JOHN TOOKER – SOYBEAN RESEARCH PROFILE

Farmer Blog



John Tooker, Professor and Extension Specialist, Department of Entomology, Pennsylvania State University

Why did you decide to pursue a career that includes soybean research?
I fell in love with insects in college. I enjoy studying them and I find their interactions fascinating. Soybeans came with the entomology job I have at Penn State, and I have enjoyed learning about the crop and how insects interact with it.

What research topic have you completed in the past or are working on now that could have or has had the most significant impact on soybean production?
The research I have done on slugs, which is a growing concern because of the use of no-till and cover crops, helps soybean producers most. My research team learned how the use of neonicotinoids also controls predators of slugs and other damaging insects. The loss of natural predators makes fields more susceptible to slug damage, and it has lots of other downstream effects. Because of this work, my team has become known as the slug people.

How has the soybean checkoff enhanced your ability to find answers to production problems for farmers?
The Pennsylvania Soybean Board was among the first organizations to fund slug research. Their willingness to fund ongoing research allows all of us to have a better understanding of what is happening in soybean fields each year.

Within your area of expertise, what are the top two or three general recommendations you would offer farmers to improve their management practices?
I recommend integrated pest management practices to manage insects. Farmers should invest in scouting to see if they need insecticides, because often treatment isn't necessary.

Within your area of expertise, what do you consider to be critical soybean research

needs that can impact the profitability of farmers in the future?
With more farmers using cover crops, I think research on the risks and benefits of cover crops is needed, especially related to pests. Cover crops actually bring more natural enemies to fields, reducing pests.

Photo: Nick Sloff, Penn State University

SRIN Articles:

Unintended Consequences Link Seed-Applied Insecticides to Slug Pressure

Sentinel Plots Encourage Scouting, Integrated Pest Management

SOYBEAN RESEARCH & INFORMATION NETWORK

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