

Primed for Performance

Soybeans can benefit from seed treatment even with light disease or pest pressure

If there's a one-two punch that can result in a knockout blow to soybean yields, it's likely to come from the damaging duo of sudden death syndrome (SDS) and soybean cyst nematode (SCN). In severe cases, the two can easily contribute to between 50% and 70% yield loss in soybeans.

In 2015, 2016 and again this year, the Farm Journal Test Plots program evaluated the efficacy of ILeVo seed treatment to prevent yield losses to SDS and SCN. Farm Journal Field Agronomists Ken Ferrie and Missy Bauer considered yield data and return on investment (ROI) of the treatment, which is offered by Bayer CropScience.

When ILeVo is paired with a fungicide plus an insecticide, three modes of action can be delivered to the seed to protect it from foliar and root-rot phases of SDS, Bauer says. Plus, ILeVo addresses all plant-parasitic nematode species in the seed zone, including SCN, which, when present, can exacerbate SDS.

In 2015, Bauer evaluated the increase or decrease in soybean yield

and net income results from ILeVo plus a fungicide/insecticide combination seed treatment versus a fungicide/insecticide combination seed treatment alone. That year, the study consisted of two plots planted in Indiana in mid-May with six replications.

In 2016, Bauer repeated the study with similar protocols and data collection. She planted two test plots on April 25 in Steuben County, Ind. One plot had four replications and the second had six.

In each case, the ILeVo plus a fungicide/insecticide seed treatment combination outperformed the fungicide/insecticide-alone seed treatment in yield and ROI. The yield increase, averaged between 2015

and 2016, was 3.32 bu. per acre. The increase in net dollars, again averaged for the two years, was \$18.57 per acre.

Bauer was somewhat surprised to see the significant positive difference between the two seed treatments.

"Where we ran the plots, we didn't have any visual signs of SDS in either 2015 or 2016, and there were only low levels of SCN present," she explains,



Improved plant health increases the number of pods and beans.

noting her team pulled benchmark soil samples early each year and again late-season for comparison.

With the low levels of disease and pest pressure, Bauer is now trying to pinpoint the factors that specifically contributed to the yield increases she observed during those two years.



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