



**Dale Bumpers National Rice Research Center
USDA-ARS
Stuttgart, Arkansas**



SEPTEMBER 2023

MONTHLY RESEARCH HIGHLIGHTS

For More Information: Dr. Yulin Jia, Acting Research Leader/Center Director
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- **Technology Transfer**

- ✓ **Interactions with the Research Community**

Through several emails and virtual meeting interactions Sept. 18–28, Drs Shannon Pinson and Georgia Eizenga provided to a scientist in the Agricultural, Food and Life Sciences Department at the University of Arkansas information on how to import rice grains into the USA from Thailand. We informed him of various types of APHIS permits (e.g., for grow-out or experimental use only), provided online links to APHIS, names and emails of APHIS contacts with rice expertise, and names of two persons at the Univ. of AR that have APHIS permits at this time.

- ✓ **Rice Germplasm Distributed**

During the month of September, 2 rice genetic stocks were shipped to researchers in Belgium and the United States and germplasm Eclipse was shipped to a food company in the United States.

New Addition of Genetic Stock:

On September 5, 2023, Drs. Trevis Huggins and Yulin Jia, and Mr. Jonathan Moser met with Dr. Xingyou Gu and his student from South Dakota State University. Dr. Gu visited with us to donate about 400 recombinant inbred lines (RILs) for inclusion in the Genetic Stocks *Oryza* (GSOR) germplasm collection. The population was developed from a cross between the lines EM93-1 and US1 to study seed dormancy. EM93-1 is a non-dormant *indica*-type semi-dwarf that carries the *sd1* allele, known as the “Green Revolution” gene. EM93-1 has white pericarp, straw hull and has no awns. US1 is an *indica* like weedy rice from the United States with red pericarp, black hull, and awns. The population was developed through traditional breeding through the F₁₂ generation. The population varies for red and white pericarp color, black, golden brown, and straw hull color and awns and no-awns. The population also varies for plant height (64.1-204.4 cm) and days to flowering (60-160). The RILs will be added to GSOR and be available for request in a few months when they are registered in the Journal of Plant Registration.



- **Stakeholder Interactions**

On September 1, 2023, Drs. Yulin Jia and Jeremy Edwards discussed DBNRRC research plan and progress, led tour research labs and field experiments with a rice farmer, Jim Whitaker (owner of Whitaker Grain, Dermott, Arkansas).



- **International Research Collaborations**

On September 8, 2023, Dr. Yulin Jia shared an update of disease related research of DB NRRC with Dr. Jose Luis LLANOS Rocha, Dean, College of Agricultural Sciences, Universidad Autonoma Gabriel Rene Moreno, Santa Cruz, Bolivia and with Drs. Alton Johnson and Paul Counce of University of Arkansas Rice Research and Extension Center.



On September 15, 2023, Dr. Alberto San Bautista Primo and two of his students from Department of Plant Production, Polytechnic University of Valencia, Spain, visited DB NRRC and presented a talk titled “Remote sensing in Agronomy from Polytechnic University of Valencia: crop rice management in Arkansas using satellite sensors” and Dr. Beatriz Moreno-García from University of Arkansas -Fayetteville presented a talk titled ‘Investigations of connections between the carbon and water cycles in rice production environments.’ A total of 40 participants including National Program Leader Jack Okamuro and researchers from University of Arkansas attended presentations and discussions.



See the web version of all DBNRRC research highlights at: <https://www.ars.usda.gov/southeast-area/stuttgart-ar/dale-bumpers-national-rice-research-center/docs/monthly-research-highlights/>