RiceCAP News

JANUARY 2007

Annual Meeting with Advisory Boards

RiceCAP held its third annual PI and Advisory Board meeting in conjunction with the Plant and Animal Genomics meeting in San Diego, CA on January 13th, 2007. The meeting consisted of a modified format whereby the Boards received an overall report from project director Jim Correll, followed by reports from the individual objective team leaders including Anna McClung (objective 1), Yinong Yang (objective 2), Clare Nelson (Bioinformatics), Jim Correll (objective 3), and Peggy Lemaux (objective 4). The program for the meeting is available on-line at http://www.ricecap.uark.edu/progress.htm as well as copies of the presentations at http://www.ricecap.uark.edu/SanDiego07.htm

The Advisory Board members provided an oral report to the group at the conclusion of the meeting.

A written report from the advisory boards is pending along with a response from the RiceCAP Executive Committee. The next annual RiceCAP meeting will be held in conjunction with the 2008 RTWG meeting that also will be held in San Diego on February 18-21, 2008. A tentative date for the RiceCAP meeting has been set for February 17th, 2008.

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Rice Facts & Folklore

Rice is one of the world’s most nutritious foods because it is low in fat (which makes it easy to digest) and it provides lots of energy! Brown rice is rich in phosphorus which helps keep bones and teeth strong, and is essential for a healthy body. In developed countries like the US, the average person eats 26.5 pounds of rice each year. In developing countries like the Philippines, the average person eats 154 pounds of rice every year. Cooked rice stays fresh for up to a week in the refrigerator, and can be frozen for up to six months.

If you really love rice, the place to be is Crowley, Louisiana. Crowley has an International Rice Festival every October that features a parade and rice eating and cooking contests.

Source: http://www.kidsregen.org/howTo.php?section=celeb&ID=10

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More Photos of the Advisory Board Meeting

Anna McClung, PI, and Melissa Fitzgerald, Scientific Board member, discussing milling of MY2 grain. (Submitted by Jim Oard)


Brian Scheffler, Kathy Yeater, and Melissa Fitzgerald.

Ed Kaleikau and Peggy Lemaux.
How Arkansas is Addressing the LLRICE601 Issue

As discussed in the last Rice-CAP newsletter, November 2006 (http://www.ricecap.uark.edu/newsletter/RiceCAPv3n3_web.pdf), rice-industry experts developed a plan to rid the long-grain system of GM rice at the seed level beginning in 2007. The proposed plan (http://www.usarice.com/industry/communication/SeedRecs.pdf) was unanimously approved by the USA Rice Federation board of directors on Dec. 6, 2007. How the plan will be implemented will vary by state. The following is a fact sheet being distributed by Chuck Wilson, Extension Agronomist, for distribution in Arkansas. Please contact your local state extension agent for details as to how the plan will be implemented in your state.

U.S. Rice Industry Recommendations to Reestablish Supply and Marketability of U.S. Rice

To all members of the US Rice Industry:
The discovery of LLRICE601 in US rice has created significant loss in revenue and poses a threat to the long-term success of the rice industry. While the USDA and other organizations maintain US rice is safe for human consumption, LLRICE601 is not approved (and therefore illegal) in other countries, particularly the European Union. Therefore, on behalf of the US Rice Industry, the following recommendations are made to eliminate rice containing Liberty Link traits from the system and restore world-wide marketability of our rice.

Key Facts & Market Situation
• August 18 – LLRICE601 presence in U.S. commercial long grain supplies announced by USDA.
• October – LLRICE601 presence in U.S. commercial long grain supplies reported.
• Key foreign markets closed or under threat. Domestic market is steady to date.
• $144 million lost revenue due to closed markets this year. 41% of market impacted to some degree.

Certified and Registered Seed
Arkansas State Plant Board requires each seed processor to submit samples of all rice varieties and hybrids, with a state seed certifying agency field inspection number attached, to a laboratory using a validated testing protocol for the presence of Liberty Link traits in rice seed. Processors must be able to document the seed sample’s chain of custody. If a positive result is received, the submitter must report a rating at the original sample submitted or have the seed re-sampled for testing. Positives will be channeled out of the system. All seed storage and processing facilities should be cleaned to reduce re-infestation of Liberty Link rice to the seed channel.

