

# USDA clears new GMO potato variety

By MATEUSZ PERKOWSKI  
Capital Press

A new potato variety that's genetically modified to withstand bruising has been cleared for commercialization without undergoing USDA's deregulatory process for biotech crops.

The agency has advised the potato's developer, Calyxt, the cultivar is not a "regulated article" under federal law because it doesn't contain genes from plant pests.

Because most commercial biotech crops incorporate genes from plant pests, they were subject to environmental analysis and a risk assessment from USDA before they were deregulated.

In the case of Calyxt's "PPO\_KO" potato, the variety was created through the "knockout" of an unwanted gene that causes bruising without leaving plant pest genes in the crop.

The cultivar will reduce browning in fresh potatoes as well as bruising "to minimize crop rejection and waste in processing lines," said Federico Tripodi, Calyxt's CEO, in an email. Up to 5 percent of fries and chips are rejected because of discoloration.

With the USDA's recent approval, the company plans to work with "third party researchers" to plant the variety in U.S. fields, he said.

The PPO\_KO variety is the second genetically modified potato developed by Calyxt that USDA has cleared for commercialization without undergoing the deregulatory process.

An earlier variety, which inactivates a gene associated with the cancer-causing compound acrylamide, was approved in 2014 and is currently in field trials.

The J.R. Simplot Co. has obtained USDA approval for potatoes with similar traits in recent years, but these were initially regulated as possible plant pests by the agency.

The Center for Food Safety, a prominent critic of genetically engineered crops, is skeptical of the PPO\_KO potato's benefits.

Calyxt has eliminated the gene responsible for producing the enzyme polyphenol oxidase, or PPO, which performs functions other than causing bruises, said Bill Freese, science policy analyst with the group.

For example, the enzyme is associated with greater pest and disease resistance,

he said. "One question is, by knocking out these genes, are you making the plant weaker and more susceptible to disease?"

Such modification could also have other unforeseen consequences, he said. "You could be knocking out genes you didn't intend to knock out."

It's possible potatoes lacking the PPO gene may harbor diseases in fields abandoned due to low prices or crop damage, which should have been analyzed by USDA, Freese said.

"This is a plant pest risk. We're not saying it is for certain, but they should be looking at it and they're not," he said.

Calyxt acknowledged that PPO is associated with disease resistance, but said the company has only eliminated one of at least six genes associated with the enzyme.

"Therefore, the other PPO genes will still be functional to help protect the potato plants from disease, insects and other stresses," the company said in an email.

The company also said it has created multiple lines of the PPO\_KO variety and will field test them to select those "with the best agronomic characteristics, including desired levels of disease resistance."



Sean Ellis/Capital Press

Idaho rangeland fire protection association members Darcy Helmick and Charlie Lyons discuss the state's eight RFPAs Oct. 20 during a Western Governors' Association meeting in Boise. Steve Acarregui, fire operations manager for the BLM's Boise district, said he would like to increase their capabilities.

## Rangeland fire associations improve Idaho ranchers' relationship with BLM

By SEAN ELLIS  
Capital Press

BOISE — A once rocky relationship between Bureau of Land Management firefighters and Idaho ranchers has improved markedly since the creation of rangeland fire protection associations in 2013.

Ranchers, who once had a contentious relationship with BLM firefighting officials, have come to respect them, Mountain Home RFPA Chairman Charlie Lyons said Oct. 20 during a Western Governors' Association meeting in Boise.

Lyons, a rancher, said that after a "very contentious meeting" several years ago between ranchers and BLM officials, "we started thinking about solutions."

After discussions with county commissioners and others, "Things started clicking," he said. "It was like a huge window opened up."

The RFPA idea was pitched to Gov. Butch Otter, who is also a rancher. At Otter's request, the Idaho Legislature has provided \$455,000 since fiscal year 2014 to help the RFPAs purchase personal protective gear, radios and other basic equipment.

While being trained by BLM officials to meet federal firefighting requirements, a camaraderie developed, Lyons said, and ranchers became willing to rely on their leadership.

