

Soybean Weed Management Systems Update

As if choosing soybean varieties wasn't already challenging enough, heading into 2019 farmers have more decisions to make than ever. On top of sorting through the tremendous amount of genetics on the market to find the right agronomic traits for your fields, there are an increasing number of weed management systems to choose from. Here are some of the highlights of the various systems; stay tuned for updates since all the dust hasn't settled for some of the systems with regards to regulatory or export issues.

Conventional or non-genetically modified (non-GM)

While not a large segment of the soybean seed market, we'd be remiss in not mentioning conventional soybeans in the conversation. With current soybean prices, the lower seed costs and a broad selection of generic herbicides can make the input side of conventional beans more attractive to some farmers. Speaking of commodity prices, in some areas conventional soybeans may offer another potential economic benefit. While the market is limited and storage/delivery policies can be more challenging, in regions where non-GM premiums are offered it might be an opportunity worth discussing with those elevators.

RR1 and RR2Y

Both systems have been around long enough that we don't have to cover a lot of information about them, but there are a few things to think about. RR1 has been phased out of many seed company breeding programs, so if you are looking for new genetics with that trait it can be pretty challenging. While RR2Y genetics are still relatively popular and available, their numbers are dropping as well. In browsing soybean seed catalogs it looks like many seed companies have begun transitioning towards other platforms. The takeaway message here is that as the number of these varieties fades, double check that the products available still meet your agronomic needs.

RR2X

The Xtend soybean system has seen significant growth since its launch; according to Bayer, dicamba-tolerant soybeans comprised half of the total U.S. soybean acreage in 2018. With Bayer licensing the technology to many other companies, finding varieties to fit your needs won't be the biggest challenge for this system. At the top of that list may well be managing off-target dicamba movement. Affecting reportedly millions of acres throughout the soybean growing regions of the US in 2017 and 2018, off-target movement led to significant label revisions for the approved dicamba products. In addition to making the approved dicamba products restricted use pesticides, the revised labels contain many other changes outlining how the products should be applied. The bottom line is that if you plan on using dicamba on Xtend beans, now is the time to start preparing by double checking that your pesticide applicators license is current, studying the label and making sure your sprayer meets label requirements.

Enlist

While the Enlist traits and the herbicides registered for use with them have USDA and EPA approval, there is still a hurdle or two to clear before a full commercial launch of the system (approval from China probably being the main issue). From Corteva Agriscience, Enlist E3 soybeans have tolerance to three herbicides; a new 2,4-D formulation (2,4-D choline), glufosinate and glyphosate. With several years of

seed production under their belt and having conducted a lot of training and stewardship activities, Corteva indicates they are ready to launch if export approvals come in time, so stay tuned.

LibertyLink

LL soybeans are heading into their 10th season, so some growers are relatively familiar with the system. According to BASF (who now holds the rights to the technology), an increasing number are using it; they show that LL soybeans are planted on nearly 20% of US soybean acres. For folks not as familiar with the system, a few key points come to mind. Seed availability is expected to be solid with dozens of companies offering LL beans. While there are several generic glufosinates on the market, there have been some ups and downs in terms of both pricing and supply in recent years. Chinese supplies may be impacted again for 2019 due to tariffs and environmental issues. Your local retailer can keep you up to date and also provide guidance with brand name Liberty programs and pricing that may help out.

GT27 and LL GT27

These systems are pretty closely related so we'll group them together. GT27 beans have tolerance to glyphosate and a new HPPD/Group 27 herbicide (pending approval). LibertyLink GT27 beans have tolerance to glyphosate, the new HPPD/Group 27 herbicide (pending approval) and glufosinate. Some more key points;

- you probably noticed the whole (pending approval) thing; it's there several times to help head off trouble at the pass
- the trait package is approved for US and export
- the new HPPD product isn't approved yet; applications of it aren't legal until approval
- the new HPPD/Group 27 herbicide (pending approval) (sorry, couldn't resist) will be labeled for burndown and pre-emergence applications
- it won't be labeled for post emerge applications
- there are lots of HPPD products on the market; these two soybean systems are only tolerant to one of them. The others would cause significant injury to these beans.
- seed supply is probably as strong in Iowa as anywhere since many of our independent seed companies licensed the technology

A few parting thoughts that apply to all herbicide systems- always read and follow label directions and use multiple, effective herbicide sites of action (herbicide groups) at effective rates as part of a long-term weed management system.