Missouri wine grape might be answer to fighting mildew and rot

By Daniel Longar
December 14, 2010 | 7:20 p.m. CST

COLUMBIA — Five years ago, Les Bourgeois Winery in Rocheport lost 25 percent of its vignoles crop to downy mildew and late season rot.

The winery has since taken steps to prevent such losses, but record levels of precipitation in recent years have increased the threat from mildew for vineyards in the area.

"The three past years have been some of the most difficult growing seasons," said Cory Bomgaars, head winemaker at Les Bourgeois.

Losing crops isn’t the only damage attributed to downy mildew and other types of fungi, he said.

"The wine quality can even be affected," Bomgaars said. "It might turn a $10 gallon into a $5 gallon."

To combat mildew, vineyards will often spray fungicides on their crops, but one local varietal has a natural resistance to downy mildew and other diseases that plague susceptible European varietals.

The Norton grape is a 150-year-old hybrid from a natural vine growing in America that has learned how to cope with downy mildew, powdery mildew and black rot fungus. It can ramp up its defenses to prevent the fungus from establishing itself.

Researchers are now trying to identify the specific genes responsible for Norton’s resistance and hope to cross breed these genes with other grape varietals.

At MU, Walter Gassmann is looking specifically at how to identify and incorporate valuable Norton genes, then transfer them into other varietals that make both red and white wine.
"It is very rare to have plants that are resistant to a broad range of pathogen classes," said Gassmann, researcher in the Bond of Life Sciences Center and associate professor of plant sciences in the College of Agriculture, Food and Natural Resources.

As a preliminary step, he has successfully added Norton's resistant genes to Arabidopsis, a plant less complex than grapes.

Using the results of Gassmann's genetic mutation, researchers at Missouri State University crossbred hybrids of cabernet sauvignon and Norton in hopes of transferring Norton's resistant genes.

Because this is a difficult process, he said it could be at least 10 years before new hybrids go into commercial production.

"Right now, crossbreeding is the only acceptable form of incorporating the desired trait from Norton into other grape species," Gassmann said.

Because the public will not accept genetically mutated organisms, he cannot replicate the process he uses with Arabidopsis on the actual grape vines.

"I believe the lack of public acceptance has a lot to do with misinformation and scare tactics," he said.

If the researchers are successful in creating resistant hybrids, Gassmann said, they hope to eliminate or reduce the use of fungicides. This would allow the grapes to grow where it is now climatically unfeasible without fungicides.

Using vines with Norton's resistance would also improve the yield of existing crops and eliminate the cost of fungicides.

But even Norton has its limitations, winemakers say.

Said Dave Johnson, the head winemaker at Stone Hill Winery in Hermann: "Norton in some years can be grown without fungicide, but in a wet year, even Norton needs a little help."
Ancient vegetarian crocodile fossil unearthed

Crocodiles came in all shapes and sizes in ancient times, including an 80 million-year-old pig-nosed, thick-skinned species that lived the humble life of a vegetarian.

The four-foot-long creature possessed grazer's teeth, a tank-like body and a short stubby tail. Most likely, they lived lives more like an armadillo's than a conventional crocodile's. Dubbed *Simosuchus clarki*, the species was first unearthed in 2000, and now appears fully described in a supplement to the *Journal of Vertebrate Paleontology*.

"No other crocodile looks as bizarre as this one," says paleontologist David Krause of Stony Brook (N.Y.) University, part of the team that discovered the species. "Crocodiles evolved into a wide variety of body plans in the Age of Dinosaurs, but this one really looks unusual."

Krause and colleagues report six exceptionally well-preserved fossils of the pig-like crocodile found on the island of Madagascar. Analysis of the skull and teeth of *Simosuchus* led by Nathan Kley, also of Stony Brook U., confirms the creature's shortened snout served for chewing vegetation, too weak to snatch up other animals. "He was a vegetarian, no doubt," Kley says.

