

Soybean Savvy: Are You Up to Speed on the Latest Soybean Developments?

MOVE OVER CORN ... soybeans are set to take center stage in 2013 and beyond as the product pipeline grows, the buzz builds and the industry moves deeper into the “decade of the bean.”

“Soybean traits are on the verge of an explosion. There’s a great deal of excitement around the new traits that are coming out. Corn has taken the spotlight for the past few years with the different Bt traits and optimal drought performance hybrids. However, with the dicamba-based weed control and more and more healthy soybeans coming out—soybeans are about to take the spotlight,” says Marty Turner, director of stewardship and compliance at STEP Ltd.

STEP helps keep agriculture industry stakeholders abreast of the new technologies available to them and the requirements and obligations associated with those technologies. Turner and his associates work directly with key seed trait providers, their retailers, dealers, and farmers on product stewardship and compliance education.

Turner says there are a number of issues industry stakeholders should keep in mind when licensing, selling, or planting soybeans in 2013 and beyond.



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TOP TOPICS IN 2013

• Patent Expiration

One of the biggest areas of confusion surrounding soybeans, says Turner, is the expiration of the Roundup Ready 1 patent and what that means to the industry. “The biggest confusion dealers express to me—and where they have trouble relaying [information] to farmers—is what happens when RR1 soybeans go off patent?” Some farmers want to know if and when they can save seed and replant it, he says.

“For some, it’s clear as mud,” says Turner. “After the 2014 season’s harvest, for growers that still purchase RR1 beans, it is in the spring of 2015

that the patent is formally off and they can plant saved seed. However, even with that possibility of replanting, there are still several RR1 varieties that will be illegal to save. This is where the confusion comes in—RR1 soybeans are covered by other patents that the breeders have earned and developed for that variety.”

For example, even after the RR1 trait goes off patent, it will be illegal to plant Pioneer brand soybeans because the individual native traits and breeding methods—as well as the varieties themselves—are patent protected. Protection of intellectual property is essential to future investment in



research and development initiatives necessary for developing the next generation of traits and technologies.

"In addition, growers will be signing technology agreements stating that they cannot replant soybeans from those crops. This will be made very clear to our customers. We have done this to preserve the funding committed to our research program to provide better products to growers," says Jerry Harrington, sales and marketing public relations manager for DuPont Pioneer.

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There's no quick-and-dirty answer for growers about planting saved seed when the patent for RR1 expires. "We tell [dealers and licensees] to tell their growers to check with that specific brand and variety if it's okay to save them after the 2014 harvest. There's no short answer that's a blanket [statement] for all of the Roundup Ready traits. I don't think there's going to be any one brand that will say, 'Any of our seed you can replant,'" says Turner. Dealers and licensees can obtain this information from their trait providers or seed company partners.

The elevator speech for growers in 2013, says Turner, is there are no Roundup Ready soybeans that can be saved this season—they're still on patent in the United States. "That's what [growers] need to understand for the 2013 planting season," he says.

• RR2Y Clarification

Another source of confusion dealers and licensees should clarify to their grower customers is the patent on Roundup Ready 2 Yield is new and RR2Y soybeans will be protected for many years to come. "Some farmers assume they can save RR2Y soybeans as well. We're helping to inform growers RR2Y is new, and that is not the case. This is still a message we'll be delivering this year," says Turner.

Many trait providers have or are in the process of undergoing renewal efforts of their licensing agreements. These agreements are important because they spell out requirements and obligations associated with the trait technologies to the growers that use them. "They are legally-binding documents and are more important than most farmers might think. As a dealer, it is important to make sure that your farmers have signed the latest, most up-to-date agreement," says Turner.

It's also critical for growers to understand what they have signed. "I've had discussions where a farmer doesn't even know he's licensed, or who he's licensed for—that's the last thing they're concerned with, but it is important." Crop claim opportunities may also be affected when growers do not sign or understand their license agreements.

• Stepping Up Stewardship

Dealers and licensees must also educate growers on the importance of proper product and technology stewardship. Appropriate stewardship practices maintain the durability of the traits and ensure the pipeline keeps growing and continues to improve down the road. "Overall, proper stewardship helps ensure farmers continue to receive the best products possible through continued improvements and research and development ... You want to make sure you're following stewardship to minimize any possibility of resistance or of the traits [losing efficacy]," says Turner.

Globally, approvals have become more complicated, putting a strain on trait providers and farmers to understand and meet stewardship requirements at a time when that knowledge is crucial—new traits entering the marketplace may not be fully approved worldwide, says Turner. "It's important to know what the [stewardship requirements] are, and it's getting tougher for farmers to understand with so many different traits out there. As it gets more complicated, trait providers and seed brands need to make sure they're staying on top of it and be at the ready to answer questions for their farmers."

WHERE ON THE WEB

To download this department and for exclusive content on the real cost of bin-run soybean seed for your grower customers, visit SEEDWORLD.COM.



TRAIT TALK

Thirty-four new soybean varieties will be commercially available to producers for planting in 2013 from **DuPont Pioneer**. These include varieties for a number of areas with resistance packages that provide tolerance to **iron chlorosis deficiency, phytophthora, white mold** and **cyst nematode**.

Monsanto expects its **Genuity Roundup Ready 2 Yield** soybeans to be its hottest soybean product in 2013. More than 300 varieties are available in multiple brands offering different genetic packages. In 2014, Monsanto

will build on its RR2Y platform with **Roundup Ready 2 Xtend**, which will add **dicamba tolerance** to the Roundup Ready package.

