

MINUTES  
30<sup>th</sup> RICE CROP GERmplasm COMMITTEE MEETING  
Monday, 22 February 2010  
Biloxi, Mississippi

The 30<sup>th</sup> meeting of the Rice Crop Germplasm Committee was held Monday 22 February 2010 in Biloxi, Mississippi. Members in attendance were Georgia Eizenga (Chair), Harold Bockelman, James Correll, James Gibbons, Farmin Jodari, Dwight Kanter, Clarissa Maroon-Lango, Anna McClung, Karen Moldenhauer, Jim Oard, Xueyan Sha, M.O. Way, Billie Woodruff, Wengui Yan, and Jack Okamuro representing USDA National Program Staff. Member participating via conference call was Mark Bohning. Guests in attendance were Debra Ahrent, Donn Beighley, Vanina Castroagudin, Nanyen Chou, Ken Foster, Yiming Jiang, Kent McKenzie, Qiming Shao, Alisha Stivers, and Zongbu Yan.

The minutes of the 29<sup>th</sup> Rice Crop Germplasm Committee held 4 February 2009 in Stuttgart, Arkansas were read and approved by a motion from Karen Moldenhauer and seconded by Dwight Kanter. Highlights of the 2009 meeting not discussed in the current report include 2,217 rice accessions were part of the second shipment to the Svalbard Seed Vault, a long term storage facility in the Arctic operated by the Norwegian government and the Global Crop Diversity Trust (GCDT). APHIS is using a RT-PCR assay to detect rice *hoja blanca* virus in clonal rice plants going through quarantine. The NSGC rice core collection (1,794 accessions) is available from GSOR, genotyped with a total of 81 SSR/SNP markers both genome-wide and targeted and evaluated for days to heading, plant height, plant type, panicle type, awn type, lodging, and sheath blight. A subset of 726 accessions was evaluated for bran color; kernel length, width, L/W ratio, and weight; amylose and ASV. The mini-core collection (217 accessions) is genotyped with a total of 155 SSR markers placed approx. every 10 cM and evaluated for kernel smut, biomass, yield components and yield potential. Wengui Yan was added as an ex-official member of the committee due to his responsibility for the grow-out of the rice germplasm collection.

Jack Okamuro, (USDA/ARS NPS) sent regrets from Peter Bretting, and presented the highlights from the “2010 Office of the National Programs Report for the U.S. National Plant Germplasm System”, as follows. NPGS is partnering with Bioversity International and GCDT to transform GRIN into GRIN-Global on a three-year, \$1.4 million project and this project is over 2/3 complete. This software will be available to genebanks of all sizes and allow information about accessions to be shared amongst researchers. There will still be the issue of seed exchange to work through depending on the country. On budget issues, across the NPGS for FY10 modest increases in funding partially covered increases in personnel costs. The new Administration’s priority areas for USDA include climate change, food safety, children’s nutrition/health, international food security, and bioenergy and the President’s FY11 budget proposes an increase (\$6.9 million) for ARS plant, insect and microbial collections. Hearings on the FY12 budget are underway and include a National Summit of Rural America in Missouri. The National Plant Germplasm Coordination Committee with members from ARS, NIFA and SAES promotes, advises and facilitates coordination between the groups for the NPGS. The NPGS staff developed a SOP for handling the germplasm accompanied by the SMTA currently being used by the CGIAR Centers (see discussion below).

Mark Bohning (USDA/ARS GRIN DBMU) reported the development of GRIN-Global is progressing with input from curators, a survey of 6,000 users, and demonstrations to several Crop Germplasm Committees and at professional/commodity meetings. Currently the software is being tested by several groups and when complete, one will be able to download data on the accessions into an “Excel” type sheet. GRIN is now enhanced to handle limited molecular data and GRIN-Global will be more robust with links to other databases. It is projected that in 2011, GRIN-Global which is Microsoft based, will replace the current Oracle-based GRIN system. Work on GRIN-Taxonomy designed to cover the wild relatives of all major and minor crops is completed on 13 major crops including rice (<http://www.ars-grin.gov/~sbmljw/cgi-bin/taxcrop.pl>). The PI books from 1979-1997 are being formatted for downloading as .pdf files. Gary Kinard is the new research leader for the unit. The Plant Exchange Office supports a “Plant Exploration and Exchange” grant program which includes both field collection and arranging germplasm exchange, respectively. Proposals for this year are due July 23, 2010. Contact Georgia Eizenga for more information.

A discussion of intellectual property issues ensued because sharing seed is a different issue than sharing information. Harold Bockelman stated that accessions covered by PVP are not distributed through the GRIN system but referred to the developer. Also, when seed covered by a MTA or SMTA, currently used by the CGIAR centers, is distributed, the person receiving the seed agrees to the MTA/SMTA. Following this discussion James Gibbons provided the following web site for additional information on the International Treaty on Plant Genetic Resources referred to in the SMTA (<http://www.planttreaty.org/>). Member countries are on a link within the “Members” subheading. It indicates that the USA has signed but not ratified the treaty. Also, there is the issue that the donor has “rights” to the given accession, no matter how many times it is crossed.

