

Weed Spectrum Changes

Good Old Days May Be Over

REGINA LAROSE

MidAmerica Farmer Grower

MILAN, TENN.

Dr. Larry Steckel, University of Tennessee Extension Weed Specialist, has noticed a change in the weed spectrum, a change growers need to prepare for, a change in resistance. “As far as weed control goes, the good old days just happened. With good burn down practices, residual or tillage, growers were able to manage marestail but, with Palmer pigweed that is not going to help growers.”

Good options to control glyphosate resistant Palmer pigweed control may take some time to develop according to Steckel. “Resistance has always happened. Farmers have gotten used to

get these sprayers out there and get the soybean fields sprayed timely post emergence. We are probably going to have to live with more weeds.”

Another big change Steckel expects to see is the return of chopping crews. “In the mid-south we are going to see chopping crews out again. I expect to see more crews out again over the next few years because there is just no way to get around all these fields in a timely manner with a sprayer. We have got these new hybrids and new genetics, new equipment but, weed control has regressed about 15 years. We are back to using herbicides we used in the early 90s to control this weed.”

Chemical companies are looking for answers



Noticing the change in the weed spectrum is Dr. Larry Steckel, University of Tennessee Extension Weed Specialist.

Photo by John LaRose

another new herbicide coming out and bailing them out. Roundup Ready technology bailed us out from the ALS resistant Palmer pigweed. Sceptors and Pursuits were not working. The Roundup Ready era took the rug out from the development of new herbicides. Pretty well all the chemical companies, all but quit working on herbicide development. As a result it may be 10 years before a new herbicide will come out that will bale us out for Palmer pigweed.”

According to Steckel, growers need to catch Palmer pigweed when it is three to four inches or less in height. “The DuPont technology, the GAT technology gives tolerance to glyphosate and ALS. It is going to help in some aspects. Growers can use very high rates of some herbicides like Resolve, it is going to help on things like glyphosate resistant giant ragweed or the glyphosate resistant common ragweed. It is not going to be as robust a system for Palmer pigweed because Palmer pigweed in the state is pretty much ALS resistant now. It is going to help us but it is not the answer. The Dicamba gene may be available in 2012 or 2013. We have looked at those on glyphosate resistant Palmer pigweeds and they are not going to be the new Roundup. They are not going to take Palmer out two foot tall. They will control them and be a good tool if they are six to eight inches tall or less. We are going to have to be timely and weed control still isn’t going to be as simple as back in the Roundup years.”

Steckel explained the range of infestation. “It is a huge problem. If you look at the north Delta, the Bootheel of Missouri, west Tennessee, east Arkansas, it is a couple of million acres now that have pretty severe infestations. It is moving, it is moving east in Tennessee, it is moving west in Arkansas. I got a call from the weed specialist in Kentucky last week and they are investigating possible glyphosate-resistant Palmer pigweed in west Kentucky. They are starting to see glyphosate failures on a pigweed (common waterhemp) in Illinois too.”

Steckel recommends better management. “Farmers are going to have to manage a lot better than they have been as far as weeds. No longer can we go out and kill them a foot tall anymore. We are going to have to get on them much smaller (3 to 4”). Another change is we are going to have to rely more on pre’s. Even after using a pre we are still going to have to spray Palmer with herbicides like Flexstar no larger than 3 to 4”. Quite frankly we are going to have to buy more sprayers and more labor to

stated Steckel. “Syngenta and Bayer are looking at new herbicides. Syngenta chaperoned all these herbicides and kept them in play. Valent has kept Cobra alive. If it hadn’t been for them some of these herbicides wouldn’t still be labeled. Syngenta and Bayer kept the registration up, that is very expensive and it is a good thing they did or we would really be without options.”

Some growers are moving back to conventional varieties. Steckel explained, “some growers are deciding not to spend the money on the tech fee when they have to put all these other herbicides on anyway. The Bootheel of Missouri is the primary spot right now in part because there are several elevators there giving a premium of one dollar to a dollar and half for non-GMO beans. We are starting to see a little of this in west Tennessee. There are a couple of draw backs. First, getting conventional beans can be pretty tough but secondly getting varieties that will yield with the Roundup Ready’s can be a problem particularly in groups IV’s. Those are the drawbacks to it but, there is more and more interest in it.”

University development of conventional varieties has slowed according to Steckel, “the universities have backed off. It is like everything in agriculture. The tax dollars available for support has become less and less. It has got us in a bind now. A lot of our funding for any of this research comes from commodity boards, industry folks and state dollars. State dollars just aren’t there.”

Steckel added many universities are down from several breeders to just one. Industry has continued to be supportive of university breeding programs. “Industry has been very supportive. The big thing is graduate students. The reason they are supportive is they need the plant breeders to come out and fill those voids when folks retire in the industry. Students get their training at the universities and then go on to companies.”

Better management is the answer to the problem as new conventional varieties become available. Many conventional varieties developed by universities will eventually have the Roundup Ready trait. “Typically the first thing that happens is everybody can use it then companies grab it and put the Roundup Ready trait into it,” said Steckel. Δ

REGINA LAROSE: Associate Editor, MidAmerica Farmer Grower



Link Directly To: **SYNGENTA**