Idaho

Barley breeder developing dryland, craft malt variety

By JOHN O'CONNELL Capital Press

ABERDEEN, Idaho -Barley breeder Gongshe Hu has sought help from crop researchers in an arid North African country as he starts working to develop a drought-tolerant malt barley variety well suited for the growing craft brewing

Hu, with USDA's Agricultural Research Service, asked officials of an international germplasm collection center in Morocco to send him two-row barley lines with good drought tolerance and high yield poten-

This season, Hu planted about eight lines — all top performers in Morocco's drought nursery, where they received reduced irrigation — in Aberdeen to expand seed for further evaluation. He hopes a few will perform well in the local climate and make good parents to confer drought tolerance in his breeding program.

Hu explained that craft brewers typically use all-grain recipes, requiring malt barley with lower protein levels than malt used in brewing beers commonly produced by large brewers. They are blended with corn or rice sugar. Dryland farming conditions tend to elevate protein levels.

Hu's breeding project will seek to combine drought tolerance with low-protein genetics to create a cross usable by dryland growers raising malt for all-grain brewing.

It looks like we will have five or six lines that grow pretty well in this environment," Hu

Hu will plant the seeds

he's raising this season in Abdrought-tolerance erdeen's nursery next season to evaluate them against local lines. Hu said it could take as long as a decade for the project to yield new varieties — even with his program speeding the breeding process by raising some generations of crosses in New Zea-

"At the moment, we're trying to introduce as much genetic diversity as we can for drought tolerance," Hu said.

land during winters.

Drought tolerance is also a trait Oregon State University barley breeder Patrick Hayes has prioritized.

"Low protein is always important for malting barley, especially under dryland conditions," Hayes said.

The American Malting Barley Association added all-malt guidelines for barley breeding in 2014, specifying all-malt varieties should have less than 11.8 percent protein, a percentage point lower than standard malts that are blended with adjunct ingredients.

"A low protein, dryland barley would potentially be useful throughout craft brewing, and would be especially desirable considering increasing environmental pressure throughout barley growing regions," said Damon Scott, technical brewing projects coordinator with the Brewers Association.

Both the Brewers Association and AMBA have supported research regarding drought tolerance.

"The whole malting barley industry would be interested in any lines that would be more drought tolerant," said Scott Heisel, AMBA's vice president and technical director.

Senior project tests cover crops

By JOHN O'CONNELL Capital Press

GRACE, Idaho — Ross Harris may change how he farms and ranches, contingent on the results of his son's high school senior project.

Other Caribou County farmers and ranchers should also be interested in 18-year-old Chase Harris' research — testing a nine-species cover crop blend, with plants intended to survive the winter, thrive in his growing environment and provide good forage for the family's cattle.

Chase — working with Cameron Williams from the Caribou County office of the USDA Natural Resources Conservation Service — planted 8 acres of the family farm to cover crops on Aug. 18, in a pasture where cattle will also have access to grass and a harvested alfalfa field. Chase said another key component of his research will be assessing which forage source the cattle prefer.

Farmers plant cover crops primarily to improve the health of their soils, but many growers also opt to graze cover crops, allowing livestock to benefit from the forage value while recirculating nutrients in their manure. Cover crops aren't common yet in Caribou County, which has a short growing

"We've always kind of been conventional farming until Chase went looking at this," Ross Harris said, adding he'd be "crazy not to continue" experimenting with cover crops if they work for his son. "We'll see how the cattle eat it and what the cover crop might look like this spring.'

Harris plans to graze his cover crop this fall and to swath



Chase Harris, left, discusses with his father, Ross, the various multi-species cover crop blends he helped plant for trials highlighted during a recent field day in Soda Springs, Idaho. Harris helped set up the field day and is organizing his own cover crop trial for his high school senior project.



Chase Harris, of Grace, Idaho, calibrates his drill Aug. 18 while planting cover crops as part of an experiment for his high school senior project.

and bale the growth for feed in the spring, before his father plants no-till alfalfa.

In Idaho, high school seniors are required to complete a project that benefits the community and includes 40 hours of work with an instructor, along with a report and a presentation. Chase said most of his classmates plan to shadow a professional and report what they learn about an interesting

"I figured if I was going to do this, I was going to do it

all the way," the Grace High School student said.

In addition to conducting the experiment on his farm, Harris helped Williams organize and promote a recent cover crop field day in Caribou County, which included presentations by a couple of the nation's top cover crop experts. Harris also helped plant the cover crop plots highlighted during the field day.

Often it takes the next generation to attempt new techniques like Chase is trying on his family's operation," Williams said.

