

David Hallauer
District Extension Agent, Crops & Soils

What to Expect from a Soybean Seed Treatment

A couple weeks ago, I started seeing posts about early planting of soybeans in my social media feed. Last week I started hearing about producers in Northeast Kansas itching to do the same. With temperatures reaching the point they did this last weekend – it's no wonder...

While arguments can be made for *and* against early planting, most agree getting a good stand is important. A soybean that emerges and begins to grow quickly generally tolerates disease/insect pressure better than one in cold, damp soils (if it survives – will it thrive?). Seed treatments are often used to help the seed weather those cooler, damper conditions, with good reason. With annual losses from soybean seedling diseases/seed rots estimated at around two bushels per acre, knowing what a seed treatment can/can't do makes good sense.

Start by considering what disease(s) you might see. Pythium, Rhizoctonia, and Fusarium are the primary suspects with field history and conditions post planting huge factors in whether we see issues. Knowing what disease to expect is the first step to having a plan to combat it.

Second, look at what is on the seed tag for treatments – both active ingredient *and* the level of treatment. For example, metalaxyl and mefenoxam are active against Pythium and Phytophthora, but not Fusarium or Rhizoctonia. Further, fields with a history of Phytophthora, for example, may require higher rates of seed treatment to be effective.

Knowledge of what to expect for the length of protection is important, too. Most seed treatments typically provide some level of protection against disease for approximately three weeks after planting (contact fungicides will have shorter residuals than systemic products). Conditions following emergence sometimes stretch this window a bit.

Despite the coverage a seed treatment provides, sometimes we still see issues. While soybeans are resilient from an emergence standpoint and forgiving from a stand standpoint, scouting is important, particularly on early planted fields with the potential for increased disease pressure. Other issues might be confused with disease and deserve attention, too. To help determine what it is, check out this reference from the Crop Protection Network (available via any District Office):

<https://cropprotectionnetwork.org/resources/publications/seedling-diseases> .