

Disease Control

Rotation, Foliar Fungicides Best Advice For Corn, Soybean Diseases

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A program on disease control in corn and soybean was presented recently by Dr. Melvin Newman, Professor of Entomology and Plant Pathology, University of Tennessee extension service.

Basically his advice boils down to three things. He suggests farmers should use a resistant variety, rotate crops and use fungicides, particularly the foliar fungicides.

"The hottest item that we have now is we found resistance to frog eye leaf spot to some of these strobilurin fungicides, like Headline, Quadris, and any of the fungicides that contain a strobilurin type fungicide," he said. "Pathologists have found this in five locations now and Tennessee was one of the first places where we found it. Now it's been found in other states, including Kentucky and Illinois. This is just for frog eye, not other diseases, so it's not a problem that we can't control, but it is an indication that our producers should use resistant varieties and the different fungicide classes."

Newman discussed the different classes of fungicides and urged farmers to help slow down any change of resistance in frogeye. He said no difference has been seen in the other common diseases like Septoria brown spot, Anthracnose, Cercospora, leaf blight.

"We have seen no difference there," he said. "We still get good control with our strobilurin fungicides on these diseases; but some of the best recommendations I can give farmers today is to plant frogeye resistant varieties. There are a great number of varieties that I have rated zero, meaning good frogeye resistance. There are some 50 varieties commercially available over the past three years that farmers can choose from and I advise them to do that. They need to get at least a variety that has good resistance to frogeye, in that case there's no danger in using a strobilurin fungicide."

Farmers who don't have any problems with frogeye have less chance of getting fungicide resistance to it, Newman explains; the other recommendation is to be vigilant and not just spray indiscriminately. If a farmer has a good rotation program and uses frogeye resistant varieties he may not have enough disease to spray.

"One of the things we want to tell farmers is just don't spray everything as a matter of fact thinking diseases are present," he said. "The same thing occurs in corn. This is kind of a new idea to spray corn for disease and the same thing goes there. Find a hybrid resistant to gray leaf spot first, this is the main disease we're looking at here in the Midsouth and especially in Tennessee; if you can find varieties that have some resistance that's good. One of the biggest things I'm showing is that rotation with soybeans or other crops really pays big dividends in reducing the amount of disease in corn. In fact some of the hybrids that we have looked at

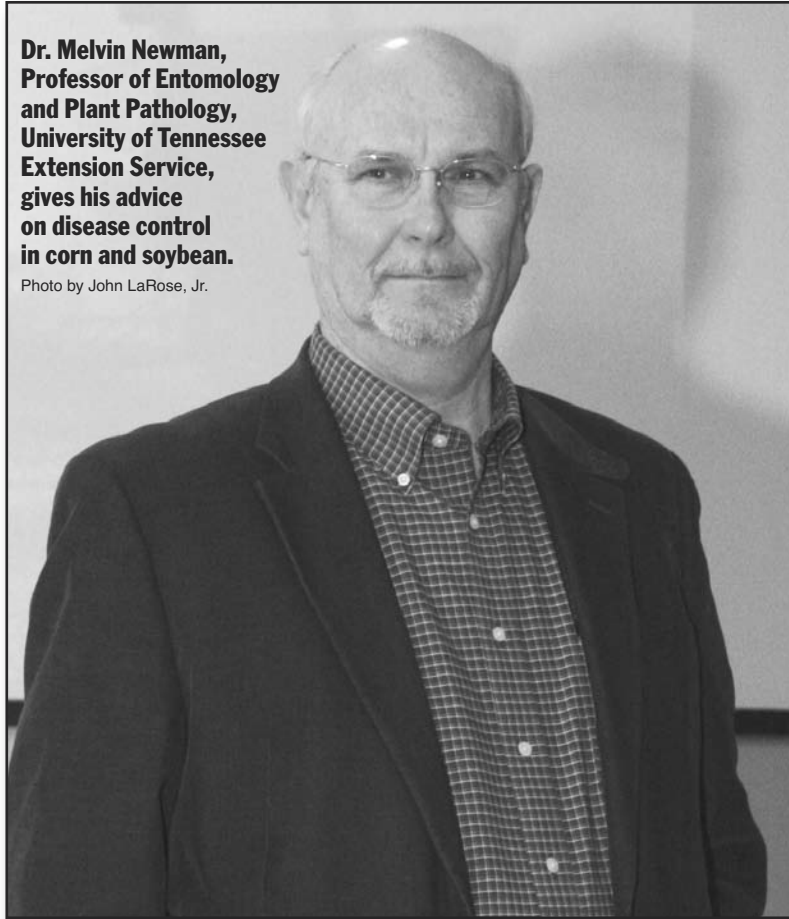
may not even need spraying because the amount of gray leaf spot and diseases in general is low, especially if farmers rotates every other year to soybeans or other crops. This is really good and it really pays big dividends.

"Where you get into trouble, and the price of these commodities plays a big role in what a farmer does, is when you raise beans after beans or corn after corn," he said. "In those cases you'll find more disease buildup where you have monocropping systems."

Newman suggests that farmers look to see if they can justify putting on a foliar fungicide.

Dr. Melvin Newman, Professor of Entomology and Plant Pathology, University of Tennessee Extension Service, gives his advice on disease control in corn and soybean.

Photo by John LaRose, Jr.



Timing is important, good coverage is important, and paying attention to diseases, especially late season diseases, is really important too.

"At the prices of the commodities today, if a farmer can save two or three bushels per acre it's money in his pocket," he said. "So farmers need to pay close attention not only to their weed and insect problems, but disease problems too. That is what we are concentrating on here in Dyersburg."

To sum it up Newman recommends that farmers rotate their crops, use foliar fungicides as needed, and be on the alert for fungicide resistant frogeye in their soybeans.

"If you're not getting good control with your strobilurins, you may want to go for a resistant variety or use a different class of fungicides, mainly the triazols. Triazols are not quite as good for control of frogeye as strobilurins; but in the face of fungicide resistance, it might pay you to go to a triazol type fungicide. That would really be our take home message today."

Producers also can go to the website <ut-crops.com> and scan the different data there, not only from Tennessee but from other areas too on cotton, corn, soybeans and wheat. There's a lot of research there including Newman's own research. Farmers can find resistant varieties to various diseases listed there. Δ

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