New Clearfield varieties could be released soon

Two potential new varieties are being considered for the upcoming growing season – a medium-grain Clearfield and a Clearfield version of Jazzman.

Dr. Steve Linscombe, LSU AgCenter rice breeder, said the medium-grain line LA2065 has performed well and has shown better yields and higher quality than the only other Clearfield medium-grain, CL261.

Also unlike CL261, LA2065 has good resistance to the current races of blast disease, Linscombe said. “It looked extremely good in 2012 when we had the blast epidemic,” he said.

LA 2065 also has good straighthead resistance and is rated as moderately susceptible to bacterial panicle blight.

Linscombe said the Kellogg Co. has been impressed with samples of LA2065 grain size and shape. “In preliminary testing, it also appears to have the processing characteristics necessary for their needs,” Linscombe said.

As for the other potential new release, the Clearfield Jazzman line LA2025 was planted at the Rice Research Station on July 3 after foundation seed was harvested in Puerto Rico.

Linscombe said this line has outyielded Jazzman 1 and Jazzman 2, and it has good aroma and milling quality, with moderate resistance to blast.

Farmers grew 33,000 acres of Jazzman in 2013, Linscombe said, and that acreage is likely to increase with a Clearfield option for Jazzman.

If the releases of LA2065 and LA2025 are approved, the new varieties could be available for seed production only for 2014 and commercial production in 2015.

Most Louisiana rice farmers will look back on the 2013 crop with good memories.

“It was the best crop we ever had,” said Whiteville farmer Jeffrey Sylvester. “Thank goodness we didn’t have any hurricanes.”

Sylvester said he did not grow any hybrid rice, and many of his fields yielded more than 60 barrels (216 bushels or 98 hundredweight). He estimated his average yield at 45 barrels dry (162 bushels or 74 hundredweight).

Dr. Steve Linscombe, director of the LSU AgCenter’s Rice Research Station, said weather conditions in June established the groundwork for a good crop.

Moderate nighttime temperatures in June, when much of the rice crop is at a critical stage of development, helps determine a crop, he said, adding those were the conditions this year.

“It is normally a good indicator that we will have a pretty decent crop,” Linscombe said, adding, “We’re probably going to have right above or right below a record.”

Linscombe said bacterial panicle blight was light in 2013, although some Jazzman 2 fields were hit hard.

The good growing conditions helped quality too, he said, with lower-than-usual amounts of chalk.

Linscombe said he’s not expecting a big jump in rice acreage for 2014, although he’s hearing from seed companies that they are getting

(Continued on page 8)
Cereal chemistry lab to determine cooking quality

LSU AgCenter research scientist Dr. Dustin Harrell is participating in a multistate study on arsenic in rice to determine if levels of the element are higher in different varieties and to see if various flooding methods affect arsenic content.

“Can we change the water management practices to alter the uptake and accumulation of arsenic in rice? That’s what we are investigating,” said the LSU AgCenter scientist based at its Rice Research Station.

All plants naturally absorb arsenic from the soil, but rice tends to absorb more because it is growing in flooded, anaerobic conditions, and that make arsenic more available for uptake and accumulation of arsenic in rice?

“The lab will test for inorganic and organic arsenic content. He said results should be available by spring 2014.

The testing is being conducted in all rice growing states, including Texas, California, Mississippi, Arkansas, Missouri and Louisiana. Harrell said the flooding practices that allow the field to drain typically will require more weed management, which will increase herbicide expenses, increase disease pressure and reduce grain yield.

Varieties being tested are CL151, Cheniere, Presidio and Jupiter, along with hybrids CLXL-729 and CLXL-745.

Harrell said all rice samples will be milled at the Rice Research Station and then sent to a lab for determining inorganic and organic arsenic content. He said results should be available by spring 2014.

The FDA recently reported the results of testing and concluded there are no health issues associated with arsenic in rice and rice products.