Cheniere Rice Variety
No Cheniere rice seed shall be sold for grain production in 2007 or 2008. Cheniere seed increase is allowed in 2007 for 2008 and 2009 seed stocks from Foundation Cheniere produced in 2005, provided that all seed stocks are negative for LL traits at 90% detection. Raisers will be held and not sold to first points of need delivery in 2007 crop milling year. Arkansas State Plant Board has banned commercial production of Cheniere in 2007 and in 2008 in Arkansas. Violators face a fine of up to $100,000 per day.

Millers/Processors
First points of delivery require documentation of negative seed test (at 0.01% detection) for the presence of LL traits, identifying the seed source in connection with ALL rice sold. First points of delivery may perform random testing of delivered rice. Positive results will be channeled out of the system on the account of the first point of delivery. No 2007 crop year Cheniere to be accepted at first point of delivery. Buyers may accept 2006 crop year Cheniere until July 31, 2007. All storage and processing equipment is to be thoroughly cleaned prior to introducing rice produced during 2007.

Producers
• Grower provides, and first point of delivery receives, three forms:
- Documentation of planting seed with “LL-negative” results,
- Sales receipt showing amount of LL-negative tested seed purchased from a seed dealer,
- FSA form of certified acre planted.
• Rice produced from farm-saved seed, except from Cheniere variety, to be accepted by first point of delivery provided such rice is accompanied by a documentation of LL-negative seed test and an FSA form of certified acre planted.
• No farm-saved seed produced on farms where Cheniere was produced in 2005 or 2006 will be eligible to be tested.

Indica Rice Lines Released to Broaden Genetic Base

The Agricultural Research Service, USDA, and the Arkansas Agricultural Experiment Station, U of A Division of Agriculture, have announced the release of three indica germplasms of rice, indica-16 through indica-18. These mutants are part of a base broadening effort to develop indicas for the US, where very narrow genetic bases, essentially all in japonicas, have evolved because of need for adaptation to temperate climates.

There are three different types of rice: japonica, indica and javanica. Japonica rice varieties are high yielding and tend to be resistant to disease. Although quite hardy, indica yield less than japonica types and are most often grown in the tropics. Javanica types of rice fall be-
How Arkansas is Addressing the LLRICE601 Issue (continued)

- Dispose of all Cheniere stocks, including farm-saved seed, prior to July 31, 2007
- Thoroughly clean all equipment and facilities that have contained Cheniere rice - bins, combines, trucks, grain carts, drills, etc.
- Rotate 2006 Cheniere fields to crop other than rice or Clearfield rice
- Plant seed documented to be found negative for I1 traits
- Maintain good records of seed used, axes produced

To Test Farm-Saved Seed in Arkansas:
You should contact the Arkansas State Plant Board to arrange for sample collection. They can be reached at:

Arkansas State Plant Board
1 Natural Resource Drive
Little Rock, AR 72205
Business Hours: 8:00 a.m. to 4:30 p.m. M-F
Phone: (501) 225-1598

The following is a list of known laboratories utilizing validated testing protocols for the presence of Liberty Link traits in rice seed.

Quentin Schultz
President
BioDiagnostics Inc.
507 Highland Drive
River Falls, WI 54022
Telephone: +1(715) 426-0246
E-Mail: Quentin.Schultz@biodiagnostics.net

Tim Gettormson
Mid-West Seed Services, Inc.
236 32nd Ave.
Brookings, SD 57006
Telephone: +1(605) 692-7611
E-Mail: tim@mwseed.com

Dr. Chong Singsit
Manager GMO Testing Services
NGS North America Inc.
1019 Harbor Ave.
Memphis, TN 38113, USA
Telephone: +1(901) 775-1660
E-Mail: chong.singsit@ngs.com

Dr. Frank Spiegelhalter
Vice President - Technical Services
Eurofins GeneScan Incorporated
2315 N Causeway Blvd, Suite 200,
Metairie, LA 70002
Telephone: +1(504) 297-4330
E-Mail: franksiegelhalter@eurofinsus.com

John Fagan
Genetics ID
501 Denicel Dr.
Fairfield, IA 52556
Telephone: (641) 472-9979
Fax: (641) 472-9198
Mobile: (312) 351-2001
E-Mail: nci@genetic-id.com

The new lines are induced early flowering mutants of Oryzica llanos 5 (PI 584668, henceforth abbreviated as OL5), a highly blast disease [Pyricularia grisea (Cooke) Sacc.] resistant cultivar from Colombia, which in itself is a month too late in maturity for the US. These three germplasm lines are 24 to 36 days earlier than the parent, making them 6 to 18 days later than the southern tropical japonica long grain cultivar Francis (PI 632447). These germplasms retain the blast resistance of the OL5 parent. Their early maturity and blast resistance make them useful sources of indica diversity for US rice improvement programs.

