

Fungal Disease Fact Sheet

Disease Name: Fusarium Ear Rot

Grain Affected: Corn

Mycotoxin: Fumonism

Pathogen: Fusarium moniliforme

Synptom: Salmon-pink to reddish-brown spore mass starting at the ear tip or on groups of kernels scattered throughout the ear, progressing to a powdery or cottony-pink mold. Has also been found in seemingly healthy corn.

Conditions: Infection tends to follow injury by insects or birds. Disease development favors dry, warm weather. High kernel moisture at time of harvest. Affects as much as 90% of midwest corn crops.

Inoculumn Dispersal: Soil and airborne, insects, birds, corn borers and earworms. Contaminated storage facilities and equipment.

Inoculumn Survival: Overwinters on/near soil surface in host plant debris. Contaminated storage facilities and equipment.

Effect on Crop: Decreased feed and market value. Reduced yield, test weights, and baking qualities.

Management: Crop rotation, deep soil tillage, resistant hybrids, reduce nitrogen levels in fields, and use of clean equipment and storage facilities.

FDA Action Level: None; Advisory levels are 5ppm for horses, 10ppm for swine, and 50ppm for cattle.

Livestock Affected: Horses, donkeys, mules, swine and cattle.

Livestock Symptoms: Equine leukoencephalomalacia (blind staggers). Loss of appetite.

Human Symptoms: On going research indicates potential for adverse health problems (cancer).



Photo 16. Corn infected by *Fusarium sp.* (G. Munkvold)



Photo 17. Fusarium ear rot (APS)