“That is simply long-term research to allow Louisiana rice producers to produce the safest, most nutritious rice available for our customers,” said Dr. Steve Limcombe, director Rice Research Station.

“Can we change the water management practices to alter the uptake and accumulation of arsenic in rice? That’s what we are investigating.”

— Dr. Dustin Harrell

LSU AgCenter agronomist

LSU AgCenter plant pathologist Dr. Chuck Rush died Aug. 10 after a distinguished 39-year career in plant pathology. He is shown here receiving the Distinguished Service Award at the Rice Technical Working Group in 2008. Even after retirement, Rush continued his work with the rice industry, starting a company that sold a specialty rice from the Blanco Island purple rice.

Retired LSU AgCenter plant pathologist Dr. Chuck Rush died Aug. 10 after a distinguished 39-year career in plant pathology. He is shown here receiving the Distinguished Service Award at the Rice Technical Working Group in 2008. Even after retirement, Rush continued his work with the rice industry, starting a company that sold a specialty rice from the Blanco Island purple rice.

By being able to analyze rice in-house, rice breeders will have better opportunities to evaluate their lines quickly and in greater numbers to decide if lines under development will perform as well in the kitchen as in the fields, Wenefrida explained.

“Once we have this cereal chemistry lab, we can cut the turnaround time in the breeding program,” she said.

The LSU AgCenter scientist said genetic markers can be associated with cooking characteristics, and that knowledge also will assist breeders in their selection processes.

“We can make it happen, but like planting a field of rice, we have to actually go out and do it. John Adams once wrote, “There was never a democracy that did not commit suicide.” Let’s not prove him right on our watch!”

— Jackie Loewer, Chairman

December 2013

From the Louisiana Rice Research Board

From my end of the levee

There are several ways to determine value. One way that we use almost unconsciously is in the marketplace – buying and selling of things.

Anytime we buy something, we determine the product is worth more than the money we use to pay for it. We may think it is too expensive, but need, time, place, quality, quantity and availability all come into play. At the end of the transaction, if completed, the product is worth the money spent.

That is not unlike our rice research needs. We would rather have them paid for by someone else, but it is the rice industry that needs them, and it is the rice industry that must pay for them.

There is also another way to determine value – usually regarding beliefs, causes, regulations, laws or agreements. Our American system of government is based on this way, and that is democracy. If the majority of people wants it and thinks it has value, or adds value, then that is the law or rule or agreement of the land.

Our nation is the pride of the world not only because our nation has made great decisions based on democracy, but those within the democracy that are in the minority demonstrate a sense of acceptance and move on. When a candidate in a political race loses, he or she does not gather an army to defeat the victorious opponent. That candidate accepts the will of the people and lives to stress his or her views another day in a democratic fashion.

The rice industry values rice research. Year after year, time after time, rice producers have demonstrated this in a democratic process, placing value in assessing themselves an amount of money dedicated to rice research. Some think differently, but in America, the majority rules.

With the narrow interpretation of state law by the Louisiana Supreme Court, we no longer enjoy the right of self-determination. Until state legislation can be put in place, there is another way we can show value for rice research.

We can voluntarily prescribe that our funds be deducted from the sale of our rice and have that dedicated to rice research. The funds would continue to be collected by Louisiana Department of Agriculture and Forestry and distributed for research.

We can make it happen, but like planting a field of rice, we have to actually go out and do it. John Adams once wrote, “There was never a democracy that did not commit suicide.” Let’s not prove him right on our watch!”

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Rice Research Board Members

Louisiana Rice Research Board members are, from row, left to right, Brian Wild, of Welsh; Bobby Miller, Eunice; Clarence Berken, Lake Arthur; Jackie Loewer, Branch (chairman); Richard Fontenot, Vidrine; back row, left, Johnny Hensgens, Lake Charles; Sammy Noel, Abbeville; Dane Herbert, Maurice; Ronald Sonnier, Kinder; Fred Zaunbrecher, Duson; Donald Berken, Welsh; and Damian Bollich, Jones. Jason Walter, of Mer Rouge, is not pictured here.

