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3. Reports of ergot in wheat

There have been multiple reports of ergot in wheat this week coming from north central Kansas. To date the information suggests that ergot was detected in loads of grain in Jewell and Republic counties. The harvest is just getting started in this area and it is possible that more loads of grain will be found to be positive for this fungal disease.

Ergot is a fungal disease that infects the wheat and other grasses during the flowering stages of growth. The fungus colonizes the developing wheat kernels, resulting in large dark-colored fungal survival structures called "sclerotia." The fungus produces a toxin that can cause serious health problems for humans and animals. Loads of grain containing ergot may receive price discounts or even be rejected at the point of delivery.



Wheat heads infected with ergot showing the dark colored sclerotia that have replaced the normal grain. Photo by O. Maloy, Washington State University.

The fungus that causes ergot can survive between growing seasons as a sclerotia. These sclerotia germinate in the spring, resulting in specialized spore-producing structures. The spores are then moved by wind to nearby wheat fields. The disease is favored by cool wet conditions during these critical growth stages, and it appears that the heavy rains in north central Kansas created conditions favorable for ergot to infection some late-flowering fields.

Ergot is also able to infect many types of wild grasses and cereal crops including rye, barley, and wheat. Rye and barley are generally considered to be more susceptible to ergot than wheat. In fact, some of preliminary reports of ergot contamination are associated with fields that had a feral rye problem. This suggests that the rye may be contributing to the levels of ergot observed in some loads of wheat grain.

The ergot sclerotia can be removed from grain with grain cleaning equipment. Cleaning large volumes of grain after harvest may be impractical, but it may be possible to remove many of the sclerotia by turning up the air on the combine during harvest. Grain from fields infested with ergot should not be saved for seed because of the risk of sowing the fungus along with the wheat. If it is necessary to save the grain for seed, it would be a good idea to have the grain cleaned to remove as many sclerotia as possible.

Crop rotation is best means of avoiding future problems with ergot. Fields infested with ergot sclerotia should not be planted back to wheat this fall. The beneficial effect of crop rotation will be reduced, however, if feral rye and other grassy weeds are allowed to head within or around the affected fields. Mowing the grass in ditches surrounding the fields in question will reduce the risk that fungus could also survive in these areas.

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4. Annual Oklahoma-Kansas Canola Conferences planned

Kansas State University, Oklahoma State University, and Cameron University will team up later this month to hold the Seventh Annual Oklahoma-Kansas Winter Canola Conferences. The July 19 conference will be held in the Hoover Building at the Garfield County Fairgrounds in Enid, Okla. The July 20 conference will be held in the Student Union of Cameron University in Lawton, Okla.

Each conference, which is free and includes morning refreshments and a sponsored lunch, begins at 8 a.m. with registration, coffee, and doughnuts. Door prizes will be given away during each conference. The program begins at 8:20 a.m. Presentations and speakers include:

- Soil Preparation and Planting – Mark Boyles, OSU.
- Winter Canola Varieties – Chad Godsey, OSU and Mike Stamm, KSU.
- Insects, Diseases and Weeds – Tom Royer, Sarah Donelson, Kris Giles, OSU entomologists; John Damicone, OSU plant pathologist; and Mark Boyles, OSU agronomist.
- Winfield Solutions and Answer Plot Update – Jay Bjerke, Winfield Solutions and Croplan Genetics.