

DuPont Herbicides Complement Pioneer Seeds

BETTY VALLE GEGG

MidAmerica Farmer Grower

GREENVILLE, MISS.

Pioneer® brand corn and soybean seed with the innovative Optimum® GAT® (glyphosate ALS tolerance) trait enables the most flexible herbicide programs on the market. Tracy Linbo, senior marketing manager for Optimum GAT, discussed the Optimum GAT trait at the Pioneer Crop Protection Technology Field Day in Greenville, Miss.

Optimum GAT will provide three main benefits over seed products currently on the market. Linbo said the first is yield.

"We have to be sure that we're maximizing yields, and we're utilizing our proprietary breakthrough technology to be sure that we're doing that for growers," she said.

The second benefit from Optimum GAT is achieving broad spectrum weed control without compromising crop safety. Many stories have been written recently about weed resistance.

"That's one area, weed that are resistant to glyphosate, that's getting very important to farmers," Linbo continued. "It has been a bigger topic in the south than it's been in some of the other areas and I think you've been talking about it longer. It may be some weeds that are resistant, it may just be some tough to control weeds. By providing a trait that is also resistant to the ALS family of herbicides, we provide more herbicide options to combat weed resistance."

Farmers want herbicides that are flexible for them and effective on a broad spectrum, but they also know that glyphosate has been pretty crop safe for them overall.

"So we have to be sure that the products that we're bringing are also very crop safe," she said.

"Then the third point farmers are interested in is getting the most from their trait investment. Growers want to make sure they're doing everything they can to protect the seed they buy.

"So when they look at Pioneer agronomic expertise, and they look at the DuPont herbicides, they know we are bringing that whole package together," Linbo continued. "We want to be sure we're providing them the most we can for that trait investment.

"Those are the three things growers look at when considering what Optimum GAT will do for them," she added. "That's very different than what they have today. We want to be sure we're providing them the most flexibility and really maximizing their results."

Linbo said growers want to know the true technical difference between "maximizing yields" with Optimum GAT and the products they use today with Roundup Ready.

"There are really two major differences between the two traits," she explained. "The first and the obvious one is the ALS chemistry tolerance. Now – with the Optimum GAT trait – farmers have a larger range of products they can use that they didn't have before. The second one is Optimum GAT is fundamentally different in how

it handles glyphosate."

Linbo explained that in conventional crops glyphosate binds to the non-glyphosate-tolerant target and kills the plant. In the Roundup Ready crop the target is modified so it cannot bind and does not affect the plant.

"That's where the crop safety comes from," she said. "Optimum GAT is fundamentally different in that the GAT enzyme uniquely causes it to metabolize the glyphosate and actually inactivates it. So it's fundamentally different, therefore ultimately providing that crop safety that the growers need."

In corn products, Pioneer will be stacking Optimum GAT with the Herculex traits to provide the insect protection that farmers also need.

"Ultimately, Pioneer is taking all of these things and bringing them together to protect the yield and provide farmers with these better weed control options for early protection," Linbo said.

Wayne Schumacher, Optimum GAT product manager for DuPont Crop Protection, spoke to explain more about the DuPont herbicides that complement Pioneer's latest crop lines.

"We have them in two basic families and the first two products are DuPont Instigate herbicide for corn and DuPont Diligent herbicide for soybeans," he said. "These two represent what we call our power herbicides that we'll be bringing forward because basically they will be able to do three key things. One is to manage the tough weeds, weeds that are becoming tolerant to either glyphosate, ALS, or other chemistries. The second is that these products will contain what we call built-in weed resistance management. With these products, farmers will be able to use multiple modes of activity on these key weeds."

Instigate can be used as both a preemergent and postemergent herbicide for those tough weeds, including resistant weeds. Diligent can be a preemergent herbicide for soybeans, with multiple modes of action in the product itself. It also can be used in combination with glyphosate.

"The other unique thing is that these products can provide both contact plus residual weed control," Schumacher said. "That's something that is absent in a lot of production systems today.

"The second family of products is our flexible family which includes the two products from DuPont called Traverse and Freestyle herbicides," he continued. "The flexibility for these two will be that these products can be used pre or post-emergence on corn and soybeans. So growers will have a very wide window of application.

"We can also utilize these herbicides to make sure that we maximize the crop rotation flexibility in areas rotating to soybeans, cotton or rice. We can design the products that meet the rotation needs and finally really deliver this uncompromised crop safety." △