

MINUTES
39th RICE CROP GERMLASM COMMITTEE MEETING

Wednesday, February 20, 2019
Virtual Meeting

The 39th meeting of the Rice Crop Germplasm Committee was held on Wednesday, February 20, 2019 as a virtual meeting because the planned meeting in conjunction with Southern Rice Breeders' meeting on Jan. 22, 2019 was cancelled due to the government furlough. Members in attendance were Georgia Eizenga (Chair), Adam Famoso, Teresa deLeon, Karen Moldenhauer, Ed Redoña, Xueyan Sha, Qiming Shao, Dante Tabien, Gary Kinard, Martha Malapi-Wight, Anna McClung, Jack Okamuro and Peter Bretting. Members not present were Paul Sanchez, Harold Bockelman and Jim Correll. Guests in attendance were Lorie Bernhardt, from the Genetic Stock-*Oryza* and a visitor at Beltsville. The meeting was called to order. The minutes of the 38th Rice Crop Germplasm Committee held on February 19, 2018 in Long Beach, CA were approved by a motion from Karen Moldenhauer, seconded by Adam Famoso, and supported by the other committee members.

Peter Bretting USDA/ARS Office of National Programs, gave a report on the status, prospects and challenges of the National Plant Germplasm System (NPGS) which highlighted key challenges of managing and expanding the NPGS to meet the increased demand for germplasm and associated information, developing/applying cryopreservation or in vitro preservation for clonal stocks, managing accessions with genetically engineered traits, acquiring additional germplasm especially crop wild relatives, and looking at developing workshops for training a new generation of plant genetic resource (PGR) managers with at least 1/3 being eligible to retire in the next five years.

Gary Kinard, USDA/ARS National Germplasm Resources Lab, reported the GRIN website was operational during government furlough but not updated, John Wiersma retired and Melanie Schori now has full responsibility for taxonomy. The two-volume book on North American Crop Wild Relatives is published with many CGC staff as authors. GRIN taxonomy is now available through GRIN-Global. A major redesign of the accession search page is planned for 2019. Proposals for the Plant Exploration and Exchange Program for FY2019 are due July 26, 2019 to Karen Williams.

Harold Bockelman, Curator of the Small Grains Collection, submitted a report which was discussed, since he had an unexpected conflict. Currently there are 19,132 accessions in the *Oryza* collection with 18,876 being *O. sativa* accessions. Four named varieties and 41 of the 69 weedy *O. sativa* collected before Clearfield from the southern rice growing area were added to the collection this past year. Some of these have been sent to the Svalbard Global Seed Vault.

Anna McClung, discussed adding descriptors for the several traits which are now being identified by markers. These are the same markers that are run on the Uniform Rice Regional Nursery. This was supported by the group.

Martha Malapi-Wight, USDA/APHIS Plant Germplasm Quarantine Program (PGQP) reported on the high-throughput sequencing technologies being implemented at PGQP for plant pathogen detection. She included in her report the 19 rice accessions originating in Trinidad, 18 of which had seed and Endornavirus was identified in these. The lines are not released from quarantine and it is unknown if these Endornaviruses are pathogens.

Anna McClung, USDA/ARS Dale Bumpers National Rice Research Center (DBNRRC) reported on the Genetic Stocks-*Oryza* (GSOR) which as part of the NPGS, included in GRIN-Global, and distributed from the DBNRRC. Since GSOR was initiated in 2004, 105,678 accessions have been distributed with 20,125 in 2018. Many of these distributions have been the diversity panels and Nipponbare. Two mapping populations were added recently. The diversity panels have voucher seed images. In early 2018, 44 *aus O. sativa* accessions were requested from IRRI. Anna has a list of candidates and will interview for the Geneticist position to work with the rice germplasm collection and GSOR.

