

Simplot plans GMO-only seed potato farms

By JOHN O'CONNELL
Capital Press

PARK CITY, Utah — Simplot Plant Sciences officials say their company intends to eventually award contracts for propagating its Innate line of biotech potato seed exclusively to farmers willing to forgo raising conventional spuds.

The planned move is among a host of precautions intended to aid in identity preservation of Innate, said Erik Gonring, Simplot Plant Sciences industry affairs manager, while offering a recent update on the technology to growers at the National Potato Council's summer meeting.

As Gonring noted, failure to keep biotech spuds segregated from conventional spuds caused market disruptions several years ago when Monsanto attempted to commercialize a biotech potato, called NewLeaf.

Gonring said Simplot has strict operating procedures governing each stage of production — such as covering truck beds with tarps and using segregated storage. He said the company has also informed major processors and dehydrators about tests available to detect the Innate genetic sequence. Furthermore, Simplot keeps records indicating where all Innate potatoes are at a given time, he said.

Gonring said Simplot has applied for approval of Innate in the top 10 foreign spud markets and hopes to get approval from Japan later this year.

In the meantime, Japan has announced plans to begin testing a small percentage of potato shipments for the presence of a biotech trait.

The Washington Potato Commission's executive director, Chris Voigt, said growers in his state are most concerned about the potential for volunteer Innate spuds to spread. Gonring said Simplot has language in its agreement requiring commercial growers to avoid planting conventional spuds in a field after an Innate season and requiring volunteer monitoring for several years. The first generation of Innate was approved Nov. 10, 2015, with sales targeting the chip and fresh-cut potato markets.

Genes from other potatoes were added to prevent the spuds from browning when cut, reduce bruising and lower levels of a potentially harmful chemical formed in certain fried foods, called acrylamide.

"We're part of this new and emerging trend of crops in the biotech market that have traits focused on benefiting the consumer," Gonring said.

He said 6,500 acres of first-generation Innate spuds were planted this season, and the company's studies show a 15 percent increase in usable spuds when Innate is packed.

By December, the Environmental Protection Agency is expected to deregulate second-generation Innate Russet Burbanks, which will include the original traits plus enhanced cold storage and late blight resistance.

Simplot Plant Sciences spokesman Doug Cole said Simplot is raising 200 acres of second-generation Innate this season for seed propagation.

Cole said the second-generation improvements will be revolutionary for the chipping industry, making it possible to store popular chip varieties for up to nine months. Currently, most chip varieties must be processed shortly after harvest.

GMO spud sponsors Boise Olympic cyclist

By JOHN O'CONNELL
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PARK CITY, Utah — Boise cyclist Kristin Armstrong will head to the Summer Games in Rio de Janeiro with the apparent distinction of being the first athlete ever sponsored by a crop bred using biotechnology.

Armstrong will be 43 when she pursues her third Olympic gold medal, competing in the individual women's time trial.

She'll also be raising awareness about the nutritional value of potatoes — and Simplot Plant Sciences' Innate line of genetically modified Russet Burbanks and Ranger Russets in particular.

Marketed under the White Russet label, the first generation of Innate russets contains traits introduced from other potatoes to keep them from browning after cutting, reduce bruising and reduce the formation of a potentially unhealthy chemical, called acrylamide,

found in certain fried foods. The second generation of Innate, which awaits approval by the U.S. Environmental Protection Agency, will include the original traits, plus enhanced cold storage and strong resistance to the destructive late blight pathogen.

"I've known folks at Simplot for a long time, and since potatoes are an excellent source of energy and nutrition, the partnership makes sense, especially because White Russet potatoes have health and sustainability benefits," Armstrong told Capital Press via email. "There's nothing in these potatoes but potato."

Armstrong, who works promoting healthy lifestyles with St. Luke's Boise Medical Center, typically eats potatoes with her meals before racing, believing they give her a lift.

"Potatoes give me just the right combination of nutrients and energy, as well as potassium for leg recovery when I need it," Arm-

strong said.

When she's not competing, Simplot spokesman Doug Cole said, Armstrong will pose for photos in a White Russet jersey, and she'll assist Simplot with a social media presence. Cole said the sponsorship contract with Armstrong will expire some time next year, and the company will re-evaluate it then.

"She'll be talking about how she uses potatoes in her training diet, and as an athlete and a mom, how a higher quality potato makes a lot of sense," Cole said.

Armstrong will train in Texas to acclimate to higher humidity prior to racing in Rio.

"I couldn't be prouder to have the opportunity to once again represent my country in the Olympic games," Armstrong said. "I am obviously excited to be on the team, and I am totally focused on my training so that I can win another gold medal for Team USA."



Courtesy of Simplot Plant Sciences
Olympic cyclist Kristin Armstrong, of Boise, sports a White Russet jersey at the Twilight Criterium race in Boise on July 16. Armstrong has been sponsored by Simplot's Innate Russet Burbank, which was bred with biotechnology.

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Wheat growers who plant using targeted seeding rates have an opportunity to maximize productivity and profit potential compared to planting based on a simple pounds-per-acre approach.

"Many wheat growers plant seed by the pound, primarily because that's the way they've traditionally done it or because they don't have a good way of knowing the exact number of seeds in a pound of the wheat variety they've purchased," said John Fietsam, Technical Product Lead with WestBred® Wheat.

"But that doesn't mean that this historical approach is accurate or what's best when it comes to maximizing yield and profit potential, which is particularly important in today's challenging economic environment. In fact, more wheat agronomists and university experts are recommending that, in order to achieve more accurate seeding results, growers should base wheat seeding rates on seeds per acre and not only pounds per acre, due to wide variances in the number of seeds that can be in a pound."

To enable growers to better calibrate their air seeders or drills for improved yield potential and efficiency, WestBred® wheat recently introduced the ConnectIN™ Wheat Insight System, which gives wheat seed suppliers the ability to provide growers Optimal Seeding Rate recommendations for the variety they

are purchasing. Optimal Seeding Rate recommendations are based on key factors like seed count per pound, geography, planting date, production practices and the targeted seeds per acre identified for the farm.

"Many wheat growers want to know how many seeds to plant per acre, how many seeds are in a pound of the variety they've purchased and how it all relates to their planting environment," said Fietsam. "The ConnectIN System, by providing Optimal Seeding Rate recommendations, gives growers valuable information in a quick, convenient format that they can easily use for planting."

Fietsam noted that since variations in seed size and density can have a dramatic impact on how many seeds are in a pound, planting based on only pounds per acre can prevent growers from optimizing results.

Although some wheat varieties are capable of compensating somewhat and producing similar grain yields across a fairly wide range of seeding rates, using seeding rates that are too low can lead to reliance on excessive tillering, delayed maturity, increased weed competition and failure to make use of the full yield potential.

Seeding rates that are too high may increase costs, result in increased lodging and possibly reduce yield

potential. Increased competition among plants also can lead to fewer kernels per head and lower kernel weight.

In comparison, planting based on Optimal Seeding Rate recommendations can result in a more targeted plant population that:

- Increases yield potential
- Improves uniformity of stand development
- Reduces lodging risk
- Reduces weed competition
- Prevents over-reliance on tillering
- Optimizes light interception

Getting it right starts with an accurate seed count.



"With Optimal Seeding Rate recommendations, the key benefit is the value being received by the grower," said Fietsam. "We believe we can enhance the way wheat is planted by providing the grower more valuable information about the variety they have purchased and are about to plant."

For more information about the advantages of Optimal Seeding Rates and the ConnectIN Wheat Insight System from WestBred wheat, see your WestBred representative, call (800) 705-2309 or visit ConnectINSystem.com.

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