Syngenta and **Bayer CropScience** recently announced that their new **MGI herbicide tolerant** and **SYHT0H2 soybean** products are under review by regulatory authorities and should be available in the United States and Canada post-2015.

MGI is an acronym for the three herbicide active ingredients, **mesotrione, glufosinate** and

isoxaflutole, to which the product provides tolerance. MGI tolerant soybeans will offer tolerance to **Callisto, Balance** and **Liberty** herbicides, and will combine residual control with post-emergence control for flexibility of weed control options.

Pending regulatory approvals, the new **Enlist Weed Control System** from **Dow AgroSciences** is to be released in 2015. Enlist will provide tolerance in soybeans to a new **2,4-D product** and **glyphosate**.

Educate the Educators

WITH THE INCREASE IN PRODUCT PIPELINE, NOW IS A GOOD TIME TO RAMP UP EDUCATION INITIATIVES FOR YOUR DEALERS AND/OR LICENSEES. INDUSTRY LEADERS GIVE THEIR ADVICE AND EXPERIENCE ON ENCOURAGING THE FLOW OF INFORMATION THROUGHOUT THE SUPPLY CHAIN.

Sooner Rather than Later

"We must engage our retail partners and growers as early as possible," says **Tony White**, product development manager at **Monsanto Company**. "It's important for us to educate them on the technology, but also to listen to them so we can unveil potential opportunities to improve how the product is used or other components around making the

trait successful. This approach includes early involvement of retail partners and others in information-gathering sessions to get their feedback—often before a product goes to commercial launch."

Provide Talking Points

"There's so much science and information they need to keep track of, it's really important for us to take that into account as we prepare to educate them," says **John Kalthoff**, portfolio marketing leader at **Dow AgroSciences**. "We try to boil everything down to two or three main points for the retailer, so when they are standing in front of a farmer they want to have two or three things they can say that will be important, accurate and compelling."

Trial Plots for Training

"We spend a lot of time with our Product Knowledge Plots to ensure our field teams understand the products, the concepts around the products, the diseases, the agronomic characteristics



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—Tony White

and the trait efficacies of the products," says **Don Schafer**, soybean marketing manager for **DuPont Pioneer**.

Avoid Data Download

"It's an educational process and not a data and information download—and then we walk away. We must teach them that they must not only fully understand the technology, but they must be able to have a discussion around the product and know we are there if follow-up is needed," says White.



Weeding Out Resistance

IN THE PAST, traits in soybeans may have seemed relatively simple when compared with crops like corn, but Carl Peterson, treasurer of the Independent Professional Seed Association and owner of Peterson Farms Seed, says a new era of soybean production is definitely on the way.

A number of new soybean products are set to hit the marketplace over the next few years that are aimed at addressing the growing concern about herbicide resistance. Many have stacked traits that will help growers better manage their herbicide options.

"Weed control in soybeans used to be a real art," he says. "We used to have to mix up all kinds of concoctions and spray at just the right time. Then it got real easy—we just sprayed Roundup—but it's not going to be that easy anymore. Resistant weeds have become a big problem."

New developments in soybean products and technologies are going to expand opportunities and possibly create shifts in the market, says Peterson. "I think [new products] may fragment the marketplace more so than in the past," says Peterson. "Maybe you have some resistant weeds in certain parts of the country that dicamba does a really good job on—well that's going to be a really big advantage, especially if it's a weed that 2,4-D doesn't do so well on. I think there is going to be a lot of opportunity as well as a lot of possibility of shifts in market share and that is kind of exciting."

Weed resistance is top of mind for many companies developing crop protectants. The issue is driving the development



Carl Peterson, IPSA treasurer and owner of Peterson Farms Seed

of traits and technology to protect and improve soybean yields, says Rex Wichert, soybean portfolio manager at Syngenta. "Weed resistance is an ongoing and increasing challenge, and I believe that changes the priority and the focus of what a grower looks at in understanding the value of a product," says Wichert.

Many corporate initiatives are underway to decrease the incidence and spread of weed resistance. Bayer CropScience is one such company that has made managing weed resistance a top priority, says Eric Peters, the company's soybean herbicide product manager. "Bayer pioneered a program called Respect the Rotation, an initiative to promote herbicide diversity, as well as reinforce the principles of integrated weed management through rotation of crops, herbicide tolerant traits and modes of action," says Peters.

STAYING AHEAD OF THE GAME

Retailers and licensees who keep up with traits and technology as well as possess a good working knowledge of the genetics behind them create more

opportunities for themselves and their customers than those who simply fill orders, says Peterson. "That first group of retailers have more opportunities because they have those relationships with growers and understanding of the traits and the genetics," he says. "There are solutions to most of the problems coming down the pipe, and seed companies have to determine which solutions fit which part of their geography and get those in the right genetics."

Both seed companies and dealers must stay ahead of the game and inform their grower customers of upcoming issues long before problems show up in their fields. "One of the things that we have done in the past few years is to bring more awareness of the resistant weeds that are coming to the region and what the situation is in other parts of the country," says Peterson.

"It's our mission to try and make sure growers understand what has happened elsewhere. It creates a sense of urgency that we don't want it to happen here. We have to keep talking about those things that are coming, and the people who are successful at doing that are going to be the ones that position themselves well in the marketplace."

There will always be new challenges to overcome, and new technologies and products will offer solutions to the many issues that may arise. Seed dealers and licensees who understand and present new traits and technologies to their customers and to the marketplace will continue to thrive, says Peterson. "The key strategy is to keep your options open," he says.