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Scientists making progress toward unlocking mysteries of bacterial panicle blight

Dr. Mike Salassi, an LSU AgCenter agronomist, repeatedly requests for information and analysis on the economic consequences of a wide variety of factors related to farming operations and agricultural production. In recent years, he has studied such topics as the economic effects of lodging of a rice crop on a farmer’s income and the ramifications of farm bill proposals. His most recent work focuses on how an underground pipeline can affect rice farming operations.

“According to a Louisiana State University AgCenter study, the 2010s saw a rise in lodging due to increased use of irrigation. This increased lodging has led to a decrease in yields. Lodging can result in a loss of 28-60 cents per hundredweight of rice. Additionally, lodging can increase costs for rice growers, including the costs of reconfiguring irrigation lines. While such lines could be installed or rerouted around a pipeline, the estimated lodging effect on milling yield across all four states reduced the resulting rough rice market price by 40-50 cents per hundredweight. In addition, lodging also reduces rice yield recovered per acre, as well as increasing costs from the inevitably slower harvest, Salassi said.”

An article published in Louisiana Agriculture magazine examined the tests conducted at the Rice Research Station and showed a loss of 28-60 cents per hundredweight, the LSU AgCenter economist said, explaining that three-year lodging study began in 2010 after a talk he had with Evangeline Parish farmer Richard Fontenot.

“Lodging has always been an issue in rice production,” Salassi said, adding, however, “There was really no recent data that documented these effects.”

“We did this research to provide the rice industry information that might prove useful as various forms of crop insurance receive more attention as potential ways for rice growers to manage production risk.”

Underground pipeline study part of economist’s work

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“The existence of an underground natural gas or hazardous liquid pipeline causes real additional costs on rice farming operations,” Salassi said. “However, the farmers had nothing on paper to mark in an argument with.”

“We put some estimates together, and we met again, and I developed a report that highlights the magnitude of some of these imposed costs,” he said.

Salassi is the LSU AgCenter economist who has studied the economic effects of lodging of rice crops on rice yields and the effects of lodging on milling yield. He has estimated that lodging has reduced rice yields by 28-60 cents per hundredweight of rice. In addition, lodging also reduces rice yield recovered per acre, as well as increasing costs from the inevitably slower harvest, Salassi said.

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The LSU AgCenter pathologist Dr. Jong Hyun Ham is trying to unlock the mysteries of bacterial panicle blight – and he is making progress with encouraging signs.

Ham said he is studying the pathogen cells to learn how and why they turn on and off the chemical systems that result in bacterial panicle blight. The pathogen cells somehow sense when conditions are good for the pathogen (high temperatures, especially at night, dry weather at the grain-filling stage and high population levels of the pathogens), and those cells release chemicals, or fatty acid-type compounds, to alert neighboring cells.

“Through that mechanism, they signal to other cells to produce the virulence factor,” Ham said.

That factor is a poisonous chemical called toxoflavin that quickly will kill its host and enable the bacterial panicle blight pathogen cells to feed on the nutrients.

Chances are that bacterial panicle blight pathogen cells can be found in any rice field, but those pathogen cells don’t start the process that leads to the disease unless the proper environment is present.

Ham is looking at the bacteria’s genetic structure to see what genes make toxoflavin. Once that is found, the gene can be turned off through development of mutants, he said, but international plant pathology regulations restrict such research to greenhouse studies only.

The bacteria’s genetic makeup includes DNA that turns toxoflavin production off, Ham said, and he hopes to find the responsible gene, too.

The LSU AgCenter scientist hopes to find a chemical that can fool the bacteria, preventing it from releasing the toxic substance, he said. Ham is working with LSU AgCenter rice breeder Dr. Steve Linscombe to develop a rice variety resistant to bacterial panicle blight. He said a progeny descended from a cross between the variety Bengal and LM-1, a mutant line of Lemont, has shown resistance to bacterial panicle blight and sheath blight. This progeny line showed more resistance than LM-1 and higher yields than Bengal or LM-1.

