

Rain Brings On The Rust In Corn Crop

COLUMBIA, MO.

Fungus is upon us as wet weather refuses to let up in Missouri. As significant rainfall continues, leaving muggy air and soggy fields, farmers are finding problems with rust and other fungal foliage diseases on crops.

Common rust is one problem farmers should keep an eye on in cornfields.

“The rainy forecast adds to the possibility that those infections will spread,” said Laura Sweets, a University of Missouri Extension plant pathologist. “The biggest thing with rust is that it’s such a rapid-building disease that you really need to get your fungicide on early to be effective.”

Paying attention to that early development is necessary with rust, which will rapidly reach a point that takes a toll on fields.

“When you’re scouting for rust, you’ll count pustules and initially see just a few, then you will see 10 or 20, and the next jump will be exponential where you’ll see them in the hundreds per leaf,” Sweets said. “If fungicides are going to be effective, you need to spray them before you see that exponential explosion.”

Sweets said she was surprised with the early emergence of common rust in fields, which tends to be less of a problem than southern rust due to hybrid resistance.

Young corn tissue is particularly susceptible,

even if the variety is resistant, she said. “If there’s a lot of young leaf tissue – in the three- or four-leaf stage – you probably will have more of a problem than if the plants are larger.”

Rust tends to be a problem in seasons when strong wind currents come from the south, spreading fungal spores to Missouri crops.

“Typically we get our inoculum from Texas and Oklahoma. We see it affect southwest Missouri first and catch air currents up through Sedalia into northern Missouri,” Sweets said.

A silver lining to the situation is that southern rust – a much more economically debilitating form of rust – has yet to be seen in Missouri fields.

Although common rust may present a problem in many fields and warrant early application of fungicide, Sweets noted that farmers should carefully evaluate whether spraying will pay off.

“If you get it early in the season, before corn tassels, you could be looking at losses up to 5 percent with common rust, but that would be even worse if you had a problem with southern rust,” she said. “There are so many fields with standing water and uneven stands that before I even consider applying fungicide I’d have a conversation about how fertility is holding up, how good is the stand.” Δ