

Finding Successful Yet Cost-Effective Approaches To Controlling Nematodes

LITTLE ROCK, ARK.

Variety trials across the state are helping University of Arkansas Division of Agriculture scientists determine the extent of the nematode problem in soybeans and

gain some form of control over the problem.

“The research is focused on two main areas: resistance and control,” said Scott Monfort, division plant pathologist.

Monfort and Terry Kirkpatrick, division nematologist, are first looking at varieties with resistance to root knot nematode.

“The root knot nematode is our biggest nematode problem in Arkansas,” Monfort said. The researchers are studying 16 varieties, mainly maturity groups five and six. States like Alabama, Georgia and South Carolina developed varieties over the years with resistance to root knot so the researchers are studying how these varieties will perform in Arkansas.

Control is the other focus area of Monfort and Kirkpatrick’s nematode work. There’s one basic option for nematode control in soybeans, Temic. The main problem concerning Temic is that many producers don’t utilize the product because of row spacing.

“Producers planting in seven and 15 inch rows don’t have the option to put out a granular nematicide like Temic,” said Monfort. “It’s not a problem for those who plant 30 and 38 inch rows.” For those producers who plant in more narrow rows, pre-planting fumigants are being studied.

“Two or three weeks before planting, producers put the product out, going eight to 12 inches deep into the soil,” Monfort said. “This is a high-dollar approach, though.”

Monfort said two issues exist with pre-planting fumigants. First, not everyone has the equipment, and second, not every producer wants to till that deep.

“Our barriers to coming up with recommendations are not all producers use the same row spacing and one recommendation can’t be applied across the board to the various row spacing used,” said Monfort.

Monfort and Kirkpatrick are looking at some treatments that appear promising.

“We hope, by the end of the season, we’ll know which of these treatments are viable for our production practices and we can move towards applying for a section 18 to get control options for producers,” Monfort said. △



Without nematodes, these roots are well-branched and healthy.

University of Arkansas Division of Agriculture photo.



With rootknot nematodes, this soyplant’s roots are meager.

University of Arkansas Division of Agriculture photo.)