

# RICE RESEARCH STATION NEWSLETTER

Volume 1, Issue 1

August 1, 2004

RICE RESEARCH STATION

## Potential Varietal Releases

The Rice Research Station has three advanced experimental rice lines in increase for potential release in 2005.

**LA 2008:** This is a very early semidwarf long-grain line. LA 2008 is similar to Jefferson in maturity. In multi-location testing in 2003, days to 50% heading averaged 77, 71, and 70 for Cocodrie, Jefferson, and LA 2008, respectively. The yield and milling quality of LA 2008 appears to be similar to that of Cocodrie. The experimental line has good seedling vigor, and while it is 2 to 3 inches taller than Cocodrie, it appears to have good resistance to lodging. LA 2008 is being increased in a 19-acre field on the Rice Research Station.

**LA 2183:** This is a high yielding semidwarf medium-grain line. This line is similar in height and maturity to Bengal. The experimental line has consistently out yielded Bengal in multi-location, multi-year testing. LA 2183 has similar head rice yields but superior grain appearance characteristics when compared with Bengal. The experimental line has consistently displayed high levels of resistance to both blast disease and straighthead disorder. LA 2183 is being increased on seven acres on the Rice Research Station.

*Continued on page 2.*



**LA 2008**

## Filling a Void Left by Furadan

LSU AgCenter entomologist Dr. Mike Stout has several projects underway at the station. One of them, aimed at control of the rice water weevil lar-

vae, is testing two granular products to fill a void created by the removal of the granular chemical Furadan in 1997.



### Inside this issue:

Potential Varietal Releases (cont.)	2
DNA Technology	2
Gibberellic Acid Boosts Growth in Young	2
Narrow Window for Ratoon Crop	3
Finding an Effective Bait for Crawfish	3
Herbicide Drift Study	3
Comings and Goings	4

### Upcoming Events:

International Rice Festival
October 14-16, 2004
Crawfish Expo
December 9, 2004

### Continued from page 1

**CL 20:** This is a high yielding, high quality semidwarf Clearfield long-grain line. CL 20 has displayed somewhat higher yield than CL 161. It is also 5 to 6 days earlier in maturity, 2 inches shorter, and more resistant to lodging than the popular Clearfield line. CL 20 also appears to be somewhat more resistant to sheath blight than CL 161. The experimental line has the same resis-

tance gene as CL 161 and is highly resistant to both Newpath and Beyond herbicides. The line is being increased on eight acres on the Rice Research Station. If released, it will be called CL 131.



**LA 2183**



**CL 20**

## DNA Technology

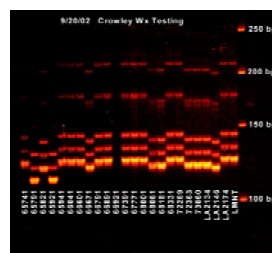
The work of Drs. Herry Utomo and Don Groth of the LSU AgCenter Rice Research Station was the focus of a report by the Baton Rouge television station WBRZ. The broadcast told viewers that the DNA technology used by crime labs also is used to speed the process of developing new plant varieties.

Currently, it takes 8 to 10 years to develop and re-

lease a new variety of sheath blight-resistant rice, but with DNA marker-assisted breeding, that cycle can be reduced by 2 to 3 years.

With Utomo's help, Groth is working to develop lines of rice resistant to sheath blight and blast.

Groth said this year's wet weather is making the problem of fungal disease more widespread



**Marker Approach**

"the DNA technology used by crime labs also is used to speed the process of developing new plant varieties."

## Gibberellic Acid (GA) Boosts Growth in Young Plants

Dr. Richard Dunand, plant physiologist, is continuing with his studies of gibberellic acid, both for seed treatment and foliar application. The plant growth regulator is particularly helpful with drill-

seeded rice planted at a low seeding rate in cool weather. He's also continuing to study which rice varieties respond to foliar application of GA. He's shown its use on young rice plants can boost

growth enough to allow a farmer to flood up to a week earlier than usual.



