SOYBEAN RESEARCH PRINCIPAL INVESTIGATOR PROFILE – KELLEY TILMON



Kelley Tilmon, Professor, Department of Entomology, Ohio State University

Why did you decide to pursue a career that includes soybean research?

My graduate training in agricultural entomology prepared me to work in any number of different crops. In 2005, I was fortunate to be offered a faculty position at South Dakota State University to work on soybean entomology. I held that position for 10 years before coming to Ohio State, where I continue to work in soybeans. I also work in corn, and a little bit in forages and wheat.

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?

I was involved in a project that demonstrated that, in most instances in the Midwest, insecticidal seed treatments do not provide an economic return in soybeans. Most of our acreage gets this treatment by default, but farmers are paying for it and the cost really adds up. Millions of dollars could be saved each year by using these insecticidal seed treatments more judiciously, in the few situations where they are most likely to pay off.

How has the soybean checkoff enhanced your ability to find answers to production problems for farmers?

I've worked on problems like management of aphids, caterpillars, stink bugs, Japanese beetles and many other insects that can either reduce soybean yield, which means farmers lose money, or that are being treated without need, which also causes farmers to lose money. All this work has been funded by the soybean checkoff. The soybean checkoff has also been very wise about funding multi-state, cooperative research. I've been involved in a lot of research across state lines. This cooperation is a very effective and efficient way to find answers that help farmers.

Within your area of expertise, what are the top two or three general recommendations

you would offer farmers to improve their management practices?

- Be aware of what's in fields and follow research-based management advice from land-grant universities about when to treat and not treat.
- This type of scouting can take time, which most of us don't have. A certified crop consultant who can scout for you is an excellent investment.
- Take some time to learn a little bit about the biology of the pests you routinely encounter. This provides so much context for how to deal with them! The extension service and the soybean checkoff education sources are always there to help with this information use them.

Within your area of expertise, what do you consider to be critical soybean research needs that can impact the profitability of famors in the future?

New invasive pests will always be coming down the pike. We need to invest in awareness and learning about them before they become a big problem in any given area. One example is soybean gall midge, which is becoming a big problem further west but is also spreading eastward. The checkoff-funded research being done in places like Nebraska will eventually benefit us all.

SRIN articles:

Finding Answers to Strengthen the Fight Against Soybean Pests

Cereal Rye Cover Crop Termination Timing Effects on Soybean Yield Across the Midwest

3D Scouting Tool Improves Accuracy of Soybean Defoliation Estimates



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