



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

SEPTEMBER 2018



MONTHLY RESEARCH HIGHLIGHTS

**For More Information: Dr. Anna McClung, Research Leader/Center Director
anna.mcclung@ars.usda.gov**

- **Technology Transfer**

- ✓ **Interactions with the Research Community**

On September 11, Dr. Jinyoung Barnaby, DBNRRC Plant Physiologist currently stationed in Beltsville, MD, hosted a visit with Dr. Jehoon Sung, head of Postharvest Engineering Division from the Rural Development Administration, National Institute of Agricultural Sciences, Korea. They discussed Dr. Barnaby's current research projects determining the impact of genetics and environment on grain quality as well as high-throughput phenotyping methodology. The meeting was followed by a lab and greenhouse facility tour at the Beltsville lab where Dr. Barnaby is currently working.

On September 17th, Dr. Yulin Jia transferred 12 genetic materials in plasmids to Samuel Roberts Noble Research Institute, OK to investigate biochemical and molecular bases of rice adaptive immunity.

On September 25th, Dr. David Gealy and Howard Black at DBNRRC hosted Dr. Meepagala Kumudini, ARS chemist at Oxford, MS. She and a team from Dr. Steve Duke's group sampled live plants of a natural infestation of the weed, duck salad, for its potential allelopathic chemical properties. While at DBNRRC, they also consulted with Yulin Jia regarding a fungal pathogen of interest.

- ✓ **Rice Germplasm Distributed**

During September, 12 rice accessions from the Genetics Stocks *Oryza* (GSOR) collection were distributed to researchers in the United States, Belgium and Canada.

- **Stakeholder Interactions**

On September 12th, Research Plant Pathologist Dr. Yulin Jia and Biological Science Technician David Alan Sites visited Chris Isbell's Lonoke County rice farm to inspect a rice germplasm that is intended for commercial production developed by Dr. Jia's program. (Dr. Jia on L, Mr. Isbell on R)



On September 20th, Drs. Anna McClung and Ming-Hsuan Chen, provided feedback to an Archer Daniel Midlands representative regarding grain quality of organically produced rice.

On September 24th, Dr. Anna McClung, Center Director, provided background information about the research and curation of the USDA's world rice genetic collection conducted by DBNRRC, to Anthony Suau, who is making a film about organic food production.

- **Education and Outreach**

On September 25th, Dr. Anna McClung, Research Geneticist, provided 25 lbs. of long paddy grain rice for testing by a new low cost dehulling machine. This is a project by students of Eric Albert, located at Pennsylvania College of Technology in Williamsport, PA that have the goal to build a machine to produce brown rice from paddy rice that can be used by small farmers (e.g. organic).