He said genome sequencing and genetic mapping are being used to identify genetic markers related to the disease resistance. Ham said some bacterial panicle blight pathogen cells do not produce toxoflavin, and testing is being done to see if a population of those non-virulent cells can be used to inoculate a plant and prevent the virulent strain from establishing itself. He said results from a test last year were encouraging, but his outcome was not as promising.

Testing also is underway on the use of ascorbic acid, vitamin C, which appears to prevent the bacteria from causing bacterial panicle blight. The disease is proving to be like the layers of an onion, according to Ham, who explained, “The more we study the disease, the more complicated it appears to be.”

Graduate student Hari Sharan Karke inoculates research plots at the Rice Research Station with bacterial panicle blight. The project is part of a study being conducted by LSU AgCenter plant pathologist Dr. Jong Ham to determine if a chemical mechanism can be used to protect plants from the disease.

Support programs, basing support levels on historical market income per acre, do not work as well for rice as the more traditional price support programs.

“Market price risk has always been the most important issue in rice production,” he said. Salassi also continued his work on a study of the economic effects of a lodged rice crop.

Results of the study from research conducted in Arkansas, Mississippi and Texas, in addition to Louisiana, will be published in the Agronomy Journal.

“We looked at the effects of lodging with all the varieties in the study averaged together,” he said. “It showed lodging could reduce head rice yield as much as 5.5 pounds per hundredweight.”

The estimated lodging effect on milling yield across all four states reduced the resulting rough rice market price by 40-50 cents per hundredweight. In addition, lodging also reduces rice yield recovered per acre, as well as increasing costs from the inevitably slower harvest, Salassi said.

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Varieties from Egypt, India, South Korea used in quest for salt-tolerant rice

Dr. Prasanta Subudhi is continuing his efforts to develop salt-tolerant rice lines, using varieties from Egypt, India and South Korea where high salt levels in coastal areas is a problem.

Subudhi is crossing those varieties with varieties developed by the LSU AgCenter, including Chieniere, CL 151, Bengal and Jupiter.

The progenies developed from those crosses are subjected to water with salt levels of 7,680 parts per million at seedling stage to see how well the rice plants survive under salt stress.

Subudhi said field testing remains in the future. “It could be another four years,” he said. “Growing a large number of plants is difficult in the greenhouse.”

If plants are grown in test plots on an outdoor farm, like the station’s central farm, Subudhi said blackbirds eat most of the grains. “Not a single grain will be left,” he said.

The LSU AgCenter researcher said much of his research in that area of the state duplicates what he is doing in south Louisiana, but he’s also been examining 16 broadleaf herbicides in four different salt stress trials to determine the optimum time to apply herbicides that control broadleaf and sedge weeds.

The use of Permit for late-season or salvage control of seshania, joint-vetch and nutsedge is working well, he said, but he advises avoiding Permit Plus for those plants because it appears the herbicide tends to delay rice maturity.

Webster said the use of Command, post-emergence, plus a crop oil concentrate, is showing good results on small grasses and joint-vetch.

The herbicide Sharpen also is being evaluated for control of small grasses, broadleaf weeds and rice flatsedge. It has shown excellent activity on seshania and joint-vetch, he said, adding Sharpen works well at the 1-ounce rate, but 2 ounces per acre can be very injurious to rice and in some cases reduce stands if it is applied during cool, wet conditions.

Webster said he has been working on burn-down weed control chemicals, including Yukon, a mixture of Permit and dicamba.

Research also continues at the Rice Research Station’s South Farm to determine the distance that joint-vetch and hemp seshania compete with neighboring rice plants.

Weed scientist looking at combinations to eliminate undesired rice plants

LSU AgCenter weed scientist Dr. Eric Webster is continuing his work on dormant hybrids and red rice outcrossing by starting a new project using several different combinations to eliminate undesired plants from a rice field.