Clarissa Maroon-Lango (APHIS, PPQ) reported their group is now part of the registration, permits and inspection group after a reorganization. Dr. Maroon-Lango’s group processed 345 rice introductions with 133 from Indonesia, 5 from South Korea and 207 from Bangladesh. Only 11 Indonesian and 184 Bangladeshi introductions germinated and produced seed. The remaining Bangladeshi introductions are being grown in 2010. There is space for additional introductions but the committee did not have other suggestions. This completes the quarantine process for the introductions from Indonesia and Bangladesh by Bob Dilday.

Harold Bockelman reported that 36 *O. sativa* accessions received new PI numbers. This gives 18,431 *O. sativa* accessions and 247 *Oryza* species accessions for a total of 18,678 *Oryza* accessions in the USDA/ARS rice germplasm collection at this time. Harold stated that after the discussion of the issues regarding seed import under the current SMTA, he will attempt to regenerate the accessions with critically low inventory due to the difficulties of importing seed from IRRI.

Harold has had several seed requests from China, India and Japan. Recently, he handled a request from Brazil for the complete rice collection. Currently Mexico is repatriating accessions of several crops for their new genebank. The group discussed how to request Brazil and Mexico reciprocate with their germplasm. Working with Peter Bretting and Mark Bohning to coordinate

requests for germplasm would be best, so it is a group effort and formal request. Each country is a different situation to work with and contacts within the country are helpful.

The six year term of committee members Dwight Kanter, Karen Moldenhauer, Jim Oard, and M.O. Way terminate in 2010 and these members are willing to serve another term. The motion was made by James Gibbons to re-elect the four members for another 6 year term, seconded by Xueyan Sha, and supported by all members.

The motion to adjourn the meeting was made by Karen Moldenhauer, seconded by James Gibbons and supported by all members.

Wengui Yan made a presentation on the “Genetic Structure of the Rice Core Collection” based on 72 SSR markers after the meeting was adjourned.

Appendix I. CGC members as of Feb 22, 2010 with year term ends in parentheses.

<p>Dr. Georgia Eizenga, Chair (2012)          USDA-ARS          Dale Bumpers National Rice Research Center          2890 Hwy 130 E          Stuttgart, AR 72160          Georgia.Eizenga@ars.usda.gov</p>	<p>Dr. Farmin Jodari (2014)          Calif. Coop. Rice Res. Foundation          P.O. Box 306          Biggs, CA 95917-0306          fjodari@crf.org</p>
<p>Dr. Dwight Kanter (2016)          MAFES          Delta Branch Experiment Station          P.O. Box 197          Stoneville, MS 38776          dgkanter@drec.msstate.edu</p>	<p>Dr. Jim Oard (2016)          Louisiana State University          M.B. Sturgis Hall          Department Of Agronomy          Baton Rouge, LA 70803          Joard@agcenter.lsu.edu</p>
<p>Dr. Billie Woodruff (2012)          RiceTec, Inc.          PO Box 17396          Jonesboro, AR 72403          bwoodruff@ricetec.com</p>	<p>Dr. M.O. Way (2016)          Texas Ag Exp. Station          1509 Aggie Drive          Beaumont, TX 77713          moway@aesrg.tamu.edu</p>
<p>Dr. James Correll (2012)          Plant Pathology Dept.          University of Arkansas          Fayetteville, AR 72701          jcorrell@uark.edu</p>	<p>Dr. James Gibbons (2012)          Rice Research and Extension Center          University of Arkansas          2900 Hwy 130 E          Stuttgart, AR 72160          jgibbon@uark.edu</p>
<p>Dr. Karen Moldenhauer (2016)          Rice Research and Extension Center          University of Arkansas          2900 Hwy 130 E          Stuttgart, AR 72160          kmolden@uark.edu</p>	<p>Dr. Xueyan Sha (2014)          Rice Research Station          LSU Ag Center          1373 Caffey Road          Rayne, LA 70578          XSha@agcenter.lsu.edu</p>
<p>Dr. Harold Bockelman, Ex-officio          USDA-ARS          National Small Grains Collection          1691 S 2700 W          Aberdeen, ID 83210          Harold.Bockelman@ars.usda.gov</p>	<p>Dr. Anna M. McClung, Ex-officio          USDA-ARS          Dale Bumpers National Rice Research Center          2890 Hwy 130 E          Stuttgart, AR 72160          Anna.Mcclung@ars.usda.gov</p>
<p>Mr. Mark A. Bohning, Ex-officio          CGC Facilitator          USDA-ARS National Germplasm Resources          Room 400          10300 Baltimore Ave.          Bldg. 003, BARC-West          Beltsville, MD 20705-2350          Mark.Bohning@ars.usda.gov</p>	<p>Dr. Clarissa J. Maroon-Lango, Ex-officio          Lead Plant Pathologist          USDA, APHIS, PPQ, PHP, PSPI          Plant Germplasm Quarantine Program (PGQP)          Bldg. 580, BARC-East, Powder Mill Road          Beltsville, MD 20705          Clarissa.J.Maroon-Lango@aphis.usda.gov</p>
<p>Dr. Jack Okamura, Ex-officio          USDA-ARS, NPS          Nat. Prog. Leader, Gen'l Biological Sci., Plant          Physiology &amp; Cotton          5601 Sunnyside Avenue          Beltsville, MD 20705-5139          Jack.Okamura@ars.usda.gov</p>	<p>Dr. Wengui Yan, Ex-officio          USDA-ARS          Dale Bumpers National Rice Research Center          2890 Hwy 130 E          Stuttgart, AR 72160          Wengui.Yan@ars.usda.gov</p>