Some South American crocodiles from the Age of Dinosaurs, which ended about 65.5 million years ago, also show signs of eating vegetation instead of the fearsome carnivorous lives of today's crocodile, notes paleontologist Casey Holliday of the University of Missouri. "This one is unique though," he says. "And the specimens are exceptional. To actually find the teeth still in the skull tells you a lot about how these guys lived."

"This is a great critter," says paleontologist Paul Sereno of the University of Chicago, by email. "Most folks don't know how wild crocs got on the great southern landmass Gondwana during the dinosaur era--mainly because all of these crocs went extinct along with the dinosaurs 65 million years, ago, only their more aquatic croc brethren surviving."

While it was around, *Simosuchus* seems to have been a pretty unassuming creature, Krause suggests. Its hide appears exceptionally well-armored, which may have allowed it to survive bites from the bigger crocs and large carnivorous dinosaurs of the era that flourished on Madagascar. Given the large number of armor bones in their hides, Kley says, "they would have made terrible boots."
University Hospital cleans up for inspectors

By Janese Silvey

Tuesday, December 14, 2010

University Hospital is gearing up for an inspection of its facilities after a survey team flagged some problems in the building after a site visit last month.

The Centers for Medicare and Medicaid notified the hospital last week that inspectors plan to conduct a full survey of all hospital facilities in the near future, said spokeswoman Jo Ann Wait. CMM contracts with the Missouri Department of Health and Human Services to conduct inspections.

Inspectors were at the hospital in early November, and “they did cite some concerns relative to broad areas such as housekeeping,” Wait said. “University Hospital is a 1956 building with thousands of square feet, so there are some facility concerns relative to cracks, discolored tiles and areas in both patient and non-patient” spaces “where we needed to get in and do some sprucing up.”

About 120 employees worked overtime or voluntarily came in this past weekend to help housekeeping staff deep-clean the hospital, including doing some touch-up paint jobs. Wait stressed that the hospital is heavily regulated and continues to provide a safe environment for patients. CMM is one of about 100 different agencies that regulate hospitals, she said.

University Hospital also recently participated in a Joint Commission accreditation review and received a Gold Seal of Approval, meeting or exceeding national standards in most areas.

In coming years, University Hospital is slated for major renovations that should resolve some of the housekeeping issues.

In January, renovation work will begin on two floors of the hospital, space that was opened when MU’s new Women’s and Children’s Hospital opened in September, spokeswoman Mary Jenkins said.

Additional renovations will begin after a new seven-story patient care tower opens next to the hospital in 2013. That facility will provide six operating rooms, 25 pre- and post-procedure rooms and 90 private patient rooms, freeing up space at the older hospital.

“We are renovating University Hospital as fast as we can,” Jenkins said. “Eventually, all of University Hospital will be renovated and upgraded.”

Medical staff is helping plan those renovations, she said, so new interior finishes are going to be easier to clean and maintain.
University of Missouri Provost Brian Foster has appointed Jim Spain to serve as vice provost for e-learning on an interim basis while a task force figures out how MU can better provide online courses.

The appointment comes about a month after administrators shifted MU Direct and the Center for Distance and Independent Study out from under the umbrella of MU Extension to campus administration.

Tom Henderson, former MU Extension director, was tapped to lead a task force that will study how to restructure the online and distance education programs.

Although details have yet to be worked out, the goal is to create an online system that’s user-friendly not only for those taking courses from afar but also for students on campus who want online options, Spain said.

“The goal is to strategically align what we’ve been doing in MU Direct and in CDIS with the teaching and learning we do day in and day out for students here on campus,” he said. “Right now, because of the way it’s been administratively structured, it’s not easy for our own campus students to take one of our distance education courses through MU Direct or CDIS. So, really, we’re trying to address those issues.”

The majority of students taking online distance courses from MU are nurses and teachers furthering their education. Spain said the task force will have to determine whether that should remain a priority.

