

Soybeans, April 10, 2001

The Fungus Among Us

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Some of our soybean disease coworkers discovered that were higher levels of Fusarium fungus in Roundup-treated soybean plots. Since then we've been getting questions regarding the disease risk with the Roundup Ready system and questions of whether growers should use it.

While the researchers should continue to investigate this issue, we need to stress that their study found no effect from Roundup or the fungus on soybean yield. In all of the years we've been working with Roundup weed control we have never noticed a disease outbreak in the Roundup plots and never noticed a yield loss from disease in our Roundup plots. And, in farmer fields, there has been no trend for Roundup Ready soybeans as a whole to have higher disease problems as compared to non-Roundup soybeans as a whole.

A couple of years ago, there was an outbreak of Sudden Death Syndrome (SDS) in North Missouri and it so happened that farmers were growing lots of Roundup Ready soybeans that year. This implied that Roundup Ready soybeans were prone to SDS. However, that year had perfect conditions for SDS and if farmers happened to have grown conventional soybeans we might have thought that conventional soybeans, as a group were bad.

If you have a history of a disease problem, by all means find a disease-resistant variety whether it's conventional or Roundup Ready. Finally, the decision on what variety to plant should be made primarily on yield. Growers should think of varieties as individuals. Roundup Ready weed control is great, but it's not worth planting a low-yielding Roundup line. It takes very few bushels of soybeans to buy all kinds of conventional herbicides. The flip side is equally true: Don't choose a low-yielding conventional soybean over a high-yielding Roundup line because a few bushels of yield will cover the extra seed cost and more. The yield potential of Roundup Ready soybeans (as a whole) versus conventional soybeans (as a whole) is now essentially the same. However, within each group there is a full array of high and low yielders. At this time, we have not seen a yield effect from an interaction of Roundup and fungi.