



July 29, 2005

AREA WHEAT GROWERS EXPERIENCE NEW DISEASE

Three or more fields in Gage County during 2003 were infected with an unusual disease for us -- common bunt or stinking smut. It showed up again in 2004 and this year it caused problems to a grower in southern Lancaster County and to two growers in Jefferson County. Farmers Cooperative in Dorchester is concerned especially when grain gets rejected from a wheat mill. Cooperative Extension is concerned and growers in Southeast Nebraska need to be aware the problem is still here. The Farmers Cooperative in Dorchester is planning a direct mail piece to wheat growers in coordination with my office.

The stinking smut fungus germinates and infects the wheat plant in the seedling stage. When the wheat plant blooms, the bunt grows rapidly and fills the kernel with smut instead of a seed. The smutted kernels rupture during harvest and handling. This spreads the spores and gives the wheat a rotten fish smell. When the mature bunt balls break open, the spores can contaminate other clean seed and soil. In a dry summer, the spores lay dormant on the soil waiting for an opportunity to infect the next wheat crop as it germinates in the fall. If you plant seed from a neighbor that you thought was clean, the smut spores can be external on the clean seed, setting up a potential disaster for your wheat crop the following year.

This year, discounts ranged from 20 to 50 cents per bushel or worse yet, the seed is not marketable at all. When bad, the wheat cannot even be fed to livestock because of the smell. Thus the name, stinking smut. One year, a grower at Husker Harvest Days told State Extension Specialist John Watkins he had 8,000 bushels of wheat rejected from all markets. The insurance adjuster could not even come within 20 feet of his bin to see the grain. Imagine not having a market for your wheat harvest. Furthermore, common bunt has been documented across the world as reducing yield by as much as 88 percent, but more typically you will experience a 20 to 30 percent yield loss. Yield losses, market discounts, and in the worst cases, total market rejection.

Even though I have not verified a grower in Saline County with a problem yet, farmers planting wheat in Saline County are urged to check cleanings very carefully for the disease and to get fungicide seed treatment applied to all home or purchased seed. Seed treatment will give a very high level of protection. The new systemic fungicides can protect you from common bunt/stinking smut which has an external spore and loose smut which has an internal spore. Loose smut (black heads at harvest time) is starting to build up in some of our area fields and can also be prevented by a systemic seed treatment.

Our suggestion is for growers to get a good source for seed or start over about every three years. This year, especially, would be a good year to buy and plant certified seed that has been treated because of common bunt showing up the last three years in adjacent counties. In the long run, the additional expense may pay. Also, if a producer obtains seed from another source, such as from a neighbor, it should be treated with a seed treatment fungicide before planting.

By treating seed with a systemic fungicide, you will control both common bunt and loose smut. When treating seed in a drill box, or with an on-farm treater, it is very important to get good



uniform seed coverage. The preferred method is to either buy treated seed or have the wheat seed cleaned and treated by a commercial seed conditioner.

Wheat seed fungicide trade name treatments for common bunt/stinking smut and loose smut include Vitavax, Enhance, Dividend, Incentive, Prevail, Raxil, Bayton and Bayton-Thiram. Reference to trade names is made with the understanding that no discrimination is intended or an endorsement. There are different formulations and mixes within trade names including liquids and drill box treatments.

For more information, contact your local Cooperative Extension Office.

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