“Undesired rice plants that emerge the next year, during the production of a rice crop, may be due to hybrid dormancy issues or red rice outcrosses,” Webster said. “These weedy rice plants are more efficient at competing for nutrients, light and space with production rice than normal red rice.

The test includes planting an infested field in soybeans, allowing part of it to remain in Clearfield rice and allowing the rest to go fallow. The sections of the field were treated with various herbicides, including glyphosate, Zidua, Outlook and Newpath.

“We’ll make our final counts and see how well we did in Year 4,” Webster said.

The LSU AgCenter researcher said work started on a new aquatic-weed herbicide, benzobicyclon from Gowan, that shows good activity on sprangletop and cattail. “It looks like it’s going to have activity on sprangletop,” he added.

Webster said Nealy sprangletop is becoming more of a problem, and he started a project in the greenhouse to study what can be done to control the weed.

Subudhi said using LSU greenhouse space. “Not a single grain will be left,” he said.

Research associate Ben McKnight drives a spray rig over a field to apply glyphosate on volunteer hybrid rice plants and outcrossed red rice as part of a study by LSU AgCenter weed scientist Dr. Eric Webster.
The LSU AgCenter hybrid project continued to move forward in 2013, with tangible progress being made.

“We are making steady progress in the right direction,” said Dr. Jim Oard, LSU AgCenter plant breeder.

For the second year, the medium-grain line LAH10 was the top entry in the uniform regional nursery trial that includes breeding material from all of the Southern rice-growing states, Oard said. “Also this year, LAH10 performed well off-station in Franklin and St. Landry parishes,” he said.

The line’s high yield potential is offset by its tall stature that would cause lodging problems, Oard said.

But the Kellogg Co. has a strong interest in LAH10 because of its bold grain, good milling and low chalk, Oard said. “We are trying to work with the parents of LAH10 to reduce the height and the date of maturity,” he said.

Four Louisiana hybrid lines also produced yields comparable to commercial hybrids, Oard said, adding, “We found that encouraging.”

In addition, five hybrid lines were identified with good milling and low chalk.

“It demonstrates that with breeding efforts hybrids can produce good milling yields and low chalk values,” Oard said. “Those lines are going to be advanced and retested for next year.”

Three new hybrid lines also will be tested in different locations across the state next year, the LSU AgCenter plant breeder said. In addition, four male sterile lines were advanced and crossed with Louisiana parents, and they will be tested in trials next year.

Oard said resistance to sheath blight and bacterial panicle blight is obvious in many of the new hybrids developed from Chinese germplasm.

The program will be working toward incorporating the Clearfield trait into medium- and long-grain hybrid lines, he said.

“The LSU AgCenter hybrid project also is cooperating with the University of Arkansas-Stuttgart to develop hybrid germplasm suitable for adaptation in Louisiana and Arkansas,” Oard said.

“The cooperation involves exchange of germplasm and evaluation of breeding lines from both states.

“So we will have a better chance to find desirable combinations,” he said.
Dr. Don Groth hopes the permanent federal label for the fungicide Sercadis is granted for the upcoming growing season.

The chemical’s temporary label expired in August 2013 for use on fungicide-resistant sheath blight.

Groth said the 2013 regulations allowed the use of the fungicide for any areas with the resistant pathogen, but a permanent label would allow the fungicide to be used anywhere rice is grown in the South. The fungicide-resistant pathogen continues to spread and could move into other rice-growing states, he said.

“If it happened here, it can happen somewhere else,” Groth said. “We think we have detected it further north into Allen and Evangeline parishes.”

The LSU AgCenter scientist said the disease is spread by soil or plant material, adding that the continued use of the same fungicide led to the resistance.

“If you challenge the population enough and put selection pressure against it, a resistant pathogen will develop,” Groth explained.

He said the fungicide resistance developed due to a single change in an amino acid of the thousands of combinations in the pathogen’s DNA. Sercadis at the higher rate in 2013 made the product much more effective, Groth said. The previous rate of 4.5 ounces per acre was increased to 7.6 ounces. Application is most effective normally made around boot stage, he said.

