

Rice Crop Germplasm Committee

The 34th meeting of the Rice Crop Germplasm Committee was held 18 Feb. 2014 in New Orleans, LA. Members in attendance were Farman Jodari (Chair), Harold Bockelman, Georgia Eizenga, Tim Walker, Jim Oard, Jack Okamura, Anna McClung, Karen Moldenhauer, Xueyan Sha, Qiming Shao, Rodante Tabien. Members participating via conference call were Peter Bretting, Gary Kinard, Clarissa Maroon-Lango. Members not present were M.O. Way, James Correll, and Wengui Yan. Guests in attendance were Don Bleighley, Ted Wilson, David Becker, Zongbu Yan and Kent McKenzie.

The minutes of the 33rd Rice Crop Germplasm Committee held 30 Jan. 2013 in LSU Baton Rouge, LA, were read and approved by a motion from Karen Moldenhauer, seconded by Tim Walker, and supported by the other committee members.

Peter Bretting (USDA/ARS NPGS) reported on the status of the National Plant Germplasm System. Priorities are given to updating the assessment of crop vulnerability in each crop including rice. Narrowing of genetic base in crops is a concern and periodic assessment is needed. A template has been developed to use for crop vulnerability statements. Genotypic characterization data are being compiled using large number of SNP markers. The soybean germplasm collection at Urbana, IL is using the genotyping and phenotyping information to define the genetic differences among soybean accessions. The fiscal year 2013 funding for USDA-ARS had a 7.8% reduction, which affected hiring of vacant positions. The 2014 budget have been proposed at 2.7% above 2012 level which was approved in Jan. USDA germplasm collections and demand for germplasm continues to grow. Collection and identification of crop wild relatives is being pursued. For rice, Arab speaking countries, North Africa and former Soviet countries offer best chance for getting additional germplasm.

Next on the agenda was the report by Gary Kinard and Ned Garvey from National Germplasm Resources Laboratory (NGRL). Gary reported that proposals are being accepted for 2015 plant exploration and exchange. Deadline for submissions is July 25, 2014. Proposals need to go through CGC's and curator for crop to get approval. Database management unit (DBMU) of the NGRL continues development of GRIN-Global. The unexpected loss of staff and retirements pose challenges to launching of this database, which is expected to be in 2014. NPGS

personnel at Ames, IA and Beltsville, MD are leading this project.

Harold Bockelman (USDA/ARS NSGC) reported there were 2 new PI assignments for rice this year, for a total of 18,733 accessions. The NSGC rice core collection includes 1,794 accessions. In 2013, 1409 rice accessions were distributed. Jim Oard commented that IRRI through the BGI is currently re-sequencing 3,000 accessions. Discussion followed as to whether it would be useful to import these accessions. The consensus of the members was to select a subset and request seed from IRRI for introduction. Georgia Eizenga offered to obtain the list and to work with Clarissa Maroon-Lango regarding the quarantine grow-out.

Georgia Eizenga commented that the SSR genotypes for the Rice Diversity Panel 1 (RPD1) were published as part of the J. Plant Registrations (2014) 8:109–116. RPD2 set is currently in quarantine process. In 2013, 1,333 lines from RDP2 were received from IRRI and seed has been harvested from 833 (Apr. 2014) after the quarantine grow-out. Anna McClung reported that a *tropical japonica* core collection, consisting of 700 lines is being assembled. This project is in the early stages. The objective is to capture the allelic variability in the *tropical japonica* pool.

Anna McClung (USDA-ARS, DBNRRRC) provided an update on the status of Genetic Stocks-*Oryza* (GSOR) at the DBNRRRC. There are 3,500 accessions in GSOR. New additions are 42 M-202 x Katy backcross lines with the blast gene, *Pi-ta*, in the M-202 background and the 14 JeffersonNILs with *O. rufipogon* incorporated into the Jefferson background. Also, the NSGC mini-core has been phenotyped for protein and stem rot. Discussion followed on the need for archiving phenotypic information of U.S. germplasm collection as well as advanced breeding material within URRN. Expanding genomics information will require sufficient phenotypic data for future association mapping. Members discussed several sources of phenotypic data that can be accessed for this purpose, including the GRIN database, URRN agronomic data for the past 30 years, disease information from California, and historic weather data. Anna McClung commented that a new molecular geneticist, Jeremy Edwards, has been hired at the DBNRRRC and starting in June 2014.

Clarissa Maroon-Lango (APHIS, PPQ) reported all rice core collection accessions from EMBRAPA, Brazil have been processed through quarantine facility at Beltsville. 182 accessions from RDP2 were also released from quarantine in 2013. Additional accessions from RDP2, as well as, new IRRI Panel will be

introduced in 2014. Members asked Clarissa regarding the status of proposed APHIS policy change for importation of rough rice from Argentina. Clarissa commented that no policy change at this time. However, a new round of PPQ notice will be announced for public comment in Argentina.

Jack Okamura (USDA-ARS, Office of National Programs) outlined the importance of the germplasm resources in the national picture. New staff changes at USDA leadership was discussed, as well as, the emphasis of the administration in providing genetic resources database tools and support. The objective is to move molecular information to the field, similar to CAP projects, which is termed as translational work.

Members whose terms expired in 2014 were Farman Jodari and Xueyan Sha. Both members were nominated for another six-year term. The motion was made to accept the proposed nominations by Karen Moldenhauer, seconded by Tim Walker, and supported by all members.

The 4th International Rice Congress will be held in Bangkok, Thailand on October 27-31, 2014.

The 35rd Rice CGC meeting will be held in Houston, Texas in 2016. Karen Moldenhauer made the motion to adjourn, Georgia Eizenga seconded the motion, and the motion was supported by all members.

Rice Crop Germplasm Committee members as of February 18, 2014, with year term ends in parentheses:

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Submitted by
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