"The training ... is where we learned to respect the BLM," he said. "It was a huge shift."

There are now eight RFPAs in Southern Idaho and their 300-plus members are qualified to help BLM and the Idaho Department of Lands fight wildfires.

The RFPAs, which consist mostly of ranchers and are voluntary, purchase their insurance and use most of their firefighting equipment.

BLM officials have come to view the ranchers as valuable assets in fighting wildfires, said Steve Acarregui, the fire operations manager for BLM's Boise district.

They provide primary protection for 1.4 million privately owned acres and 6.3 million government-owned acres.

The associations have helped BLM and the state battle 103 blazes since 2013.

"They have added incredible capacity to the (wildland firefighting ability) in the state of Idaho," said Julia Sullens, the IDL's liaison to the RFPAs.

The ranching community has a "can-do" attitude, Acarregui said, and when the idea of forming RFPAs was being discussed, BLM officials recognized they could create a valuable force multiplier if they could harness that energy.

Besides providing a quick, initial response to many fires, the ranchers have also been used to do other things such as rehab work and create fuel breaks.

"It's grown way bigger than we first envisioned," Acarregui said.

He said the BLM would like to increase the capabilities of the current RFPAs as well as create new ones where possible.

If someone wants to start a new one, "I'll be right there to help you get it off the ground," he said.

An effort is underway to change BLM policy to allow the agency to directly transfer surplus firefighting equipment to RFPAs, Acarregui said.

"We do have a lot of congressional support on that and I hope to see some legislation soon," he said.

The BLM this year changed its policy manual to allow RFPA members to assist the agency through the duration of a fire instead of just assisting in initial response.

# California winegrape growers wrap up quick, smooth harvest

By TIM HEARDEN  
Capital Press

SONOMA, Calif. — Growers in California's prime wine country say their harvest of a slightly larger grape crop this year was quick and smooth.

Relatively cool weather in August aided grape quality, said Anthony Beckman, winemaker at Balletto Vineyards in Santa Rosa, Calif.

"I got awesome flavors without having huge sugars," he said. "Instead of having an early harvest like 2015 ... we let the grapes hang a little longer."

Other area vintners say this year's wines will end up being among the best.

"We're all looking forward to these wines going in bottles," said Steve Sangiacomo of Sangiacomo Family Vineyards in Sonoma.

Beckman and Sangiacomo were taking part in a live Facebook news conference on this year's crop, hosted by Sonoma County Winegrowers. The Oct. 25 event was part of the organization's effort to help consumers as well as reporters get to know local growers, organizers said.

Growers throughout California have mostly wrapped up their harvest of an anticipated 3.9 million ton winegrape crop, up 5 percent from



Courtesy of Sonoma County Winegrowers

Workers remove debris from winegrapes during the harvest in Sonoma County, Calif. Growers say this year's harvest was quick and went smoothly.

2015, according to the National Agricultural Statistics Service. Wine represents 57 percent of the state's total grape crop.

After three straight years of record-high crushes, from 2011 to 2013, production in 2014 and 2015 was lighter, mainly because of drought-related water shortages.

Last year, alternating warm and cool weather during the growing season led to an early bud break, a long flowering and fruit set period and an early harvest.

This year's harvest started later but was quicker, growers said.

"This is the first year I can remember when we were picking Chardonnay at the same time as Cabernet Sauvignon," said Duff Bevill, founder and partner at Bevill Vineyard Management in Healdsburg, Calif. "That's really unique."

Meanwhile, a lack of rain during the harvest led to "clean" fruit, with very little rot or mold, growers said.

The good-quality crop

comes as the prices of grapes from the state's most famous region were already trending upward. They rose 6 percent in Napa County last year to \$4,336 per ton and by 5 percent in Sonoma and Marin counties to \$2,443, NASS reported.

U.S. wine exports, 90 percent of which are from California, reached a record \$1.61 billion in 2015 and the volume of shipments was up 4.1 percent from the previous year to 51.2 million cases, according to the San Francisco-based Wine Institute.

