

MINUTES  
35<sup>th</sup> RICE CROP GERMLASM COMMITTEE MEETING  
TUESDAY, 27 JANUARY 2015  
Delta Research and Extension Center, Stoneville, MS

The 35<sup>th</sup> meeting of the Rice Crop Germplasm Committee was held on Tuesday, 27 January 2015 in Stoneville, MS. Members in attendance were Karen Moldenhauer, Qiming Shao, Anna McClung, Georgia Eizenga, Xueyan Sha, Rodante (Dante) Tabien and Farman Jodari (Chair). Members not present were Jim Oard, Mo Way, and Jim Correll. Members participating via conference call were Clarissa Maroon-Lango, Peter Bretting, Harold Bockelman, Jack Okamura, Gary Kinard and Renee DeVries. Guests in attendance were Jeff Oster, Zongbu Yan, Yeshi Wamishe, and Ed Redona. The meeting was called to order at 4:00 pm.

The minutes of the 34<sup>th</sup> Rice Crop Germplasm Committee held 18 February 2014 in New Orleans, LA were approved by a motion from Georgia, seconded by Xueyan, and supported by the other committee members.

**Gary Kinard**, National Germplasm Resources Lab (NGRL), reported on plant exploration projects in 2014 with the objective of filling gaps in the collection. The deadline for submitting proposals is July 2015 for the following fiscal year. More emphasis is being placed on GRIN Taxonomy for on-line use and John Wiersma has been responsible for this effort. This is to provide accurate scientific names for worldwide use of the NPGS (National Plant Germplasm System) databases. This standard set of plant names is essential for effective management of ARS plant germplasm collections, which now represent about 14,895 taxa.

The Database Management Unit (DBMU) is continuing the conversion of GRIN to GRIN Global for plants. This is expected to be completed in 2015, pending review of the security features of the new system. GRIN-Global supports the NPGS (National Plant Germplasm System). The public website is fully functional, however, germplasm requests are not being filled through this test public website until everything is converted to GRIN-Global. Submission of feedback is encouraged.

**Peter Bretting**, USDA/ARS Office of National Programs, reviewed the status of the National Plant Germplasm System. This included the increased requests for accessions with flat budgets. Most exciting was the development stronger and more extensive international partnerships and increased requests for crop wild relatives. Ratification of the FAO International Treaty on Plant Genetic Resources for Food and Agriculture by the U.S. Congress is still progressing.

Anna McClung commented that a collection of 630 isolates of the blast fungus collected from the rice fields of USA from 1959 to 2005 and previously maintained by Tony Marchetti was deposited in the USDA National Center for Genetic Resources Preservation in Ft. Collins, CO. Subsequently (Jan. 26, 2016), DB NRRC personnel deposited 882 rice blast isolates collected by pathologists from rice fields of the Southern USA from 2006 to 2014 at the same location. Together, a total of 1512 rice blast isolates have now been preserved for use by the research community. These blast isolates are critical genetic resources for studying genetic changes in the

rice blast fungus due to changing climate and production systems, and for identifying means to control this disease.

Next on the agenda was a report by **Harold Bockelman** from the National Small Grains Collection (NSGC) in Aberdeen, ID. Harold reported that a total of 2,100 rice samples were distributed in 2014 to fill the approximately 100 seed requests that were received. Some accessions require a Standard Material Transfer Agreement (SMTA) or MTA (material transfer agreement) for distribution. This includes the over 300 accessions recently received from Brazil, representing their rice core collection. Information about the collection includes 15 descriptors. Harold and staff are working closely with Lorie Bernhardt and Anna McClung of the DBNRRC when filling foreign germplasm requests so that only one phyto-sanitary certificate is requested, when orders include accessions from both GSOR (Genetic Stock-*Oryza*) at Stuttgart, AR and the NSGC at Aberdeen, ID.

Anna McClung asked about collecting information from germplasm donors that needs to be corrected and updated. Also, she commented about adding marker data to the collection. Georgia Eizenga made the motion to develop a panel of markers for identifying the sub-population group for the accessions in the collection. It was seconded by Qiming Sha.

**Joseph Foster**, from USDA-APHIS, PPQ office reported on the status of senior pathologist vacancy left by relocation of Clarissa-Maroon as quarantine officer. This position has been approved to be filled in 2015. He indicated that additional technical help will also be included. Clarissa commented that quarantine facility is currently available to plant new rice introductions if needed.

**Anna McClung (DBNRRC)** provided an update on activities at Stuttgart. Completion of missing data in the collection continues. High emphasis is being placed on generating marker data. Plans were discussed to replace grain chemistry data with markers. Further discussions continued. Anna indicated that samples could be sent to the genetic marker lab rather than grain quality lab. The marker analyses would include markers for amylose, gel type, RVA profile, blast and aroma. Questions were asked regarding the degree of reliability of quality markers. Karen made the motion and Dante seconded the motion that marker data be obtained as we grow out the collection and/or add new accessions to the collection, and added to GRIN. This would also include subpopulation information, as well as, for the aforementioned traits. Anna commented on *Tropical japonica* Core Collection that is being developed. Plans are underway to make 30 years of URRN data available as one file on-line.