“The consultants I talked with liked it,” Groth said. “They thought the rice looked like fields sprayed with Quadris when it first came out.”

In addition, the restriction on where the product can be used has been relaxed.

Groth said he is testing several new fungicides that may be available in two to three years. “There’s potential we will have resistance to Sercadis in five to six years,” he said. “If we have another product we could rotate with Sercadis, that would be the ideal situation.”

Fungicides have been used on rice since 1977, Groth said. Sheath blight became a problem as more rice farmers started growing soybeans in rotation with rice, and the soybeans also were susceptible to the sheath blight pathogen that causes aerial blight. Before that, most farmers rotated rice with pasture for cattle.

The acreage planted to rice in Louisiana parishes is shown on this map. While some parishes do not produce any rice, planted/harvested acreage in others ranged from less than 5,000 acres to about 75,000 to 85,000 in the state’s top two rice-growing parishes.

The Louisiana Rice Research Board approved continuing funding for 17 LSU AgCenter projects and new funding for two projects during its October 2013 meeting. The 2014 project titles, lead researchers and funding amounts are listed here.

### 2014 Louisiana Rice Research Board funded projects

#### Continuing projects

- **Agricultural Economics and Agribusiness**
  - Economic Analysis of Rice Production and Farm Management in Louisiana
    - Michael Salasso
    - $32,400

- **Communications/Rice Research Station**
  - Enhancement of Rice Research and Extension Communications
    - Steve Linscombe and Frankie Gould
    - $29,160

- **Entomology**
  - Integrated Management Strategies for Insect Pests of Rice in Louisiana
    - Michael Stout
    - $86,265

- **Plant Pathology and Crop Physiology**
  - Characterization and Utilization of Genetic Traits for Resistance to Multiple Diseases of Rice
    - Jong Hyoum Ham
    - $33,777
  - Study of the Biology and Management of Cercospora in Rice
    - Clayton Hollier
    - $17,820

- **Rice Research Station**
  - Rice Multidisciplinary Research Program
    - Conducted at the Rice Research Station
    - Steve Linscombe
    - $876,717
  - Development of Disease Control Practices in Rice
    - Donald Groth
    - $55,485
  - Rice Management Strategies for Efficient Utilization of Agronomic Inputs and Natural Resources
    - Dustin Harrell
    - $106,313
  - Rice Research Station Overall Support
    - Steve Linscombe
    - $20,250
  - Multiple Generation Rice Breeding Nursery
    - Steve Linscombe
    - $59,535
  - Development of Superior Rice Varieties for Louisiana
    - Steve Linscombe
    - $433,958
  - Development of Hybrid Rice and Sheath Blight-Resistant Germplasm for Louisiana
    - James Oard
    - $104,490
  - Marker-Assisted Breeding and Development of Molecular Markers for Important Traits in Louisiana Rice Production
    - Harry Uomo
    - $23,389
  - Rice Grain Quality Enhancement: Characterization of Elite High Protein Lines and Development of Herbicide-Resistant Rice
    - Ida Wenefrida
    - $19,137
  - School of Plant, Environmental and Soil Sciences
    - Breeding Rice Varieties with Tolerance to Abiotic Stresses
      - Prasanta K. Subudhi
      - $32,400
    - Weed Management in Herbicide Resistant/Tolerant and Conventional Rice
      - Eric Webster
      - $130,515

- **Southwest Region**
  - Louisiana Rice Research Verification Program
    - John Suichak
    - $17,010

- **New projects**
  - Dean Lee Research Station
    - Development of an Electronic Sensor System to Improve the Pattern Testing of Aircraft When Planting Rice or Appplying Fertilizer
      - Randy Price
      - $42,000
  - Rice Research Station
    - Effects of Water Management of Rice Grain Yield, Milling Yield and Grain Arsenic Concentration: Continuation of USA Rice Multistate Effort
      - Dustin Harrell
      - $25,000

#### Totals

- Total Continuing Project Funding: $1,201,904
- Total New Project Funding: $67,000
- Total 2014 Funding for Continuing and New Projects: $1,268,904
The Louisiana Master Rice Growers program began in 2013 as a cooperative endeavor involving the LSU AgCenter, the Kellogg Co. and Louisiana Rice Mill — although development of the program has been underway for three years.