## Oregon company ready to license its biomass technology

By ERIC MORTENSON  
Capital Press

TROUTDALE, ORE. — An Oregon company showed off a demonstration facility where it converts forest slash into biomass briquettes, and said it is prepared to license the technology and sell it worldwide.

Hiroshi Morihara, an Oregon developer and engineer who is CEO of HM3 Energy Inc., also announced the company has found a "big fish" investor: a Japanese energy company that wants to use the briquettes to fire electrical power plants in Japan and replace coal and nuclear facilities.

New Energy Development Co. has invested \$2 million in HM3 and plans to build a briquette production plant at an undisclosed location in Oregon. The briquettes would then be exported to Japan.

Using logging debris or agricultural crop residue to make biomass pellets is an idea that has had numerous starts and stops over the years, as developers and investors have struggled to make the process pencil out.

The upside has always been appealing from a rural economic development perspective. Using forest slash to produce biomass energy reduces wildfire risk, restores forest health and puts people to work in the woods and in production facilities, backers say. An economical technical solution, however, has been slow in coming.

HM3 believes it has refined the process to the point it can license and sell the technology.

"We were able to say, hey, we can do this," Morihara said during a news conference and media tour of the company's \$4 million demonstration plant in Troutdale, east of Portland.



Photos by Eric Mortenson/Capital Press

HM3 CEO Hiroshi Morihara, left, and Sen. Ron Wyden spoke at a biomass briquette news conference Oct. 18 in Troutdale, Ore.



Biomass briquettes made from logging slash can be burned like coal to power electrical plants. An Oregon company says it has perfected the technology to produce the briquettes.

The company, and others working along the same line, use a process called torrefaction. They essentially roast wood debris in a controlled environment and temperature range, which removes moisture and volatile compounds. The finished product is a lightweight, brittle cube that can be pulverized and burned like coal, but much cleaner. At the news conference, Morihara displayed bri-

quettes made from juniper trees.

Portland General Electric is interested in converting its coal-fired power plant in Boardman, Ore., to operate on biomass. Later this year, a company called Oregon Torrefaction will supply PGE with enough briquettes to operate the power plant for a day, considered a key test of the technology.

Oregon BEST, an arm of the state business department that provides funding and university research expertise for a variety of energy projects, estimates Oregon, Washington and British Columbia could provide 35 million tons a year of biomass material to torrefaction plants.

The event at HM3 included an appearance by U.S. Sen. Ron Wyden, Oregon's senior senator. He said HM3's progress demonstrates that politicians don't generate jobs themselves but can best help by creating a good business climate through such things as research and development tax credits.

## Food security group will offer advice to next president

By ERIC MORTENSON  
Capital Press

A Chicago think tank that often comments on agricultural issues has formed a task force to inform the winner of this year's presidential election on steps the U.S. government and private sector can take to reduce world hunger.

The Presidential Transition Plan Task Force will be led by former Secretary of Agriculture Dan Glickman and former Rep. Douglas Bereuter. They were appointed by the Chicago Council on Global Affairs.

The council considers international food security to be a matter of U.S. national security, and in April 2015 issued a report on that topic.

With the world population projected to exceed 9 billion by 2050, "Investing in food security and improved health and nutrition for the world's people is not simply a humanitarian matter. It is squarely in the interests of the United

### Online

Previous Capital Press coverage of the issue

[http://www.capitalpress.com/Nation\\_World/Nation/20150618/food-national-security-intertwined-experts-say](http://www.capitalpress.com/Nation_World/Nation/20150618/food-national-security-intertwined-experts-say)

Also, [www.thechicagocouncil.org](http://www.thechicagocouncil.org)

States," the report's authors concluded.

The council recommended the U.S. use its agricultural research and education infrastructure to train the next generation of leaders in Africa, Asia and Latin America. Land-grant universities such as Oregon State University, Washington State University, the University of Idaho and the University of California-Davis "should be at the center of a cooperative international effort to reduce hunger and malnutrition around the world," the study said.