“Part of it, for us, is deciding what we’re really trying to accomplish as an institution through our online and distance learning portfolio,” he said. “Are we trying to reach out to certain populations in certain discipline areas such as nursing and teaching, or are we trying to expand capacity on campus through the use of hybrid instruction delivery? All of those questions are very strategic in nature and have to be addressed first.”

Once the task force hashes that out, members will then look at more specific issues, such as whether CDIS and MU Direct should relocate to a central space. Right now, CDIS is in Clark Hall, and MU Direct is in Whitten Hall.
When details are finalized, Spain said administrators will better know what qualifications a permanent vice provost of e-learning will need to have, and a search can begin.

MU's focus on e-learning corresponds with the U-M System's yearlong study of improving online learning across the four-campus system.

Administrators last week unveiled a systemwide portal that would serve as a one-stop shop for students wanting online classes, allowing them to browse by subject and see course options from all four campuses. The portal still is being designed, but Zach March, director of e-learning and distance education, suggested the website could include video introductions from faculty members and opportunities for student feedback.

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KU saw large spike in administrative costs over last five years

Posted on Tuesday, December 14, 2010

By Rachel Whitten
December 14, 2010

(KansasReporter) TOPEKA, Kan. — A new study of Big 12 schools has found administrative costs at the University of Kansas have more than doubled over the last five years.

The study was conducted by the American Council of Trustees and Alumni, a Washington D.C. based think-tank that works with donors, trustees and university alumni to uphold high academic standards. The study showed that administrative costs at KU have gone up 120 percent or almost $29 million from 2002 to 2008. At the same time, instructional costs increased by 79 percent, or almost $163 million.

Meanwhile, the study said KU’s bitter athletic rival across the state line, the University of Missouri, cut administrative costs by almost 40 percent, or $14 million, while the increase in instructional costs was 48 percent or $108 million.

The University of Kansas said it found faults with the study’s data when compared to records the university keeps. Specifically, a KU spokesperson said when comparing university data with the study, it appears the study left out statistics from the University of Kansas Medical Center from the baseline costs in 2002, and added them back in 2008 to give the impression of a larger increase.

“The data at least in one spot is not accurate or is not apples to apples and I have no way of knowing if the other data was gathered in an apple to apples format,” said KU spokesperson Jill Jess.

The university chose to not give further comment because they felt the term “administrative costs” could not be understood because there are varying types and definitions of what goes into that category.

“I have no idea what they’re calling administrative costs,” Jess said. “It’s not a situation where I can say ‘here’s what they used and here’s our numbers.”

The University of Missouri could not comment on the accuracy of the study’s data compared with their own statistics, but a university spokesperson did say they’ve been cutting costs.

“There have been several things we have done, including hiring freezes and freezes on certain types of expenses and further review on other expenses like travel and office expenses,” said Missouri spokesperson Christian Basi. “We’ve asked each department to look at their operating budget to see if there are things they can cut back on such as printing materials. We left it up to each department because they know what’s best for their department.”

The study said the reason many universities gave for higher administrative costs was increasing technology expenses.
The average increase in administrative costs over five years in the Big 12 was 59 percent, with KU, Texas Tech and Oklahoma doubling expenses in that area. At the same time, Missouri, Iowa and Texas A&M cut administrative expenses.

The Kansas Board of Regents Kansas are asking the state for $50 million more in their budget this year to partially restore what they say are previous spending cuts.
Mourners take cover as shots fired at funeral

By Associated Press
Tuesday, December 14, 2010 - Added 13 hours ago

KANSAS CITY, Mo. — Shots were fired outside a Kansas City church during a Tuesday funeral for the slain cousin of a University of Missouri basketball player, prompting some of the mourners to run outside and return fire, police said. No gunshot injuries were reported.

Someone opened fire around 12:15 p.m. outside Macedonia Baptist church as the funeral was wrapping up for 20-year-old Marion Denmon, cousin of Missouri guard Marcus Denmon, said Kansas City police spokesman Darin Snapp.

