MINUTES RICE CROP GERMPLASM COMMITTEE

February 16, 1999 Beaumont, TX

The 20th meeting of the Rice Crop Germplasm Committee was held on February 16 from 2:30 - 5:30 pm at the Texas A&M Agricultural Research & Extension Center in Beaumont. Committee members present were Dave Mackill (Chair), Jeff Oster, Jim Oard, Anna McClung, Kirk Johnson, Karen Moldenhauer, Chris Deren, Farman Jodari, and David Kohlwey. Fleet Lee was sitting in for CGC member Rick Cartwright.

Ex-officio members present were Allan Stoner (NGRL) and J. Neil Rutger (DBNRRC). Other interested participants were: Thomas Tai, Juan Consvegra, Wengui Yan, Bob Dilday, Georgia Eizenga, Fleet Lee, James Gibbons, David Gealy, Rolfe Bryant, Toni Marchetti, Bob Fjellstrom, John Robinson, and Dwight Kanter.

- 1. The minutes of the 19th RGCG meeting were read. The motion to accept the minutes was made by Kirk Johnson and seconded by David Kohlway. The minutes were accepted.
- 2. Dr. Allan Stoner reported on the study of the National Plant Germplasm System (NPGS) by GAO. This was based on a survey of CGC members of all crops. Summaries of the report were distributed. The entire report is available at the GAO's web site (http://www.gao.gov/AIndexFY98/abstracts/rc98020.htm). It was pointed out that the rice CGC had somewhat different priorities than most other CGCs. Quarantine and evaluation/enhancement of accessions were considered much more important than new acquisitions, which was a high priority for other crops. This report has been useful in the effort to get more support for the NPGS. Dr. Stoner also mentioned the effort by the American Seed Trade Association (ASTA) to get increased funding for the NPGS. In the event that new money is forthcoming, there will be a need to prioritize the requirements of the NPGS over all crops. The CGC reports are an important source of information for this purpose. It is expected that about 50% of the funds would go for new acquisitions and maintenance, and about 50% for evaluation. It was therefore important that the rice CGC keep this report updated and establish priorities for acquiring new germplasm.
- 3. Dr. Stoner discussed the new Material Transfer Agreements (MTA) that are being used for designated germplasm held by the CG centers. Designated germplasm refers to the bulk of these collections and basically excludes unreleased material developed by the centers. By ordering germplasm that originates from the Centers, one automatically accepts the conditions of the MTA. This essentially precludes anyone from seeking PVP or utility patents on this germplasm. Its use in research and breeding, however, remains unrestricted.
- 4. Dr. Harold Bockelman was not able to attend the meeting due to illness. Dr. Bob Dilday gave a report on the current status of the collection in Dr. Bockelman's absence. The collection consists of 19,862 accessions of *Oryza sativa* and eight additional *Oryza*

species. The accessions originate from 110 countries, with 5 countries accounting for about 60% of the collection. Dr. Dilday has been importing accessions from countries that are currently underrepresented, which include Bangladesh, Ivory Coast, CIAT (Columbia), and Japan. It remains difficult to get germplasm from India (a major source of genetic diversity in *Oryza*) and China. Approximately 5000 accessions have been brought in during the last few years, but most of these remain at NSSL awaiting a growout at the Quarantine Lab in Beltsville. Concern was expressed about a problem in importing accessions (particularly newly released varieties) into the collection from Japan. Dr. Dilday mentioned, however, that he was able to import 450 cultivars recently that will be placed into the collection after quarantine. He has a catalogue of the Japanese germplasm collection, and these accessions can be requested if desired.

- 5. Dr. Sarbagh Salih is the replacement of Dr. Bruce Parliman for quarantine growouts of rice accessions. She was unable to attend the meeting but submitted a report. A total of 96 accessions arrived at the PGQO during 1998; 114 accessions are being grown but have not been shipped, and 185 accessions were shipped. The problem of the low number of accessions being grown in quarantine was discussed. The committee members suggested that the Chairman with the assistance of Jeff Oster and Kirk Johnson could look into this matter to see if the capacity could be increased. Dr. Salih has indicated that she will seek ways to increase the number of accessions processed. Although the current space is limited, an expansion of the facility is underway which should provide more greenhouse space within 18 months.
- Or. Neil Rutger reported on the Rice Genomics Resources Program at the Dale Bumpers National Rice Research Center (DBNRRC). This facility will provide a valuable resource to the US rice research community by maintaining difficult to propagate germplasm (mutant collections, genetic male steriles, insertion mutants) and resources for molecular genetics research (probes, primers, etc.). The Center will cooperate with Cornell University (and the USDA center for bioinformatics at Cornell).
- Quarantine proposal. The Chairman gave an update on the CGC proposal to the US Rice 7. Foundation for the revision to quarantine procedures. This proposal was rated as highest priority in its category and was approved for funding. Dr. Tom Mew, Head of IRRI's Plant Pathology Division and Seed Health Unit, has agreed to prepare the document for submission to APHIS. Dr. Mew's credentials as a world authority on rice seed health should lend credibility to the CGC's effort to streamline the quarantine process. Dr. Mew will spend two months at Davis beginning in June 1999. During this time, he will visit the US rice research stations and discuss the quarantine issues with pathologists and breeders. His report would be completed by the end of the summer and would be circulated to CGC members and rice pathologists for comments. Dr. Stoner mentioned that Dr. Mew should probably visit Dr. Arnie Tschanz of APHIS to get a better idea of what APHIS expects. Dr. Kirk Johnson suggested that breeders from private companies could meet with Dr. Mew as a group to indicate their needs for importing germplasm. It is hoped that Dr. Mew can attend the Temperate Rice Conference in June so a schedule for his visits can be set up.

- 8. The Chairman distributed CD-roms of the ICIS (International Crop Information System) that were provided by Dr. Graham McLaren of IRRI. These CD-roms contain a database on rice germplasm developed in breeding programs throughout the world. For example, any breeding line or cross can be looked up and the pedigree displayed as far back as the land races. Breeders can enter their own pedigrees that will be linked to those in the database. One CD-rom was distributed to each rice station. The Chairman asked that any feedback could be given to Dr. McLaren directly (or sent via Dave Mackill).
- 9. The chairman distributed a document presented at the last meeting of CGC chairs (July 1998) on core collections. Dr. Harold Bockelman has been involved with establishing core collections for other small grains and would be interested in doing the same in rice. There is a need to develop a core collection for the US rice collection, perhaps starting with the IRRI set imported by Dave Mackill in 1991. The Chairman will contact individuals interested in this effort and will report to the next CGC meeting.
- 10. The issue of the availability of germplasm developed in US rice public breeding programs was discussed as embodied in the Breeders Code of Ethics, which was circulated at the Breeders Workshop. Kent McKenzie forwarded a preliminary discussion paper last year, but no response was forthcoming from the breeders. Dr. John Robinson mentioned that higher-level administrators would make the final decision regarding the future availability of improved germplasm, but that now would be the time for the breeders to make their concerns known. Dr. Robinson indicated that he would be circulating some comments for input to various interested parties, and he would be willing to include CGC members on the distribution list.
- 11. It was agreed to hold the next CGC meeting during the RTWG in Mississippi in 2000. The tentative date has been set as Sunday, February 27, in Biloxi.
- 12. The motion to adjourn (Karen Moldenhauer, seconded by Anna McClung) was passed.