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### **Soybean Seedling Disease Scouting**

If you've ever wondered how well soybean seed treatments work, think back to the last time you saw much stand loss from seedling diseases? Crop Protection Network estimates put Kansas losses at a quarter of a percent. While that comes to almost five million dollars in value across the entire states, for individual growers, it might be a non-issue – until its concentrated in one area of one field.

We often think about seedling diseases in cooler soils, and while some diseases prefer them, others (Phytophthora) thrive in warmer soils. With most of the area experiencing ample moisture and a number of soybean acres planted early in April, it might be a year to keep soybean seedling diseases on your radar during emergence evaluations.

The most common pathogens we see are the aforementioned Phytophthora plus Pythium, Fusarium, and Rhizoctonia. While disease causing conditions may differ, the result is often the same: post-emergence damping off with the base of the plant and root system often showing everything from discoloration and lesions to collapsed stems and poorly developed root systems.

Seed treatments are very effective – so long as they include an appropriate active ingredient to combat the disease(s) in question. For example, Phytophthora and Pythium require active ingredients like mefenoxam, metalaxyl, or ethoxam. Those don't touch Fusarium, however, so knowing what your seed treatment includes can help you understand what you might be seeing in the field. Keep in mind as well: even with the right active ingredients, seed applied fungicide protection *does* have a limited protection period. If the crop emerges slowly, fungicide protection can wane. That's why strategies like variety selection, crop rotation and proper drainage should also be a part of an integrated disease management program.

Seedling diseases *can* be a concern, but other issues may also arise during establishment. Herbicide injury, soil compaction, high residue, flooding, cold stress, drought, planting depth, and seed quality can be problems as well. For assistance with proper identification, consider submitting samples to the KSU Plant Disease Diagnostic Lab (contact me or any District Office). Another resource is *Soybean Seedling Diseases*, available from any District Office or online at: <https://crop-protection-network.s3.amazonaws.com/publications/cpn-1008-soybean-seedling-diseases.pdf> .