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Gray Leaf Spot Management

Gray leaf spot can be devastating to corn. According to Illinois corn fungicide trials, if at least five percent of the ear leaf area is affected by disease at season's end, a foliar fungicide applied between VT and R1 would likely have been beneficial. Fungicide application research has demonstrated that the single best time to apply a fungicide to corn for gray leaf spot control is from VT to R1. That means, if you haven't been scouting – it's time to start!

Gray leaf spot is characterized by one to two inch long rectangular (the shape is key!) lesions over the entire leaf area between the veins. Early lesions are small, necrotic spots with yellow halos that gradually expand to full-sized lesions. Usually tan, lesions may turn gray during foggy or rainy conditions.

Predicting disease pressure is difficult at best. That said, KSU Plant Pathologist Dr. Doug Jardine encourages growers to focus scouting based on several disease risk factors, including hybrid susceptibility (seed company information is your best resource), previous crop, weather, and field history. If moisture in the form of rain or humidity is prevalent, disease risk increases. Pay close attention to fields with a history of high disease severity as well.

Current disease management guidelines suggest a 'stairstep' approach to fungicide applications. Susceptible hybrids (the lowest rated within a company's line-up) should be considered for a fungicide application if disease symptoms are present on the third leaf below the ear or higher on 50 percent of plants. Intermediate hybrids need to show disease symptoms on the third leaf below the ear or higher on 50 percent of the plants examined, if the field is in an area with a history of foliar disease problems, if the previous crop was corn, if there is 35 percent or more surface residue, and if the weather is warm and humid. Resistant hybrids (those with the best rating within a company's line-up), generally won't benefit from a fungicide applications.

Japanese Beetles

They have returned! Japanese Beetles are back in full force!!

Adults are just under a half inch long and metallic green with coppery wing covers. A series of white dots made up of tufts of hair that project from under the edges of the wing covers are present on the back half of the insect. They beetles feed in groups on leaves, flowers and wounded or mushy fruit (usually working from the top down) of over 300 different plant species, typically over a four to six week period.

Control options are as varied as simply shaking them from plants in to a jar or bucket containing soapy water (best done in the morning when the insects are sluggish!) to the multitude of insecticide products available to homeowners. In most cases, the level of infestation determines the control method!

Insecticides with active ingredients that include cyfluthrin, bifenthrin, and cyhalothrin will generally provide two to three weeks of protection. Carbaryl containing products can be used as well, lasting one to two weeks. Neem or Pyola containing products will provide three to four days of control. Avoid traps as they tend to attract more beetles than they kill!

Keep your eyes out for them. They can eat a lot in a short time!