The lines were derived by gamma radiation of
Fellowship at Colorado State University

Two Ph.D. level USDA National Needs Graduate Fellowships are available at Colorado State University beginning in summer or fall of 2007. The fellowships are in a novel program entitled “Crops for Health: Applying Plant Genomics for Human Health Benefits”, which links disciplines within the agricultural and human health sciences. Applicants must be U.S. citizens or permanent residents. For more details, please visit http://www.cropsforhealth.colostate.edu/fellowships.htm.

IRRI Training

IRRI Rice Breeder’s Course

One of the five core goals of the new IRRI Strategic Plan (2007-2015) is to develop the next generation of rice scientists. This is particularly needed in the field of rice breeding. The number of rice breeders has decreased over the years, and those that remain need to enrich their skills with the precision tools afforded by advances in rice genomics and information technology. Meanwhile, breeding varieties that are adoptable by farmers remains a major challenge, along with the dwindling funds for breeding research. This situation demands maximum impact from rice breeding using limited resources.

The course is targeted at breeders and agronomists working on variety development or cultivar testing, and at research managers with responsibility for rice breeding programs in the public, private, and NGO sectors.

For the full descriptive brochure and application form go to http://www.ricecap.uark.edu/events.htm

New Gramene Release

RELEASE #23 OF GRAMENE

Gramene is proud to announce the release #23 of Gramene. For detailed information on the newest updates, please see the release notes at http://www.gramene.org/documentation/release_notes/releases.html

Gramene is a curated, open-source, web-accessible data resource for comparative genome analysis in the grasses. Their goal is to facilitate the study of cross-species homology relationships using information derived from public projects involved in genomic and EST sequencing, protein structure and function analysis, genetic and physical mapping, interpretation of biochemical pathways, gene and QTL localization and descriptions of phenotypic characters and mutations.

Source: USDA Vision newsletter
Ron Phillips, Scientific Board member for RiceCAP and Regents Professor at the University of Minnesota, has been awarded the 2006/7 Wolf Foundation Prize in Agriculture. He shares this recognition with Michel A. J. Georges, University of Liège Liège, Belgium, for “for groundbreaking discoveries in genetics and genomics, laying the foundations for improvements in crop and livestock breeding, and sparking important advances in plant and animal sciences.”

The full description of the award may be accessed at http://www.wolffund.org.il/cat.asp?id=14&cat_title=AGRICULTURE

Ron Phillips Receives Wolf Foundation Award in Agriculture

National science society honors Karen Moldenhauer

The American Association for the Advancement of Science announced Nov. 27 that it has awarded the distinction of AAAS Fellow to University of Arkansas rice breeder Karen Kuenzel Moldenhauer. Dr. Moldenhauer, who holds the university’s Rice Industry Chair for Variety Development, is based at the Division of Agriculture’s Rice Research and Extension Center (RREC) near Stuttgart.

Outreach

Outreach Material Review Committee Formed

A new committee has been formed to provide reviews on educational materials developed for the RiceCAP project. The committee was brought together to supply rapid and standardized feedback for RiceCAP participants preparing outreach publications. Anyone interested in having RiceCAP-related educational materials reviewed should send them to Ken Korth (kkorth@uark.edu).

Members of the Outreach Educational Materials Review Committee are:

- Ken Korth, Chair - University of Arkansas, Fayetteville, AR
- Anna McClung - USDA-ARS, Stuttgart, AR/Beaumont, TX
- Nathan Buehring - Mississippi State University Extension Service, Stoneville, MS
- Chris Greer - University of California Cooperative Extension, Yuba City, CA

Dr. Ronald Phillips

Dr. Karen Moldenhauer
Calendar of Events

FEBRUARY 2007

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2/13/07—Arkansas Rice Conference, Wynne, AR. See http://www.ricecap.uark.edu/events.htm

2/14/07—Rice Breeders meeting, Memphis, TN. See http://www.ricecap.uark.edu/events.htm

2/15/07—Deadline for application to Rice Production course in Philippines. See http://www.ricecap.uark.edu/events.htm

We’re on the web!
www.ricecap.uark.edu