"Several people inside the service had guns and went outside, where they exchanged gunfire with people in two vehicles," Snapp said, adding that 20 to 30 shell casings were visible on the ground outside the church. "The strange thing is, we haven’t located any bullet holes in the church. We don’t know if the occupants of the two cars were shooting up in the air."

Missouri began issuing conceal-carry permits in 2004.

Police were looking for a tan SUV and a red Monte Carlo or similar vehicle, Snapp said. He said none of the roughly 400 people inside the church were hit by gunfire, although one woman slipped on ice and broke her arm while she was running after the shots were fired.

University of Missouri media relations director David Reiter said Marcus Denmon and a few university staff members were at the funeral but were unharmed.

Marion Denmon was shot Dec. 3 while riding in a car that got caught between two other vehicles whose occupants were firing at each other. He died four days later.

Snapp said the funeral shooting appeared to be gang-related.
Jacquin Johnson said the last words she heard from the pastor Tuesday was that the internment was going to be held at Blue Ridge Lawn Cemetery.

"Then I heard a 'pop pop' and people were screaming," said Johnson, who was in the choir stand. "I knew that had to be gunfire."

Johnson fell to the floor and a woman sitting beside her fell on top of her. The service was so packed that mourners were forced to stand along the outside edge of the chapel. They all scrambled, and Johnson called 911.

"It was chaos," she said. "I heard someone say, 'Oh my God. They are trying to shoot up his casket. They are trying to destroy his casket.'"

People were yelling not to go out the front door, so Johnson rushed to the basement.

"All these young people killed aren't even in a gang, they're just are in the wrong place at the wrong time," Johnson said. "It's crazy."
National Press Club Cheers Reports That Imprisoned Iranian Blogger Was Freed

By National Press Club
Published: Tuesday, Dec. 14, 2010 - 2:43 pm

WASHINGTON, Dec 14, 2010 -- PRNewswire-USNewswire -- The National Press Club today is cheering reports that Kouhyar Goudarzi, an Iranian blogger imprisoned for the last year in Teheran’s notorious Evin Prison, has been released.

Goudarzi was the international winner of the Club’s 2010 John Aubuchon Press Freedom Award.

According to Iran’s Committee of Human Rights Reporters and other sources, Goudarzi was set free after being jailed since last December. He had been charged with “heresy,” a capital crime, “propagating” against the regime and “congregation and mutiny with intent to disrupt national security.” Goudarzi was reportedly put into solitary confinement in May 2010, after which even his mother was no longer allowed to visit him.

"The release of Kouhyar Goudarzi is a relief to people who believe in free speech and a free press everywhere,” said Alan Bjerga, president of the National Press Club. “We pray that he is well, and we demand that Iran release others who are unjustly imprisoned. We look forward to presenting him our press-freedom award in person when he is able to receive it. We also look forward to the day when the circumstances that prompted his receiving that award no longer exist for any journalist.”

The U.S. winner of this year's press-freedom award was Charles Davis, a University of Missouri journalism professor and longtime advocate of open government.
If you don't think the aromas of broccoli, cauliflower or Brussels sprouts are cool, be glad the weather is chilly.

"Vegetables in that family contain sulfur compounds that can smell foul in the kitchen," says David Trinklein, a horticulturalist and associate professor of plant science at the University of Missouri-Columbia. "In the spring, vegetables can develop lots of these and get quite pungent. But they enjoy the crisp nights and cool, clear days of this time of the year."

What's more, vegetables in the Brassica family -- as well as leaf vegetables in other families, such as spinach -- are genetically predisposed to "supercool," which means that the liquids within them stay in a liquid state even when temperatures are below freezing.

In plainer language, some veggies like cold weather and have a longer season because they're equipped to withstand frosts and freezes. The aromas and flavors of fall-harvested versions are often much more appetizing.