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Fungicide Applications in Corn

A tour of Meadowlark Extension District fields last week suggested consistent presence of Gray Leaf Spot (GLS) in scouted fields at very low levels. That's a good sign – but one that could change rapidly as we proceed through the growing season. As the optimum application window approaches (years of fungicide application research suggest the single best time to apply fungicide to corn for GLS control is from VT to R1), it's a good time to think about how we manage fungicide applications to achieve the highest effectiveness.

Timing is one key. Early applications (V7/V8) won't persist against late-season pressure. Protection from the fungicide is limited and if disease pressure is sufficient, a second application may be needed. If GLS *isn't* an issue, but you are worried about southern rust and want to wait to see what happens on that front, keep in mind that foliar fungicides are best applied prior to R5 for southern rust control (think in the R2 range). Visit <https://corn.ipmPIPE.org/southernrust/> to follow Southern Rust progress (currently found in Louisiana and points east, but not yet north). For fungicide recommendations, visit the Crop Protection Network at: https://cropprotectionnetwork.s3.amazonaws.com/CPN2011_FungicideEfficacyControlCornDiseases_04_2022-1650470887.pdf.

When scouting, consider other factors as well: hybrid susceptibility (more susceptible hybrids will have a greater response to a fungicide), previous crop residues, weather (southern rust is favored by warm days and nights above 80 degrees F with high humidity, field history, and disease pressure. According to the data from Illinois corn fungicide trials, if at least five percent of the ear leaf area is affected by disease at the end of the season, a foliar fungicide applied at VT and R1 would likely have been beneficial.

With any luck, you'll avoid a fungicide application altogether. If not, it's a great time to evaluate where to focus your efforts.

Tomato Leaf-Spot Diseases

July has arrived, and soon, too (if they haven't already) will fungal diseases of tomato. If you find brown spots on the leaves, you may well have either Septoria leaf spot or early blight.

While you'll usually see Septoria first, both diseases can infect leaves, turning them yellow and causing them to drop from the plant. Bottom leaves will show disease pressure first.

To try and prevent issues, consider mulching, caging, or staking to hold plants up off the ground. Enhance circulation and implement other practices to help plant leaves dry more quickly. Work to keep water from splashing disease spores from the ground to the plant as well. Mulch is again a good option for this. After the season, make a mental note to rotate tomatoes to a different area of the garden next year.

Sometimes, all of our cultural efforts don't quite cut it. If you have to use a fungicide, apply to both the upper *and* lower leaf surfaces, reapplying if rainfall removes it. Time applications to protect the plant when it becomes most susceptible when the fruit is about the size of a walnut. Multiple products are available, but they do have different pre-harvest intervals to adhere to. As with any pesticide, *always* read and follow all label directions.

If you've had problems in the past, make sure you start protecting plants *before* these diseases are first seen. Control is almost impossible on heavily infected plants.