

Bad News, Good News

Herbicide resistance tops the list of concerns for the 2007 season, and retailers can play a huge role in helping stem the problem — and find new business along the way.

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“WHAT do you want to hear first, the good news or the bad news?” is a question often posed in tough times. This year's herbicide outlook qualifies.

Bad news first: Resistance continues to increase across the country and breakthrough chemistries to combat weeds are mighty hard to come by. But chemical manufacturers are rising to the occasion with creative alliances and product mixes — and retailers can play a profitable role in explaining and marketing the options to growers.

Complex Year

Growers are facing a host of heavy decisions as we head into '07, thanks in part to shifts in the commodity market (see “Changing Tides,” p. 48). One example: Bayer and Syngenta report that in the Eastern Corn Belt, growers may need to figure last year's cutworm infestations in their herbicide programs.

Moth flight occurred sooner than expected in '06 and lots of green tissue was available for them to feed on because of lack of snow cover. Spring application of a burndown product could diminish havens for damaging populations in '07.

Another factor to consider: How does the '07 glyphosate resistance outlook compare with '06? “I think we're on the front end of much more severe issues cropping up on us as we go forward,” says Chuck Foresman, senior technical brand manager, herbicide resistance, with Syngenta. Six glyphosate-resistant weeds have been confirmed in 16 states, he says. The newcomers are Palmer pigweed and waterhemp, added to the previously

discovered horseweed, common ragweed, Italian ryegrass, and rigid ryegrass.

“Growers have run into problems with stacked resistance to different modes of action,” explains Foresman. For example, waterhemp across the Midwest could have ALS resistance and PPO resistance on top of glyphosate resistance. “Then we have no alternative, no way of controlling that weed post-emergence in the crop,” he says.

Foresman adds that university researchers are now watching lambsquarters and giant ragweed as the next possible candidates for resistance.

Chemical companies and Extension staff have been generating management recommendations for a few years now, and many 2007 products on the market (see chart) — as well as many other compounds — fit into those programs which advise:

Making Burndown And Premerge Applications. The manufacturers we talked with emphasized the use of pre-emergence residual herbicides in both corn and soybeans.

“In our 2007 technology use guide, we're recommending growers use a residual if they have dense stands of difficult to control weeds,” says Rick Cole, corn technology development manager at Monsanto.

“We believe there's a strong case to be made for greater herbicide inputs to protect yield potential because there are much stronger commodity prices than we've seen in the past,” says Duane Martin, soybean prod-

uct manager at Syngenta.

In fact, he says university research has overwhelmingly shown preemerge treatments more than pay for themselves — a positive selling point for retailers.

“In corn, preemerge treatments eliminate or reduce early weed competition to increase the chance for better yields and delay the postemergence application of glyphosate for optimum weed control timing,” says Dave Downing, herbicide product manager at Makhteshim Agan North America (MANA). In general, some experts would like to see glyphosate saved for in-crop use only.

Jeff Carpenter, soybean product manager at DuPont says, “Recent Doane's data shows that currently 55% of the glyphosate-tolerant corn receives a preemerge residual treatment, but only 25% of glyphosate-tolerant soybean production. Will residual use quickly grow in the soybean business to address weed shifts? Every 1% growth in the soybean number brings approximately 700,000 acres of residual-herbicide market potential to retailers.”

Mixing Up Chemistries. For soybean growers in Roundup Ready systems, this approach can be a challenge. Some have been applying glyphosate



only for up to 10 years on the same fields. While simple — and in the past, effective — this puts “incredible selection pressure out there,” says Foresman.

“Often the general feeling on resistance is, ‘If I don’t have the problem yet, I’m not going to put any additional money to try and protect against a future problem,’” agrees Bill O’Neal, technical product manager, Impact herbicide, with AMVAC.

However, Mark Loux, weed specialist at The Ohio State University, announced in his Extension bulletin that growers cannot afford *not* to use pre-emergence herbicides in beans.

“Soybean growers will need to manage their time as they work through preemergence treatments,” says Dan Hinterliter, product manager at Syngenta. “It’s something they’re going to have to go back to, to control some of these weed issues that are arising.”

