November 7, 1997

SUBJECT:

Minutes of the Plant Germplasm Operations Committee Meeting (PGOC)

1997

TO:

PGOC Members

FROM:

Mark A. Bohning MAA

CGC Facilitator

I have enclosed the 1997 minutes of the Plant Germplasm Operations Committee (PGOC) meeting which was held in Corvallis, OR, on July 29-31, 1997. Also enclosed is the corrected version of the 1996 PGOC minutes. Feel free to contact me if you have any corrections or comments.

Enclosures



Minutes of the Plant Germplasm Operations Committee Meeeting July 29 - 31, 1997: Peavy Arboretum, Corvallis, OR

Kim Hummer opened the meeting and welcomed members and guests. She introduced Dr. Mike Burke, Associate Dean, College of Agricultural Science, Oregon State University who welcomed the group and discussed the importance of agriculture to Oregon's economy. The 1996 PGOC minutes were distributed and reviewed. Henry Shands suggested that the section discussing the U.S. funding of the CGIAR Centers should be ammended to read "U.S. funding of the CGIAR Centers has decreased from a maximum of 46 million dollars to 22 million dollars." George White moved and Verne Sisson seconded approval of the minutes as ammended. The motion passed unanimously.

National Program Staff Report

Henry Shands reported on several issues related to the NPGS. The FY97 ARS budget for plant genetic resources was \$20,057,090. The President's FY98 budget submitted to the Congress included a \$2 million increase for genetic resources. The House markup includes a \$500,000 increase and the Senate markup a \$1.5 million increase. The House and Senate conferees will meet to deliberate the final budget in September. Senator Stevens, Alaska, has introduced a bill to develop an Arctic germplasm repository to be located at Palmer, AK. The repository would concentrate on plants important for environmental conservation.

Dr. Shands discussed his duties as the Assistant Administrator for Genetic Resources and Biodiversity. Among other things, he is responsible for budgetary issues at the administrators level and concentrating on the linkages between the U.S. National Genetic Resources Program and public and private institutions in the U.S. and the international community.

The GAO report on the NPGS is nearly completed. When a final draft has been completed it will be forwarded to Dr. Shands for review and comments. The final report should be available during the Fall of 1997. The Convention on Biological Diversity has been ratified by 169 countries including Canada and Mexico, however the U.S. has not ratified it. During the April 1996 Extraordinary Meeting of the FAO Commission on Genetic Resources, the U.S. position proposing open access for all agricultural genetic resources received little support. Subsequently, the U.S. proposed that a smaller set of crops essential to world food security serve as the basis for the renegotiated International Undertaking. Additional crops were later added to the initial list. It is proposed there would be open access to these crops and countries would incur no obligations in exchanging or utilizing them. The proposal was included in a negotiating draft for consideration by the Commission.

Peter Bretting, acting National Program Leader for Plant Germplasm, reported on additional activities regarding the NPGS. Congress did not approve any of the proposed ARS location

and unique to the Canadian environment. PGRC also plans to increase their collaboration with the United States and has decided to adopt GRIN as their data management system. Research at Saskatoon will concentrate on analyzing the genetic diversity of the collections.

Vavilov Institute

Marina Gritsenko from the N.I. Vavilov All-Russian Scientific Research Institute of Plant Industry (VIR) reported that VIR maintains approximately 331,000 germplasm accessions. The United States has provided several coolers that will allow VIR to improve storage conditions for a portion of the collection. Currently about 17,000 accessions have been placed in these coolers. Tissue culture is also being used to store certain species including potatoes and tree fruits. VIR's emphasis on collection and acquisition has decreased, but requests and distributions have increased over the last several years. One of the highest priorities is on data management and there is currently information available on 230,000 accessions which can be accessed over the Internet.

Intellectual Property Rights

Margaret Connor from the ARS, PWA Patent Office discussed the implications of intellectual property rights on plant genetic resources. She discussed plant patents, the plant variety protection act and utility patents. Plant patents are administered by the Patent and Trademark Office (PTO) and used to protect asexually reproduced plants. The Plant Variety Protection Act is administered by the USDA Plant Variety Protection Office and protects sexually propagated plants, first generation hybrids and tuber crops not covered by the Plant Patent Act. Utility patents are administered by the PTO and can be used to protect new varieties, genetically engineered plants, plant parts such as fruits/genes and methodologies. Margaret also discussed the Convention on Biological Diversity, GATT/TRIPS and UPOV and there implications on plant protection around the world.

National Germplasm Resources Laboratory Report

Allan Stoner informed the committee that the Plant Quarantine Office was recently transferred to the Fruit Laboratory in Beltsville. Ned Garvey reported the PEO assigned 3900 PI numbers in 1996 including 461 Crop Science Registrations and 503 Plant Variety Protection applications. A computerized dataform is under development which will facilitate collectors organizing data in a standardized format. PEO recently obtained access to the APHIS EXCERPT database. NPGS sites are encouraged to contact the PEO for specific questions regarding foreign country plant exchange regulations or they can obtain their own access by contacting APHIS.

