

Roundup Ready 2 Yield

Monsanto's Newest Soybean Offers Big Jump In Yields

UNION CITY, TENN.

Monsanto held its 2008 Technology Showcase to introduce its new Roundup Ready 2 Yield soybeans that provide a 7 to 11 percent yield increase. Robert (Robb) Fraley, chief technology officer for Monsanto, said the technology will be offered in two dozen varieties this fall with enough seed available for 2 to 3 million acres.

"Each of the crops we're working on – corn, soybeans, cotton – have major technology advances coming in the pipeline," he said. "It starts this fall in soybeans with Roundup Ready 2 Yield which is our new Roundup Ready technology that in our testing brings with it a huge 7 to 11 percent increase in yield. That's going to be a real breakthrough for soybean growers."

By the second year the technology will be offered in a lot more varieties and on a lot broader scale.

"With that kind of yield benefit, I think we'll see a ramp up in adoption of Roundup Ready 2 Yield that will be probably even faster than for Roundup Ready," Fraley said. "I think the old product – one of my favorites because I helped invent it – will probably be out of the marketplace in five or six years just because the yield benefit of Roundup Ready 2 Yield is so great."

He explained the Roundup Ready 2 Yield gene will be the platform Monsanto uses to stack for Dicamba tolerance, which is going to be an important tool for weed resistance and weed control. While Dicamba is not a new product, the new technology built into the seed make it a viable option for farmers.

"We'll also be adding genes that increase yield in soybean and change the oil composition as well," he continued. "I think one of the most exciting elements for the soybean grower is there's so much new technology in the next few years that it's going to be a very, very fun time."

Dicamba is a very broad spectrum weed control system. Through work with the university, the gene was discovered that enables the soybean and the cotton plants to become resistant to Dicamba.

"So it has that same benefit as Roundup Ready in giving farmers broad spectrum weed control and excellent crop safety," Fraley said. "Our commercial approach will be to stack or combine the Roundup Ready 2 Yield with the Dicamba gene and that will enable growers to apply both products and get the benefits of better and more durable weed control."

Dicamba will take care of the resistant weeds that have cropped up, and that is the main thrust for adding it to this system.

"The combination of Roundup and Dicamba is just generally a better weed control product," he continued.

The farmer's cost of the Roundup-Dicamba system was not yet known, but Monsanto's general approach maintains that if the technology creates so much value for the marketplace, Monsanto always tries to capture one-third or one-half of that value for the company to reinvest in research. That gives the growers the opportunity to earn back their investment and receive a return.

Monsanto is also working on crops designed to withstand drought.

"About five years ago we discovered our first drought gene," Fraley said. "In the laboratory literally you could see the difference in the trays of plants. Those without the gene were dead, the ones with the gene were green. And since that timeframe we've been moving that gene into corn, soybean and cotton. Now we're starting to see field results of drought tolerance that are quite dramatic."

"Another thing that's important to point out is that it's not just one drought control gene," Fraley said. "We're testing literally dozens of different drought genes and I think we'll see multiple generations of drought resistant products in the marketplace in the future."

The first corn drought product is expected to be commercialized after the turn of the decade. Fraley discussed other exciting innovations on the horizon.

"We've talked about a lot of exciting products in soybean and in cotton," he said. "In corn we're going to see today's Triple Stack, which has been a very popular product, become obsolete as we launch SmartStax which contains eight genes. Literally three genes are for the corn borer, three genes are for rootworm and one each are for Roundup and Liberty Link."

That will give growers a boost in bug control and higher yields, but because of the multi gene approach, it will provide the basis for deregulating some of the refuge acres.

"We're already starting to see interest by the regulatory agencies in doing that, and that's going to mean big yield increases on farms," Fraley said.

SmartStax will be launched in 2010, so next fall the seed will be sold in the marketplace.

"Overall, it's a tremendously exciting time for this industry," he added. "We're seeing global demand for our products, we're seeing a technology explosion that is going to drive yields and productivity far beyond what people appreciate today. So, it's exciting to be part of this indus-

try."

Ron Akin, technical development manager, discussed the growth that this 10th field day has generated.

"I think we had as many corn hybrids and soybean varieties planted at our first field day back in 1999 as we had customers attending," he said. "Attendance has increased over the years and we're expecting about 750 customers today."

Akin credited the good central location for the field day as one reason, but said the real draw are the timely topics and top-notch speakers.

"If you look at the agenda you will see university personnel from five different states and their topics really hit home with the farmers

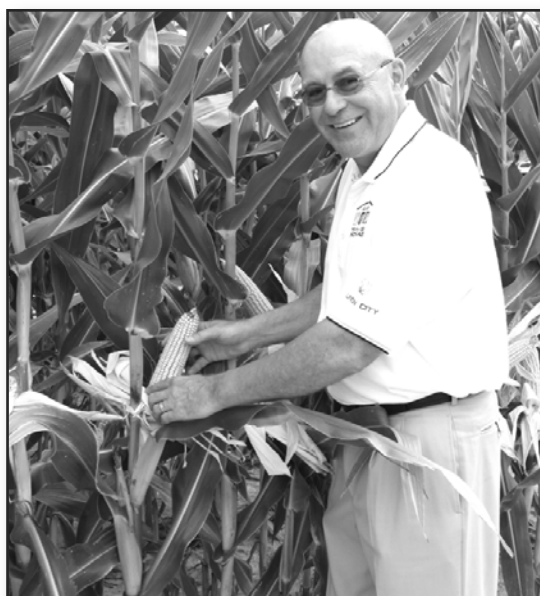


Shown are (from left) Josh Grey, Ron Akin, Technology Development Manager, and Guy Grey, corn, soybean and wheat farmer from Obion County, Tenn.

Photo by John LaRose

Giving his presentation is Mr. Larry Ganann, Technology Development Representative for D&PL/Monsanto.

Photo by John LaRose



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who attended" he said. When our speakers discuss crop germplasms and technologies for 2009 and beyond, our customers appreciate this type of information. All three crops – corn cotton and soybeans – are represented here today and we're very excited about their future in the Mid-South.

The varieties on display are the ones for the future.

"Absolutely, all three crops – corn, cotton and soybeans – we have a great looking future ahead of us."

He said some experimentals are among the plots on display, however a majority of those shown will be available in different amounts.

"However, we didn't want to put something out here that the farmer says 'well I like this, it looks good and I'm interested in it;' then all of a sudden we don't have it. So really everything we have out here we are trying to have available."

Akin said the field day is a way to showcase the products that will be available.

"The events we're talking about is Dicamba soybeans that we have, now of course we have several years out but it's really good to look at these in the field and planted," he said. "We have our second generation Roundup Ready soybeans coming as well. It's here and we will have some for commercial sale in 2009. We have Dicamba cotton out here which really is exciting and of course we've been able to put Dicamba over these Dicamba crops at several different rates and, believe you me, they are very tolerant to this particular product. It's a great weed control addition to the Roundup products that we have. Δ