Chemistry Collaboration

Many lament the lack of new molecules, as the last totally new chemistry to come along was in 1998, with the discovery of the HPPD class (which can’t be used in soybeans). But as noted, chemical companies are working hard in other ways to make mode-of-action diversification easier. They’re teaming up to introduce new premixes and revisiting some older chemistries that have proven effective in the past.

One chemistry that’s making a return this year is sulfentrazone, premixed with cloransulam-methyl in the new product Sonic. “This is really a re-release, because sulfentrazone has been out of soybeans for the past three years. It’s a brand new chemistry to most growers,” says Nate Miller, Dow AgroSciences product manager. He says the compound will be especially helpful in the southern two-thirds of soybean areas where growers are having difficulty controlling key weeds.

FMC will be marketing the same premix as Authority First DF, “designed to provide soybean growers a clean start and a resistance management tool for both ALS- and glyphosate-resistant broadleaves,” says Aaron Locker, FMC product manager. He says based on feedback, growers “have been looking forward to this premix for a long time.”

Soybean growers will have another

next year, some coming out of soybeans.

Dennis Belcher, technical service representative with BASF, adds a word of caution, especially considering some are saying as many as 40 million acres could go to Roundup Ready corn this year: “If a grower continues to use glyphosate on soybeans, then uses it on this second wave of glyphosate-tolerant

new preemerge product in the form of Prefix from Syngenta, available in co-pack form, which contains metolachlor and fomesafen. One preemergence premix giving old favorites new life contains metolachlor, atrazine, and the safener benoxacor — Bicep II at Syngenta and Parallel Plus at MANA.

Valent has improved its classic clethodim herbicide, releasing Select Max, which has faster, more complete uptake in grassy weeds, including volunteer corn, says Elsa Zisook, marketing communications manager.

Corn can look good not only because of bullish prices but the fact that more herbicide options are available for the crop. Anywhere from 6 million to 10 million additional acres of corn will be planted

corn coming around, I don't see resistance getting any better."

A huge move to glyphosate-tolerant corn may not be good news to retailers in another way. "Some estimate that as much as \$800 million in revenue will come out of the corn herbicide business within the next two to five years," says DuPont's Carpenter. He notes that such a scenario occurred in the soybean business in the early 2000s when one or two glyphosate applications replaced preemerge residual and in-crop post herbicides. "It forced retailers to analyze their marketing strategies, crop protection pricing, and service offerings to their customers."

Role Of Retailers

Dealers have more to "sell" than ever in this unusual year not only in talking up new products but in offering:

Advice To Growers. Market research has shown that retailers are the local experts that growers rely on "on the front line." "They're priceless," says Dow's Miller. "Dealerships need to be a very active and interested voice in promoting resistance management. Those that don't will be left behind."

Valent's Zisook agrees, "Retailers will be counseling growers on the best, most efficient herbicide choices while also considering 'external' issues of labor, fuel costs, seed and technology costs, crop choices, spray drift management, and the like."

New Product Trials. For new products such as AMVAC's Impact (only the second HPPD inhibitor on the scene, Syngenta's Callisto was the first), retailers recommend growers to trial it on, say, 10 to 15 acres. Last year, several hundred growers in 35 states "who weren't really sure they wanted to transfer their program to Impact" had such an opportunity, says O'Neal.

Bottom line: Encouraging investment in multiple products is not only good resistance management, it gives a retailer profit opportunities as well. ▀

PRICES UP ONLY SLIGHTLY

Chemical companies have held the line on herbicide price increases, but they're inching up a bit in 2007, for the first time in five years.

And why not. Companies share the same employee, energy, and transportation challenges as growers and retailers, says Travis Dickinson, head of marketing at Syngenta.

"Plus, many of the traditional herbicides have a petroleum base," notes Rick Cole, corn technology development manager with Monsanto. "Companies finally have to raise prices slightly to recoup some of that."

Add to that some firms' monolithic financial investments in research and development — as they search for the next silver bullet pesticide — and it was only a matter of time before costs had to be passed along to customers. "But the increases are fairly insignificant on a cost-per-acre basis," believes Damon Palmer, product manager, Dow AgroSciences.