, the root-shoot axis less than 1/3 the length of the caryopsis extending to a fine point at the base; scutellum outline visible

**Endosperm:** soft to semi-solid

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



Normal size florets of *Avena sativa*



Caryopsis of *Avena sativa*

