

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

The Impact of Soybean Seedling Diseases

Retired K-State Research & Extension Plant Pathologist Dr. Doug Jardine spent much of his career sharing information on soybean disease management. His estimates suggested we could increase soybean yields by over twelve percent if we could eliminate disease pressure. Disease elimination is not possible – but disease management is, and it starts at planting.

Early season seedling blights are estimated to reduce yields an average of two and a half bushels per acre with *Pythium*, *Rhizoctonia*, and *Fusarium*, the primary culprits. Fortunately, seed treatments are effective at dealing with many of these issues, so long as we are using the appropriate active ingredients. What does your seed tag say? Whether you are done planting or just getting started, take a quick look at the active ingredients of your seed treatment and see what they are effective against. Some will likely be fungicides active against the aforementioned diseases. Others may be treatments designed to combat insect pressure. Knowing what you may have some protection against can be a big help when scouting. The Crop Protection Network has some great resources on fungicide efficacy. Drop me a line if you are interested.

The presence of a seed treatment doesn't guarantee elimination of disease. Environment, genetics, and production practices significantly impact seed treatment efficacy. Early season soaking rains or cool/wet conditions following planting can overwhelm seed treatments in conditions that are perfect for diseases to thrive. Many seed treatments are designed to provide protection of seeds/seedlings for approximately three weeks after planting. If environmental conditions conducive to disease occur after that time, the efficacy window may be closed.

For more information on soybean diseases, drop me a line for links to Crop Protection Network publications. Soybean Cyst Nematode – present in nearly twenty percent of our Kansas soybean fields - and other diseases will be discussed in this space at a later time.

Peach Leaf Curl

One of the more common peach tree diseases has shown itself again in 2020. Peach Leaf Curl was noted on a peach tree this week.

A fungal disease, peach leaf curl causes leaves to become puckered and distorted with a reddish-green hue. Severely infected trees tend to drop leaves. If the tree is healthy – this year's leaves are large and deep green with last year's growth being greater than eighteen inches – the tree will likely try to put out new leaves. If not, particularly if last year's growth was less than twelve inches, a fertilizer application would be helpful if one has not yet been applied.

Apply one and a half to two cups of a balanced N-P-K fertilizer under the branch area of the tree. Apply as soon as possible to promote new leaf growth.

Both peach leaf curl and plum pocket can be controlled with a single fungicide application applied this fall after leaf drop or early next spring before bud swell. Use products labeled for peach trees containing the active ingredient chlorothalonil. Be sure to completely cover the tree, including the bark and trunk.