Jack Okamoto, USDA/ARS National Program Leader for rice, led a discussion with the committee on how to manage rice accessions that were gene edited or had genetically modified traits if, and when the accessions are contributed to the collection. There is the possibility that the orders come through GSOR but the shipment is not from GSOR. This is being done with the maize stocks collection in Urbana, IL.

The motion was made by Karen Moldenhauer to include Peter Bretting as an ex-officio member of the committee because he is the National Program Leader for Crop Production and Protection and works with the plant germplasm collections as one of his responsibilities. The motion was supported by Xueyan Sha and supported by the committee members.

Adam Famoso made the motion that we ask pathologist, Xin-Gen (Shane) Zhou complete Jim Correll's term since Jim no longer has support for rice research. The motion was seconded by Dante Tabien and supported by the membership.

Karen Moldenhauer motioned to adjourn, Xueyan Sha seconded the motion, and the motion was supported by all members.

Appendix I. CGC members updated after February 20, 2019 business meeting with year term ends in parentheses.

<p>Dr. Georgia Eizenga, Chair (2024) USDA-ARS Dale Bumpers National Rice Research Center Center 2890 Hwy 130 E Stuttgart, AR 72160 Georgia.Eizenga@ars.usda.gov</p>	<p>Dr. Xin-Gen (Shane) Zhou (2024) Texas A&M AgriLife Research Center 1509 Aggie Drive Beaumont, TX 77713 409 752 2741 ext 2225 xzhou@aesrg.tamu.edu</p>
<p>Dr. Adam Famoso (2022) H. Rouse Caffey Rice Research Station Louisiana State University 1373 Caffey Road Rayne, LA 70578 AFamoso@agcenter.lsu.edu</p>	<p>Dr. Teresa deLeon (2020) Calif. Coop. Rice Res. Foundation P.O. Box 306 Biggs, CA 95917-0306 Tdeleon@crrf.org</p>
<p>Dr. Karen Moldenhauer (2022) Rice Research and Extension Center University of Arkansas 2900 Hwy 130 E Stuttgart, AR 72160 kmolden@uark.edu</p>	<p>Dr. Edilberto (Ed) Redoña (2024) Delta Branch Experiment Station Mississippi State University 82 Stoneville Rd. P.O. Box 197 Stoneville, MS 38776 ed.redona@msstate.edu</p>
<p>Dr. Paul Sanchez (2022) Lundberg Family Farms 5311 Midway P.O. Box 369 Richvale, CA 95974 psanchez@lundberg.com</p>	<p>Dr. Xueyan Sha (2020) Rice Research and Extension Center University of Arkansas 2900 Hwy 130 E Stuttgart, AR 72160 xsha@uark.edu</p>
<p>Dr. Qiming Shao (2024) Nutrien Ag Solutions 676 County Rd 324 El Campo, TX 77439 qiming.shao@.com</p>	<p>Rodante (Dante) Tabien (2024) Texas Ag Exp. Station 1509 Aggie Drive Beaumont, TX 77713 retabien@ag.tamu.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. Gary Kinard, Ex-officio Research Leader USDA-ARS National Germplasm Resources Laboratory Beltsville, MD Gary.Kinard@ars.usda.gov</p>

<p>Dr. Martha Malapi-Wight, Ex-officio Lead Plant Pathologist - <i>Poaceae</i> Quarantine USDA-APHIS Plant Germplasm Quarantine Program Bldg. 580, BARC-East Beltsville, MD 20705 martha.malapi-wight@aphis.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>Dr. Jack Okamuro, Ex-officio USDA-ARS, NPS Nat. Prog. Leader, Gen'l Biological Sci., Plant Physiology & Cotton 5601 Sunnyside Avenue Beltsville, MD 20705-5139 Jack.Okamura@ars.usda.gov</p>	<p>Dr. Peter K. Bretting, Ex-officio USDA-ARS, NPS Nat. Prog. Leader, Plant Germplasm and Genomes 5601 Sunnyside Avenue Beltsville, MD 20705-5139 Peter.Bretting@usda.gov</p>