DEAN MALVICK – SOYBEAN RESEARCH PROFILE

Farmer Blog

Dean Malvick, professor and extension specialist of plant pathology, University of Minnesota

Why did you decide to pursue a career that includes soybean research?
I became interested in plant pathology based on my interests in pathology and microbiology. I wanted to use it in a way that could improve crop production and food production, and in research with real application for farmers and food producers. Soybeans are a fascinating crop and very important economically to Minnesota and across the U.S. There are many interesting and important disease problems to work on.

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?
Almost everything we do as researchers is in a collaborative effort. Some of the significant projects that I have worked on are with brown stem rot to continue our understanding of this disease. Other notable projects include work with sudden death syndrome on both the resistance and the seed treatment sides, white mold management, Rhizoctonia root rot management, and Phytophthora root rot management with resistance.

How has the soybean checkoff enhanced your ability to find answers to production problems for farmers?
The soybean checkoff has provided critical financial support that has enabled much of this work to be done. Also it has helped to establish collaborators.

Within your area of expertise, what are the top two or three general recommendations you would offer farmers to improve their management practices?
From a plant pathology and crop disease perspective, it would be helpful if farmers were all very diligent in scouting their fields – and some farmers are. Understanding where the problems are occurring and which ones are limiting production in all production areas, that would be helpful for researchers and extension specialists who could get information out to

producers. Also for funding agencies, so work could be prioritized based on real needs. The more we can understand exactly what the limiting factors are in every field that grows soybeans, the better off we will be.

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?
It is important to continue enhanced soybean breeding for more diseases or higher levels of resistance to diseases. We also need to continue research to truly understand the scope and impact of different problems as well as biological and environmental factors that increase risk to yield and productivity. There's so much we still don't know.

SRIN articles:

Searching for Answers to Reduce Severity of Soybean Stem Diseases

Multi-Faceted Plant Pathology Project Reflects the Collaborative Intention of NCSRP

SOYBEAN RESEARCH & INFORMATION NETWORK

This website is funded by the soybean checkoff