

WHEN IT COMES TO SOYBEAN THREATS, THE BEST DEFENSE IS A GOOD OFFENSE.

Primary methods of controlling soybean threats in fields used to be fairly straight forward. Start with the most resistant variety available, and then apply your fungicides and insecticides in a timely manner. Rotating with corn or other non-host crops was always an added management practice many farmers considered. However, there is a trifecta of threats to soybean crops that are increasing in severity and causing drastic economic losses in fields throughout the Midwest.

“Nematodes, white mold, and sudden death syndrome (SDS) are three of the biggest yield-robbers in soybeans,” says Jim Schwartz, director of Practical Farm Research and Agronomy at Beck’s. “Depending on conditions this summer, it’s possible farmers will see an increase in these three threats. Not only are they destructive when they hit, but once present in a field, they’ve proven to be difficult to manage and control.”

Nematodes

Nematodes are silent killers as the damage they cause is a result of feeding on roots, which can impact plant growth. The bigger issue with this pesky parasite is that their devastation typically occurs below-ground, invisible to the human eye.

Even if above-ground symptoms do occur because of significant infestation, they can often be confused with other problems such as drought stress or nutrient deficiencies.

Each year, nematodes are responsible for more than \$3 billion in losses, with soybean cyst nematodes (SCN) being the most menacing of all. With the potential to cut yields by as much as 30 percent or more, SCN can cause stunting, early death, reduced nodulation, and can serve as an entry point for other diseases.

Sudden Death Syndrome

Sudden death syndrome (SDS) occurs when the plant is infected by the fungal pathogen *Fusarium virguliforme*. Though symptoms of SDS typically do not appear until later in the growing season, the initial infection occurs only in the growing season.

Often influenced by weather, SDS is most severe when soybeans are planted early into cool, wet soils that are heavily compacted and poorly drained. Initial symptoms include leaf yellowing and loss of the upper leaves. As it progresses, tissue between the veins will begin to yellow, and eventually the leaf will die while the petiole will remain attached. And here’s the challenge. These symptoms can appear similar to the symptoms caused by brown stem rot, which makes it increasingly difficult to diagnose. There are no corrective actions that control SDS after the infection has occurred.

White Mold

White mold (*Sclerotinia* stem rot) is influenced by weather and thrives in cool, wet conditions and can drastically diminish soybean yields. In the presence of white mold, farmers are often faced with making tough management decisions that leave them choosing between what is best for disease management and what is best for maximum yield potential.

White mold symptoms first occur during the early reproductive stages and is typically most prominent in products selected for high-yielding environments. Infected fields will see a reduced seed number and weight and also a negative impact on their seed quality and reduced germination. Similar to nematodes and SDS, once white mold symptoms are identified, it’s too late. The damage has been done.

Management Solutions

The most important thing farmers can do when looking to control this trifecta of destruction is to be proactive. Always select the highest performing genetically suited soybean variety for your geography. Stay ahead of these threats and work to control them early by utilizing a comprehensive seed treatment to diminish the potential for yield loss. Beck’s now provides farmers with the option to add a broad spectrum nematicide, Nemasect™, as well as modes of action to control SDS and white mold in their fields.

“Over two-year field trials, Nemasect, along with the active ingredients to suppress white mold and SDS have a 2.9 Bu./A. yield advantage when compared to a standard fungicide and insecticide treatment,” says Schwartz. “Escalate, Nemasect, and SDS+ work

together to drive performance. The combination of a hard chemistry, a bio-fungicide, and a bio-stimulant provide effective nematode protection while also controlling SDS and providing suppression of white mold. It really is a complete seed treatment package.”

Beck’s base seed treatment, Escalate®, comes standard on every bag of soybeans at no charge. But because each farm is different and every year is unique, farmers now have the choice to two additional treatment packages so they can select the level of protection that’s right for their operation. **To learn more visit BecksHybrids.com/Products/Seed-Treatments/Soybeans**



Includes 8 different modes of action to control or suppress 7 diseases, 5 soil-dwelling insects, and 3 of the most common nematode species.

escalate

nemasect

sds+