Farmers: Beware of waterhemp

Prior to harvest and soon after harvest, farmers evaluate the performance of their fields to identify issues that need to be addressed before planting the next crop. The effectiveness of their weed control program is part of the evaluation.

Identifying the weeds that are present at harvest is a good indicator of future problems. If certain weeds are present, a farmer will have to determine whether he or she used the wrong herbicide or management program, or did unusual weather interfere with the success of the program, or has a weed population become established that is resistant to the herbicide program.

Farmers who are consistent in using good programs year after year have the least amount of weed problems. Unfortunately, a farmer who is negligent for one year may pay for it with serious weed issues for the next decade since some weed species can produce 100,000-500,000 seeds per plant.

Farmers have the best chance to battle troublesome weeds when they grow corn since they have a variety of products that are effective, particularly against broadleaf weeds.

Farmers know that if they had a particular problem in a soybean field they need to reduce the weed seed bank, seeds that are already in the soil, when they grow corn.

By far, troublesome weeds are more of a problem in soybeans than corn. This is primarily a result of farmers growing continuous soybeans year after year, over-use of glyphosate as the primary or only post-application herbicide, lack of soil-applied pre-emergent herbicides that will provide residual control for an additional four to six weeks after planting, and waiting too long to apply herbicides after the crop is up.

Weather has been a major factor this year. Early in the growing season, farmers had trouble finding good conditions to spray their burn-down herbicides before planting. Periods of heavy rains prevented farmers from applying post-emergence programs, and allowed new seeds to germinate later in the growing season.

Once again, marestail and giant ragweed have taken advantage of the weather and particularly in fields that used a weak weed management program.

Fortunately, Palmer amaranth has not been found this year.

Waterhemp, a new weed for our area, has made its appearance in a few fields and that bodes major future problems for soybean growers.

Waterhemp looks very similar to other common pigweeds but has no hairs on the stems and the leaf is shinier, longer and narrower. Seed branches of waterhemp are slenderer and more branched compared to redroot and smooth pigweed.

Waterhemp is dioecious, meaning whole plants either have male or female flowers, but not both. This leads to a huge amount of genetic variability, producing stems that are red or green or various levels of the two colors. It also allows resistant genes to herbicides to develop sooner in populations.

I have observed several fields that were infested with waterhemp in Hancock County. Farmers need to have zero tolerance for waterhemp, which means individual plants need to be removed by hand before they go to seed if found in soybean fields. Once infested, a farmer will have serious weed issues in future years.

Waterhemp moving into our area is most likely resistant to glyphosate and other commonly used soybean herbicides. If a farmer does not remove the first plant seen he will have a major problem in two to three years.

One waterhemp may produce a half-million seeds. If that plant is not removed, those seeds will be spread across the field by the combine during harvest. If the farmer grows soybeans the next year, there will be large patches of waterhemp and by the third year the field will be infested, with limited herbicide options. Yield reductions may be as great as 25 to 50 percent.

Even if a farmer does not have waterhemp now, he should adjust the herbicide program as if he did. This would include using a burndown program with a mix of herbicides with different modes of action, a pre-emergent with soil residual activity, and removing any waterhemp plants that are not killed by the herbicide program.

Some farmers use tillage rather than applying a pre-emergent herbicide. This may work for marestail, but it will not work for waterhemp. The fields that were infested with waterhemp used tillage and did not apply a pre-emergent herbicide.

Since the fields infested with waterhemp were along the upper end of the Blanchard River, farmers downstream may have waterhemp seeds brought into their farms from flooding this summer. I believe floodwater is how waterhemp seeds got to these infested fields in the first place.

The weed management program recommended for waterhemp will also be effective against marestail and giant ragweed.

Speaking of ragweed, people who suffer from seasonal allergies will notice the abundance of ragweed pollen this year, which will continue until first frost.

Farmers will continue to battle weeds in their fields. Waterhemp is a new concern and may require farmers to change their weed management program. Following a zero tolerance policy for this weed will pay off significantly in the future.

Go to the following website for identification and more information on waterhemp: https://www.extension.purdue.edu/extmedia/bp/gwe-13.pdf.

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