“It’s been a model pilot program and the first of its kind in rice production,” said Dr. Steve Linscombe, director of the LSU AgCenter’s Rice Research Station.

Kellogg wants most of its rice grown by participants in the program, which officially is dubbed the Kellogg’s Certified Rice Grower program, Linscombe said.

“We have developed a functional, logical program that incorporates the significant sustainable improvements our producers have made in the past 20 years with potential improvements that can and will be made,” Linscombe said.

The financial incentives offered by Kellogg for reaching the different levels are rewards for practicing the sustainable methods, he explained.

“Kellogg understands that for any program to be successful, it must be economically sustainable for farmers,” Linscombe said.

He said the Louisiana Master Farmer program dovetails well with the Certified Rice Grower program, Linscombe said.

A financial incentive is provided for rice sold to Kellogg, along with the distinction of being designated as a Master Rice Producer or Kellogg’s Certified Rice Grower.

Four levels — bronze, silver, gold and platinum — are attained by farmers who complete different stages of the program, including classroom sessions, farm practice documentation, field day attendance and writing/implementing a conservation plan. Kellogg representatives recognized the highest two levels of participants during the 2013 Rice Research Station Field Day.

Platinum level farmers were Dwayne Compton, Rene Daboval, Shannon Daboval, Eric Unkel and Mark Zaunbrecher. Gold level participants were Ray Faulk, Michael Talley, Dale Thibodeaux, Randy Thibodeaux, Ross Thibodeaux, Steven Thibodeaux, Tommy Webb and Craig Zaunbrecher.

Dr. Ernest Girouard, Louisiana Master Farmer program coordinator, said several more participants have completed varying phases of the program, and he said a Kellogg’s Certified Rice Grower field day is being planned for the spring for farmers to complete the second phase of the program.

Girouard also said the Kellogg initiative is not the only one of its kind. “Other companies are developing sustainability programs, including Nestle,” he said.

Waterfowl use the rice fields at the LSU AgCenter’s Rice Research Station, where faculty members have been instrumental in working with the Kellogg Co. and Louisiana Rice Mill to develop the Kellogg’s Certified Rice Grower program. Kellogg has initiated an industrywide program to improve the sustainability of all aspects of the production of their products.

The Louisiana program has been in development since 2010. The program features a common-sense approach to sustainable rice production, and the LSU AgCenter’s Master Farmer Program is an integral part of the Kellogg program.

Entomologist finding newly registered insecticides less toxic to crawfish

LSU AgCenter entomologist Dr. Mike Stout says testing of insecticides is showing newly registered insecticides are far less toxic to crawfish than pyrethroids.

“There’s no question that Dermacor, CruiserMax and Nipsit are safer for crawfish,” Stout said. “I would be less concerned if these insecticides drifted onto a crawfish pond than if pyrethroids did.”

The researcher cautioned, however, that rice farmers who also use their fields for crawfish production should closely follow the label restrictions.

Stout said today’s insecticides are considerably safer for invertebrates such as crawfish.

“We’ve come a long ways in 15 years in terms of the insecticides we now have available,” he said.

“Farmers now have a huge choice compared to what they had 20 years ago.”

On the other hand, Stout said insecticide makers are not putting truly new chemicals on the market these days. Even “new” products are just slight variations of pyrethroids and neonicotinoids, he said.

Stout said he is still trying to determine the effects of a recent decision by the U.S. Environmental Protection Agency regarding neonicotinoids and assertions that the chemicals affect pollinating insects. “I think where it’s going to affect growers the most is in the application of neonicotinoids at or near flowering,” he said.

