

Sorghum Ergot Field Identification

Sorghum ergot is a disease that attacks unfertilized ovaries of the flowers of grain and forage sorghums and johnsongrass. Field identification of sorghum ergot is readily made by careful observation of the following symptoms.

Infected ovaries of sorghum are converted into a white fungal mass that is visible between the glumes. From the infected flowers, a viscous, colorless-to-opaque sticky fluid or "honeydew" is exuded, which makes the head very sticky (Figure 1).



Figure 1. Sorghum head with honeydew.

Honeydew production can be so abundant that it drips onto other parts of the panicle, lower leaves, and soil. When dried, the honeydew has a white appearance. Honeydew is easily washed away by moisture.

During humid periods, the ergot fungus abundantly produces spores (conidia) on the surface of the honeydew, giving a white, powdery appearance (Figure 2). This white powdery growth appears wherever honeydew has accumulated.

During hot, dry periods, the honeydew-conidial complex dries, forming a dirty-white, brittle crust on the panicle and leaf surfaces.



Figure 2. Spores produced by ergot fungus cause white, powdery appearance.

In moist conditions, a common fungal saprophyte (*Cerebella volkensii*) may colonize the honeydew and form a large, black, convoluted mass (Figure 3). Other saprophytic fungi also may colonize the honeydew, causing the head to become moldy.

The ergot-infected flower may be replaced by a hard, dense fungal mass (sclerotium) which may be capable of overwintering (Photo not available).



Figure 3. Saprophytic fungus colonizing honeydew.

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