

David G. Hallauer
District Extension Agent
Crops & Soils/Horticulture

Southern Rust and Corn Fungicides

A crop can't ever be 'counted on' until its in the bin. While with each progressing growth stage we get closer to that time, we're not there yet. This week's finding of corn southern rust in NEK further underscores the need for full season crop monitoring. There's an article in this week's KSU Agronomy eUpdate on it: https://eupdate.agronomy.ksu.edu/article_new/first-report-of-southern-rust-in-kansas-505-5 . It provides information on disease spread as well as management recommendations. The two questions generally arising when dealing with late season southern rust are: will it affect yield and did a previously applied fungicide help?

The answer to both questions depends a lot on hybrid, growth stage, and degree of disease pressure. Most research suggests fungicide applications *can* be effective up until dent growth stage – if disease pressure is high and the hybrid is susceptible – but are probably best timed to be on in advance of the dough stage (R4) of growth. Most corn fungicides will provide approximately three weeks of protection and have their greatest efficacy when applied at the start of the disease's presence rather than after significant infection.

Weather conditions favoring southern rust development include hot temperatures (morning lows in the mid 70's/daytime highs in the mid 90's –temperatures above 100 may not slow it much according to research from southern states) with at least four hours of consecutive leaf wetness. Outside of these conditions, we may still see disease, but progressing more slowly.

Southern rust is certainly a disease that can cause a lot of problems in a short time. Continue to monitor fields for disease pressure and growth stage prior to making treatment decisions. You can follow disease confirmations at <https://corn.ipmPIPE.org/southerncomrust/> .

Lilac Leaf Spot

Over the past four years, lilacs have increasingly exhibited a fungal disease known as Pseudocercospora Leaf Spot. Not a typical problem for us, the disease has caused significant damage to some stands. The disease favors high humidity and moderate temperatures, often showing up after bloom and becoming very noticeable in mid-late July.

Typically leaf spots don't become severe enough to result in decline of the plant. However, if repeated infections occur, particularly when combined with drought/heat or other stresses, the stress may become too much and plants may decline. Unfortunately, no fungicides have been specifically tested to treat Pseudocercospora and a label search of fungicides in Kansas yields zero labeled products. Even if it did, application would need to be done earlier in the summer and likely repeatedly through the growing season.

Without a fungicide, cultural practices are key. Pseudocercospora can survive two years in plant debris. Cleaning up old leaves/twigs and pruning out dead branches is our best option at this point. Keep plants healthy, including deep (but infrequent) watering when soils are dry.

For more information about Pseudocercospora, check out this reference from Iowa State University: <https://hortnews.extension.iastate.edu/lilac-pseudocercospora-leaf-spot> . You can request a copy from any District Office as well.