News release Sandra L. Wick Crop Production Agent KSU/Post Rock Extension Agent August 15, 2025

There is still time to control your volunteer wheat!

Many producers are busy out in the fields swathing and baling alfalfa and forage sorghum or sudan, but it soon will be time for wheat drilling! There is still time to control or kill the volunteer wheat **BEFORE** you attempt to drill your 2026 wheat crop. Stay tuned and I will share some guidelines for managing your volunteer wheat.

Producers really don't like the mention of volunteer wheat, but you can always count on it rearing its ugly head. Volunteer wheat is a fact of life in wheat production and no combine is perfect, so there is usually plenty of grain left on the ground in the field to produce volunteer. Volunteer wheat can serve as a host for insects such as the wheat curl mite, Hessian fly, greenbug and the bird cherry-oat aphid along with diseases such as wheat streak mosaic virus complex and barley yellow dwarf. The Wheat Streak mosaic virus complex, which includes 2 other viruses, Triticum and the High Plains, spread by the insect...the wheat curl mite, and is the most significant threat from volunteer wheat.

The wheat can be infected with the wheat streak virus in the fall or in the spring with fall infection most impacting the yield. The cycle starts when the wheat plant dries down, the wheat curl mites congregate on the flag leaves and are picked up by wind currents and carried to their over-summering grass hosts including volunteer wheat, corn and a few other grasses. As summer hosts start to dry down the reverse process occurs and mites are carried by winds to newly emerged winter wheat. The most severe wheat streak mosaic is found where volunteer wheat provides a "green bridge" through the summer between wheat crops.

On average, Kansas producers lose 10 million bushels per year to this disease. Control of volunteer wheat is the best defense against the wheat streak mosaic virus complex.

If the volunteer is still alive, or worse yet, dying when new wheat is emerging, pests and diseases will likely move from the volunteer wheat directly into the new wheat. Kansas has been significantly affected by these diseases the last couple of years.

There are two critical periods for volunteer control: immediately after harvest and PRIOR to fall planting. Volunteer wheat can be destroyed by either conventional tillage or by use of chemicals or a combination of both. K-State Research and Extension has a NEW recommendation with managing volunteer wheat. The recommendation is called, the "Wheat-free window." These windows include periods **30 days PRIOR** to the start of the optimal winter wheat planting window by zones in Kansas. For northcentral Kansas, our window is wheat-free from August 15 to September 15. Other management guidelines include avoiding early planting which can also reduce the wheat curl mite numbers and the length of time that they have to transmit the wheat streak virus complex. Varietal selection can also be an important way to reduce the impact of wheat streak. Since the mite is carried by the wind from plant to plant and

from field to field, the control of ALL volunteer is critical. The mite can be carried for several miles so the cost of NOT controlling volunteer may hurt you and also your neighbor.

If you are noticing volunteer wheat close to where you will be planting winter wheat you may want to select a variety that has some resistance to wheat streak mosaic or plant later as indicated by the Best Management Practice dates which range from September 29 in Jewell and Smith Counties to October 4 in Lincoln with Osborne and Mitchell counties in between these dates. There are currently a few varieties adapted to Kansas that have wheat streak mosaic resistance, including KS Dallas, KS Bill Snyder, KS Territory along with KS Mako and KS Western Star, which might help in lessening the virus infection.

A couple of excellent publications are available for producers through K-State Research and Extension including the 2025 Wheat Variety Guide along with the 2025 Chemical Weed Control booklet. The Wheat Variety guide publication provides evaluation of each of the wheat varieties for disease and insect resistance while the chemical publication outlines weed control chemicals for each of the major crops in Kansas. Remember volunteer wheat is the source of severe problems and may actually cost much more if NOT controlled. Stop by or call any offices of our Post Rock Extension District, including Beloit, Lincoln, Mankato, Osborne or Smith Center for the publications I mentioned, or if you have additional questions on controlling volunteer wheat.

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