

Burrus Buzz

Delivering more than just seed!

March 27, 2015



Burrus is Offering ILeVO®

by Stephanie Porter

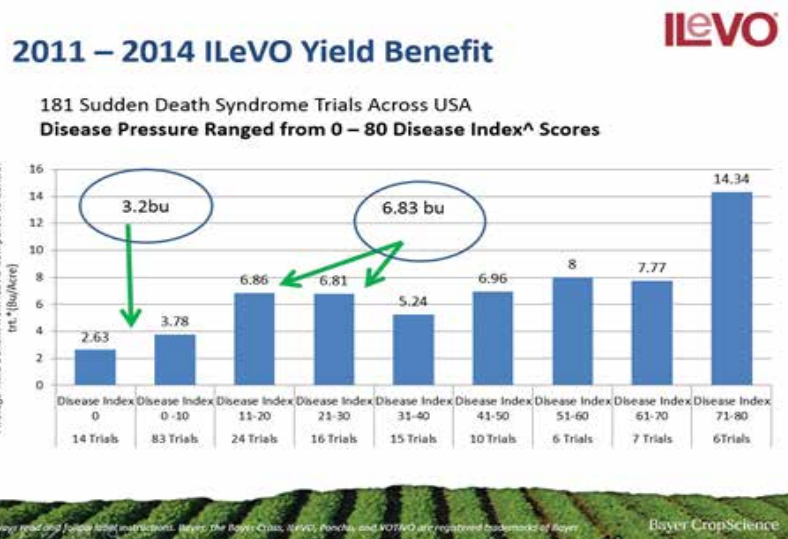
Burrus is now offering the ILeVO® seed treatment as an option, in addition to their current PowerShield® (Fungicides, Insecticide, and Biologicals) soybean seed treatment, on select soybean varieties. This new soybean seed treatment package will be called PS SDS, which stands for PowerShield® for Sudden Death Syndrome.

What is the ILeVO® seed treatment? This is a new seed treatment offered by Bayer CropScience that protects the soybean root system against fungal pathogen that causes SDS and has activity on nematodes within the seed zone. This, in turn, helps to produce healthier plants with a higher yield potential.

Why would you need the ILeVO® or PS SDS soybean seed treatment? *Fusarium virguliforme* or the pathogen that causes Sudden Death Syndrome (SDS) has contributed to an annual yield loss of over \$540 million/year since 2009 and this trend continues to rise across the Burrus footprint. When SDS visual symptoms are present, yield loss can exceed 70%. When no SDS visual symptoms are experienced, root rot could still contribute to 20 to 30% yield loss. The use of the PS SDS soybean seed treatment can be used in conjunction with many other cultural practices (resistant varieties, avoiding compaction) as an integrated approach to combat SDS and allow growers to continue to plant soybeans earlier to increase their yield potential.

Thus far, what is the yield benefit of the new ILeVO® seed treatment? The disease index (DX = (DI * DS)/9) has been created to help measure the yield reduction that can occur due to foliar disease symptoms of SDS. It is the percentage of plants showing leaf symptoms (disease incidence) times the severity of foliar symptoms. The disease severity of foliar symptoms is determined by a scale from 1 to 9. Therefore, the disease incidence (DI) multiplied by the disease severity (DS) is divided by 9 to arrive at the disease index (DX). At the soybean growth stage, R6 (full seed), it is estimated that for every 10 unit increase in the disease index (DX) as a result of SDS, there is approximately a 7 percent reduction in yield.

The chart to the right shows results from 181 Sudden Death Syndrome trials across the country from 2011-2012. In the absence of SDS foliar symptoms, Bayer still saw soybean yield increases averaging 3.2 bushels per acre with the addition of the ILeVO® seed treatment. As the potential for the SDS disease index or for foliar symptoms increase, the soybean yield advantage with the use of ILeVO® can also increase.



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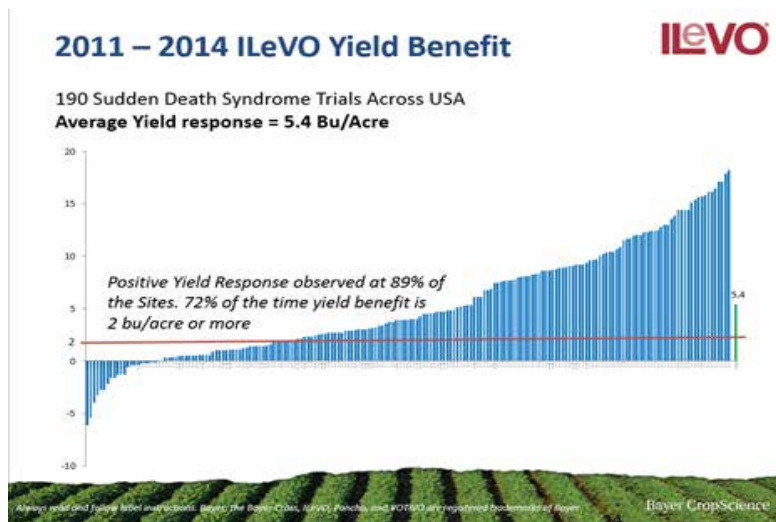
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Burrus is Offering ILeVO® (continued)

by Stephanie Porter

If no SDS foliar symptoms are present within soybeans, could you still benefit from the addition of ILeVO® in the PS SDS seed treatment? If the SDS pathogen is present, the root rot phase of SDS can still occur early in the growing season. Research is being done to better understand the correlation between the SDS root rot phase and yield loss, but Bayer's data shows an average 2 bu/A yield advantage in the absence of foliar symptoms. The level of the SDS pathogen in your soil and genetic differences between soybean varieties can complicate the ability to use only one number to express the yield advantage of ILeVO® for SDS. But, we do know that 72 percent of the time, ILeVO® can offer a 2 or more bushels an acre advantage, when compared to a base seed treatment.



Will ILeVO® help protect against nematodes such as the soybean cyst nematode? The ILeVO® seed treatment does have a broad spectrum activity against all nematodes. As a nematicide, ILeVO® kills nematodes near the seed, but as the root (tips) move away from the seed zone, protection is no longer available later in the growing season.

Burrus is excited to offer the ILeVO® seed treatment, which will be combined with their base soybean PowerShield® treatment and called PS SDS. ILeVO® is a unique compound that brings both fungicidal and nematicidal activity, when applied to soybean seed. ILeVO® impacts SDS disease symptoms above and below the soil. Burrus will continue to evaluate this new seed treatment during the 2015 growing season.