## Narrow Window for Ratoon Crop

A narrow window exists for deciding whether a farmer will attempt a second crop, according to Dr. Johnny Saichuk, LSU AgCenter rice specialist.

Delaying will push the ratoon further into cool weather, he explained. It takes 80-90 days for a second crop to mature for harvest.

Saichuk said as a general rule, a south Louisiana farmer who wants to at-

tempt a second crop should have the first harvest completed no later than Aug. 15. North Louisiana farmers who want to gamble on a second crop should harvest no later than Aug. 1, he said.

He also recommends that harvesters be equipped with conventional headers, instead of stripper headers. Although stripper headers are faster, they can reduce second crop yield, Saichuk said.

A field with a bad red rice problem should be disregarded, Saichuk said, and farmers planning to crawfish probably won't want to try a second crop because of conflicts with water management. The effects of disease also can carry over into the second crop.

Nitrogen should be applied immediately after harvest, he said, and the maximum recommended rate has been increased

from 75 to 90 pounds an acre. The maximum nitrogen rate should only be used on fields with good to excellent yield potential. Flooding should follow immediately after fertilization. Also, he said research has yet to determine the effectiveness of flail mowing or rolling stubble in preparation for a second crop.

## Finding an Effective Bait for Crawfish

Dr. Ray McClain, LSU AgCenter professor of aquaculture, is working to find an effective bait as a substitute for dead fish. Manufactured bait seems to work well in warm weather but its effectiveness is decreased by colder

temperatures. McClain also is collaborating with Robert Romaine, LSU AgCenter aquaculture professor, and Jay Huner, director of the Crawfish Research Center at the University of Louisiana at Lafayette, to study

crawfish reproduction.

Manufactured bait seems to work well in warm weather but its effectiveness is decreased by colder temperatures.

## Herbicide Drift Study

Dr. Eric Webster, LSU AgCenter weed scientist, is studying how drift from Newpath, Beyond, Roundup and Liberty herbicides can be distinguished according to their effects.

### Rice Research Station



*Research partially funded by the Louisiana Rice Research Board*

## RICE RESEARCH STATION

Rice Research Station  
1373 Caffey Road  
Rayne, LA 70578

Phone: 337-788-7531  
Fax: 337-788-7553  
E-mail: [slinscombe@agcenter.lsu.edu](mailto:slinscombe@agcenter.lsu.edu)



The LSU Agricultural Center is a campus of the LSU System and provides equal opportunities in programs and employment.

The Rice Research Station was established in 1909 and is the oldest rice research facility in the United States, as well as in the western hemisphere. Research is conducted here not only by station scientists but also by AgCenter scientists from the LSU Campus in Baton Rouge. In addition, much of the research conducted here is done in cooperation with scientists from other rice producing states, as well as scientists from other countries.

[www.lsuagcenter.com/inst/research/stations/rice/](http://www.lsuagcenter.com/inst/research/stations/rice/)

## Comings and Goings

Dr. Pat Bollich recently shifted positions from the Rice Agronomist at the Rice Research Station to Resident Director of the Central Research Station in Baton Rouge, LA. During Pat's 19 years at the station, he has made numerous contributions to rice research, including development of nitrogen fertilization recommendations, straighthead screening, conservation tillage practices, water quality work, and improved ratoon crop production to just name a few. Pat has been recognized by several organizations over the

years for his accomplishments, including RTWG Distinguished Rice Research and Education Team Award, Conservation Tillage Rice Researcher of the Year Award, The Tipton Research Award from the Louisiana Agricultural Experiment Station, and most recently the RTWG Distinguished Service Award.

Dr. Jason Bond started on station as the project leader for rice agronomy and cultural practices June 14. He is a native of southeast Arkansas where he grew up on a rice, cotton, soybean farm near

Lake Village. He earned a Bachelor of Science degree in Agronomy with a crop science concentration from LSU in 1997 and a Master of Science degree in Weed Science from LSU in 2000. Jason graduated from the University of Arkansas this May



**Dr. Jason Bond**