**Jeff Oster and Yeshe Wamishe**, rice pathologists from California and Arkansas, respectively discussed rice disease of quarantine significance. This was in preparation for renewal of rice crop vulnerability report. Farman commented that Don Groth, Louisiana pathologist, has already submitted a new list of diseases of quarantine significance. Jeff and Yeshe agreed to include their list of diseases and provide to all members and the group. Jeff Oster also commented about quarantine permit requirements and whether the requirements are uniform for all permits that are issued. Some permits require seed to be germinated on blotter paper and others require growth on a PDA (potato dextrose agar) media. A broader question is whether enough is being done to prevent transmission of diseases. Renee DeVries (from APHIS permits office) joined the

conference call at the invitation of Clarissa and Farman to explain permitting process. Renee indicated that some changes were made in the permit process in 2010 and 2013. Rules changed to a controlled import permit. There was variation in old permits. Improvement studies of 588 permits are underway to standardize these conditions. Renee indicated that inputs from cross functional groups such as CGCs can make proposals for method improvement. Currently both germination methods are permissible. Clarissa commented that both methods are ok, however, PDA is preferable. IRRI is using both methods. E-mail Renee with your inputs. Ed Redona inquired about importing the rice MAGIC (multi-parent advanced generation inter-cross) populations from IRRI (International Rice Research Institute). Consensus was that importing through Beltsville would be most feasible.

Karen Moldenhauer made the motion to adjourn, Georgia Eizenga seconded the motion, and the motion was supported by all members.

Appendix I. CGC members as of Mar 1, 2016 with year term ends in parentheses.

<p>Dr. Farman Jodari, Chair (2020)          Calif. Coop. Rice Res. Foundation          P.O. Box 306          Biggs, CA 95917-0306  <a href="mailto:fjodari@crrf.org">fjodari@crrf.org</a></p>	<p>Dr. Georgia Eizenga (2018)          USDA-ARS          Dale Bumpers National Rice Research Center          2890 Hwy 130 E          Stuttgart, AR 72160  <a href="mailto:Georgia.Eizenga@ars.usda.gov">Georgia.Eizenga@ars.usda.gov</a></p>
<p>Dr. Tim Walker (2018)          Delta Branch Experiment Station          82 Stoneville Rd.          P.O. Box 197          Stoneville, MS 38776  <a href="mailto:twalker@drec.msstate.edu">twalker@drec.msstate.edu</a></p>	<p>Dr. Jim Oard (2016)          Louisiana State University          M.B. Sturgis Hall          Department of Agronomy          Baton Rouge, LA 70803  <a href="mailto:Joard@agcenter.lsu.edu">Joard@agcenter.lsu.edu</a></p>
<p>Dr. Qiming Shao (2018)          Bayer Crop Science          676 County Rd 324          El Campo, TX 77437  <a href="mailto:qiming.shao@bayer.com">qiming.shao@bayer.com</a></p>	<p>Dr. M.O. Way (2016)          Texas Ag Exp. Station          1509 Aggie Drive          Beaumont, TX 77713  <a href="mailto:moway@aesrg.tamu.edu">moway@aesrg.tamu.edu</a></p>
<p>Dr. James Correll (2018)          Plant Pathology Dept.          University of Arkansas          Fayetteville, AR 72701  <a href="mailto:jcorrell@uark.edu">jcorrell@uark.edu</a></p>	<p>Dr. Xueyan Sha (2020)          Rice Research and Extension Center          University of Arkansas          2900 Hwy 130 E          Stuttgart, AR 72160  <a href="mailto:xsha@uark.edu">xsha@uark.edu</a></p>
<p>Dr. Karen Moldenhauer (2016)          Rice Research and Extension Center          University of Arkansas          2900 Hwy 130 E          Stuttgart, AR 72160  <a href="mailto:kmolden@uark.edu">kmolden@uark.edu</a></p>	<p>Rodante (Dante) Tabien (2018)          Texas Ag Exp. Station          1509 Aggie Drive          Beaumont, TX 77713  <a href="mailto:retabien@ag.tamu.edu">retabien@ag.tamu.edu</a></p>
<p>Dr. Harold Bockelman, Ex-officio          USDA-ARS          National Small Grains Collection          1691 S 2700 W          Aberdeen, ID 83210  <a href="mailto:Harold.Bockelman@ars.usda.gov">Harold.Bockelman@ars.usda.gov</a></p>	<p>Dr. Anna M. McClung, Ex-officio          USDA-ARS          Dale Bumpers National Rice Research Center          2890 Hwy 130 E          Stuttgart, AR 72160  <a href="mailto:Anna.Mcclung@ars.usda.gov">Anna.Mcclung@ars.usda.gov</a></p>
<p>Gary Kinard          Research Leader          USDA-ARS          National Germplasm Resources Laboratory          Beltsville, MD  <a href="mailto:Gary.Kinard@ars.usda.gov">Gary.Kinard@ars.usda.gov</a></p>	<p>Martha Malapi-Wight, Ph.D.          Lead Plant Pathologist - Poaceae Quarantine          USDA-APHIS          Plant Germplasm Quarantine Program          Bldg. 580, BARC-East          Beltsville, MD 20705  <a href="mailto:martha.malapi-wight@aphis.usda.gov">martha.malapi-wight@aphis.usda.gov</a></p>
<p>Dr. Jack Okamoto, Ex-officio          USDA-ARS, NPS          Nat. Prog. Leader, Gen'l Biological Sci., Plant          Physiology &amp; Cotton          5601 Sunnyside Avenue          Beltsville, MD 20705-5139  <a href="mailto:Jack.Okamura@ars.usda.gov">Jack.Okamura@ars.usda.gov</a></p>	