Jimmie Mowder reported the GRIN SUN computer was moved from the National Agricultural Library (NAL) to Building 003 in October, 1996. The move will allow NGRL to save approximately \$118,000 annually through the elimination of space charges at the NAL and the salary of 2 operators. The current GRIN software will remain static while developers focus their

increase public awareness about genetic resources and specifically the NPGS and 2) increase the lobbying effort in Congress so they are aware of our activities. Anne Marie stressed the need to get all types of organizations involved in AGRA including seed companies, grower organizations, backyard gardeners, environmental groups, etc. Anne Marie stated that she is being supported by funding from several seed companies and she can be reached at annemarier@aol.com. She asked the curators to provide her with interesting stories about site activities and any success stories which show how genetic resources have been useful in improving agriculture. Information about AGRA and its activities can be accessed over the world wide web at http://www.amgra.org.

U.S. National Arboretum Herbarium Report

Mark Hershkovitz reported on the status of the U.S. National Arboretum herbarium and its role related to the NPGS. The collection currently consists of approximately 600,000 samples. A priority over the next several years will be to establish a molecular taxonomy laboratory which will focus research on cultivated woody landscape plants. A discussion ensued on where herbarium samples for NPGS accessions should be stored. Mark indicated his willingness to work with the sites if they are interested in storing these samples at the USNA.

NPGS Success Stories

Peter Bretting indicated that he had been asked by staff members of the CSREES for examples of the successful use of plant germplasm from NPGS collections to solve important agricultural problems. He felt that they are interested in using the success stories to publicize the 1998 joint meeting of the Regional Technical Committees to be held in Ames, IA.

National Center for Agricultural Utilization Research

Peter Bretting briefly discussed a project to assess the status and future plans for the extensive seed collection held at the National Center for Agricultural Utilization Research (NCAUR) in Peoria, IL. The collection was assembled over many years for research on seed biochemistry emphasizing new crops and industrial products. Steve Eberhart has offered to have the NCAUR collection transferred to the NSSL to take advantage of the storage facilities and seed testing capabilities.

Subcommittee Reports

I. Alternate Growout Site

David Eder reported on the startup of the alternate growout site at Parlier, CA. A new screenhouse has been completed and another is under construction. In the spring of 1997, 307 accessions representing 28 species were field planted and all are doing extremely well. A fall increase will be planted in September 1997. In FY98, cages will be purchased for controlled pollination growouts and a technician will be recruited. The possibility of obtaining office space

have been established for 26 seed crops and 11 vegetatively propagated crops. It was pointed out that the curators need to be the driving force behind their establishment and should get assistance from the CGCs. During the discussion it was noted that some collections that are small and well characterized may not need a core subset and this should be designated in GRIN.

VII. Plant Exploration

Karen Williams indicated that seven exploration proposals were funded in FY97. Ten proposals were submitted for funding consideration in FY98, two of which are plant exchange proposals. These will be distributed soon to the Plant Exploration Subcommittee for evaluation and then forwarded to the ARS National Program Staff for final approval.

Alternative Methods for Preservation and Distribution

Ray Schnell led a discussion on the possibility of storing germplasm as DNA. He indicated this could be used to backup a collection such as the sugarcane collection in Miami. Although storing DNA would not preserve genotypes the committee felt the concept merited additional thought and research. Steve Kresovich reported that many sites are distributing DNA and there needs to be a way to document the time and expense incurred. Peter Bretting indicated that this issue is being considered by the NPS and suggested that a list of sites distributing such material along with the costs associated with it should be developed.

Miscellaneous Topics

Allan Stoner reported on the status of the effort to develop a new procedure to review the classification of Category 4 plant genetic resources positions. In 1996, three case write-ups were prepared and reviewed by Barbara Leonhardt (Director, BARC Plant Sciences Institute) and Pete Struthers (Human Resources) using a procedure developed by the Human Resources Division. After the review it was decided that it did not adequately address the need to assess the impact of the individual. Allan Stoner has been asked by the Agency to work with Richard Dunkle, Midwest Area Director, to suggest modifications and submit them to the Human Resources Division. A new subcommittee was formed to address issues related to evaluating genetic resource personnel. The membership consists of Allan Stoner (chair), Steve Kresovich, John Bamberg, Eric Roos and Kim Hummer.

The PGOC Operational Guidelines were reviewed and several changes to membership and subcommittee structures were approved. A revised set of guidelines is attached as appendix 1.

Prior to the meeting, each of the NPGS sites was asked to provide a report on their FY97 accomplishments to Peter Bretting. These reports will be consolidated and placed on the GRIN web page. Representatives from all sites present gave a brief oral presentation of their accomplishments.