Chase said he got the idea for his cover crop project from his biology teacher, Eli Hubbard, who spoke in class about cover crops as a means of improving soil structure. Hubbard planted his first cover crops this season on his farm and ranch.





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Growers report lower yields in early Norkotah harvest

By JOHN O'CONNELL Capital Press

RUPERT, Idaho — Potato industry officials report yields are down significantly as Western Idaho growers commence with their early harvest of Russet Norkotahs for the fresh market.

Growers statewide anticipate having more average production during their genas the crop will have time to continue progressing, though they don't expect to approach last year's record volumes.

They expect tuber quality to vary dramatically from field to field, based on site-specific conditions during a prolonged heatwave this summer.

But growers also say they're optimistic about strengthening prices, given Idaho farmers planted 15,000 fewer potato acres this season and should have a reasonable-sized crop to market.

'Yields are down, price is up, and (tuber size) is pretty good," Mountain Home grower Jeff Harper said amid his early harvest.

Jeff Miller, a crop scientist at Rupert-based Miller Research, explained during an Aug. 17 field day at his potato



John O'Connell/Capital Press Jeff Miller, of Miller Research in Rupert, Idaho, holds potato leaves with symptoms of early blight during an Aug. 16 field day. Miller said disease pressure has been fairly low, but the potato crop may be on pace to have highly variable quality.

research plots that the 2017 crop got off to a slow start. Potato planting was delayed by wet fields, and cool spring weather delayed crop emergence.

Miller said an "almost unheard of" two-week period of temperatures that peaked above 95 degrees may also lead to more tuber quality problems, such as hollow heart. Miller expects tuber quality of individual fields could vary widely, depending on the growth stage when the hot weather hit.

"People aren't sure what

it's going to do to quality," Miller said. "We've done some test digs and some looked horrible while some looked great."

In Eastern Idaho, Ritchie Toevs, president of the Idaho Potato Commission, anticipates his yields will be down by about 60 hundredweight per acre from last season.

Toevs, of Aberdeen, plans to start harvest on Sept. 20 and has been pleasantly sur prised by tuber quality in his test digs. He believes a bad wildfire season has contributed to reduced yields.

"I don't know if smoky weather might have taken some off of the crop in August," Toevs said, noting smoke blocks solar radiation. "We didn't see the mountains for two weeks."

Marty Kearl, farm manager with a Jentzsch-Kearl Farms unit in Bliss, agrees early harvest yields are low, but he believes there's still time for the rest of the crop to

catch up. He added that growers have also had little trouble with diseases.

"The tubers are smaller than they were last year at this time, but the vines are looking better," Kearl said.

Idaho labor chief resigns abruptly

By CAROL RYAN DUMAS Capital Press

The Idaho governor's office is giving no reason for the sudden departure or commenting on whether the labor director's resignation is related to a whistleblower lawsuit filed in December.

Jon Hanian, the press secretary for Gov. Butch Otter, said he could not share any additional information about state Labor Director Ken Edmunds' recent departure.

"He offered his resignation. The governor accepted it. We are moving forward and beginning the process for naming a permanent replacement," Hanian said in an email reply to Capital Press.

A whistleblower lawsuit was filed against the Labor Department, Edmunds and two other IDOL supervisors in U.S. District Court last December.

That lawsuit, filed by

James Cryer — a 23-year competitive bidding process. employee at the department who was fired in June 2016 alleges the defendants violated Idaho's whistleblower law and Cryer's constitutional rights to free speech, privacy and freedom from unreasonable search and seizure.

The issue involves intimidation and retaliation after Cryer registered his concerns as an IDOL purchasing agent over alleged violations of state purchasing laws and rules and his unwillingness to bend those regulations, according to the complaint.

The result of his complaints and anonymous emails to state officials alerting them to alleged abuses resulted in a subpoenaed search of his personal cell phone records and his termination.

Among other things, Cryer's concerns involved allegations of attempted preferential purchases with vendors that would evade the required

In addition to raising concerns with individuals in IDOL and the Idaho Division of Purchasing during 2015, Cryer also sent seven anonymous emails - some in December 2015 and some in April 2016 — to state officials "hoping it would spur officials to take appropriate action to stop and cure these violations," court documents

"Instead of investigating the validity of the anonymous complaints or taking measures to address the allegations of illegal activity, IDOL chose to target the messenger," the complaint states.

On June 23, 2016, Edmunds terminated Cryer, alleging that sending the anonymous emails was "conduct unbecoming a state employee or conduct detrimental to good order and discipline in the department."