ZHI-YUAN CHEN – SOYBEAN RESEARCH PROFILE

Farmer Blog



Zhi-Yuan Chen, Professor of Plant Pathology and Crop Physiology, Louisiana State University

Why did you decide to pursue a career that includes soybean research?
I grew up on a farm, so I know that it is tough to be a farmer. I wanted my career to focus on agriculture and helping farmers. I began using transgenics to reduce aflatoxins in corn in 1996. In 2005, I was hired to use similar approaches to address soybean rust. Since then, I have expanded my focus to other diseases, all with the goal of making soybean production more sustainable.

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?
My research on a non-transgenic approach to disease control has the most potential to impact soybean production. Should soybean rust become a more consistent challenge, my research has identified a genetic marker to screen for resistance to that disease.

How has the Soy Checkoff enhanced your ability to find answers to production problems for farmers?
I really appreciate Soy Checkoff support and commitment to research. I know farmers want answers to their questions today, but I value their patience and understanding that research to find those answers takes time and resources. I thank farmers for their support and commitment, as they provide the only support I can tap into to impact soybean production.

Within your area of expertise, what are the top two or three general recommendations you would offer farmers to improve their management practices?
Farmers need to balance managing soybeans for yield with managing pest resistance to reduce the cost of inputs. There are always tradeoffs, and high yields come with other costs. Farmers will benefit from balancing yield and long-term sustainability.

Within your area of expertise, what do you consider to be critical soybean research needs that can impact the profitability of famers in the future?
I think research on new management practices that reduce costs and improve the environment will benefit farmers greatly. That includes more research on precision agriculture, so they can just apply inputs when and where they are needed.

SRIN articles:

Silencing *Cercospora* Genes Fights Soybean Disease

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