

# Wheat Scab Widespread In Missouri, Wet Weather To Blame

## *Fungus Cuts Yields, Lowers Quality, MU Specialist Says*

**COLUMBIA, MO.**

**W**heat scab, a fungal disease, is more widespread this year than it has been for several years, threatening to lower yields and reduce seed quality, said a University of Missouri Extension specialist.

"It's been a long time since we've had a statewide problem with scab," said Laura Sweets, MU Commercial Agriculture Extension plant pathologist. "You really need wet conditions as the crop is flowering and right after flowering for scab to take off."

With corn and soybean planting delayed by persistent spring rains, farmers may not have paid as much attention to their wheat, Sweets said. "So it could be a surprise when they pull a combine into the field thinking they're going to get very good yields but don't get quite what they expected."

Wheat scab, also known as *Fusarium* head blight, affects wheat heads and kernels. Damaged kernels can result in major declines in yield and quality. "Infected kernels are light enough in weight and small enough in size that they will be blown out of the combine," she said.

Farmers with discolored, stunted kernels may be docked on wheat at the elevator. The fungus can produce mycotoxins that may affect livestock, lowering feed intake and reducing weight gain.

It's too late in the season to treat scab with fungicides, Sweet said, but farmers can try one tactic to reduce the number of tainted grains at harvest: set the combine to blow out as much lightweight material as possible. This may help those planning to save seed or sell directly to a grain elevator.

Those thinking of saving seed should first determine the level of scab in the field, have the seed cleaned, do a germination test and consider using a seed treatment.

Farmers can perform germination tests at home or send samples to the Missouri Seed Improvement Association.

"*Fusarium* can survive on the seed," Sweets said. "If scab is high, that seed shouldn't be saved. If it's moderate, getting it professionally cleaned removes many small and damaged kernels."

Signs of scab include shr-unken or discolored kernels with a pink or chalky tinge. Some may appear as "tombstone kernels," which are white, softer than normal and have an odd texture.

The fungus overwinters in crop residues, which are the major source of spores the next spring. It can cause disease in corn, barley, small grains and forage grasses, Sweets said.

Outbreaks of wheat scab are almost nonexistent in dry weather, but wet conditions during flowering dramatically increase the risk of infection.

If scab is a problem, manage fields for next year by using a scab-resistant wheat variety and rotating crops. Planting wheat after soybean can lower the risk of scab, Sweets said. "Because corn is a host for scab as well, planting wheat into corn increases your risk."

Next year farmers can take advantage of new fungicides that can be used later in the season and are more effective, she said. "But the trouble with fungicides is that none of them eradicate or completely control it. They just suppress or reduce it." Δ