The product most affected by that would be Tenchu, used in late season against stink bugs, he said.

The scientist said testing of neonicotinoids used as a seed treatment on rice plants showed little or no traces of the chemical 45 days after planting. That test was conducted on the roots and shoots of 40 samples of rice plants, Stout said.

“That tells me neonicotinoids are probably not present in plants at flowering,” he said.

Stout is conducting work to find out if agronomic practices can reduce insect pressure. For example, he will be working with Dr. Dustin Harrell, an LSU AgCenter agronomist, on a project to see if fertilizer can compensate for plant damage inflicted by rice water weevils.

He said hybrids also will be tested to see if they are affected less by weevils than conventional varieties.

In addition, Stout is continuing work to see if water management and planting dates affect weevils’ effects on rice, and he is working with LSU AgCenter rice breeder Dr. Steve Linscombe to develop rice lines with more resistance to weevils.
“It was probably better than average from what they normally would harvest here. All in all, the rice crop was good to exceptional in some cases.” — Vince Deshotel

At Acadia parishes, said the 2013 crop county agent in Jefferson Davis and Richland parishes, the bird problem started when rice was sprouting. “It was unbelievable, the blackbirds this spring, and they stayed until May,” Buller said.

The bird repellant AV101 has been effective at reducing bird damage, but Saichuk said he is concerned whether the material will be available for 2014.

An increasing problem is the prevalence of hogs manumating fields of rice and other crops. “It’s going to get worse,” said farmer Richard Fontenot of Vidrine, who said he shot a hog near his shop in 2013.

Jefferson Davis Parish farmer Clarence Berken said his 2013 rice crop resulted in yields just less than 50 barrels an acre (180 bushels, 82 hundredweight) for the first crop, and many of his fields resulted in a second crop of more than 20 barrels (72 bushels or 33 hundredweight), with an average in the high teens.

“Overall, our average was better than average,” Berken said.

Saichuk said the average yield for north Louisiana farmers was in the neighborhood of 160-165 bushels (44-46 barrels, or 72-74 hundredweight).

Neither disease nor insects were a major problem in the area, Collins said.

He said the acreage total for Richland Parish in 2013 was between 16,000 and 12,000, about what it was in 2012.

Collins said he expects a slight increase in rice acreage next year in north Louisiana. He said the drop in corn prices will cause some farmers to look at other options.

“Some won’t plant rice for four to five years, but when prices get right, they may plant 600 or 700 acres,” Collins explained.

Farmer John Owen of Richland Parish said the area has benefited from the new Kennedy Rice Mill at Mer Rouge. He said the new $10 million facility in Morehouse Parish gives farmers another option for selling rice that pays more money.

“Nothing but good news for all the growers to have a new player,” he said.

Owen said he also expects rice acreage to increase in north Louisiana during 2014, with fertilizer and diesel prices dropping and rice prices holding at profitable levels. “You plug it into a spreadsheet, and rice is looking pretty good,” Owen said.

LSU AgCenter economist Dr. Mike Salassi said uncertainty will be a big factor when it comes time for farmers to decide how much rice they will plant.

“Bankers and the landlords are probably going to be the biggest determinants,” Salassi said.

Rice buyer David Bertrand, of Elton, said banks were anxious about the upcoming growing season because of uncertainty with the pending U.S. farm bill.

Because it’s likely direct payments will no longer exist, he added that banks would like to see farmers have some type of security, which means many farmers are contracting next year’s crop.

Also, many farmers are locked into a crawfish/rice rotation that keeps land in production almost year-round. “There is no off-season,” Bertrand said.

He said he expects the 2014 rice acreage in Louisiana will be similar to the 411,000 acres grown in 2013.

Bertrand said he is encouraged by the $70 million investment that a New York grain shipping firm is making at the Port of Lake Charles. “It’s a healthy sign for the whole industry,” he said. "I’m starting to see a revival and reinvigoration for agriculture in the area."