***Phaseolu*s Crop Germplasm Committee Meeting Minutes**

Conference Room B at the UC Davis, Sacramento, CA

July 26, 2018

**Participants:**

* Bretting, Peter (petter.bretting@ars.usda.gov) USDA-ARS Office of National Programs
* Kinard, Gary (Gary.Kinard@ars.usda.gov) – ARS National Germplasm Resources Lab
* Cichy, Karen ([Karen.cichy@ars.usda.gov](mailto:Karen.cichy@ars.usda.gov)) – USDA-ARS, East Lansing, MI
* Gepts, Paul ([plgepts@ucdavis.edu](mailto:plgepts@ucdavis.edu)) – University of California Davis
* Heitholt, Jim ([Jim.Heithlot@uwyo.edu](mailto:Jim.Heithlot@uwyo.edu)) – University of Wyoming
* Kelly, Jim ([kellyj@msu.edu](mailto:kellyj@msu.edu)) – Michigan State University
* Kisha, Ted ([theodore.kisha@ars.usda.gov](mailto:theodore.kisha@ars.usda.gov)) – USDA-ARS Western Region Plant Introduction Station, Pullman, WA
* McClean, Phillip ([Phillip.mcclean@ndsu.edu](mailto:Phillip.mcclean@ndsu.edu)) – North Dakota State University
* Miklas, Phil ([phil.miklas@ars.usda.gov](mailto:phil.miklas@ars.usda.gov)) – USDA-ARS, Prosser, WA
* Osorno, Juan ([juan.osorno@ndsu.edu](mailto:juan.osorno@ndsu.edu) ) – North Dakota State University
* Pasche, Julie ([Julie.pasche@ndsu.edu](mailto:Julie.pasche@ndsu.edu)) – North Dakota State University
* Porch, Tim ([timothy.porch@ars.usda.gov](mailto:timothy.porch@ars.usda.gov)) – USDA-ARS, Mayaguez, PR
* Pastor-Corrales, Talo ([talo.pastor-corrales@ars.usda.gov](mailto:talo.pastor-corrales@ars.usda.gov)) – USDA-ARS, Beltsville, MD
* Urrea, Carlos ([currea2@unl.edu](mailto:currea2@unl.edu)) – University of Nebraska

Tim Porch called the meeting to order at 10:35 A.M.

1. **Introduction of Members and Guests**

**2)** **Approval of minutes of last meeting**

Minutes from the last meeting, held at the Kellogg Center, Michigan State University on November 1, 2017 were distributed, reviewed, and approved. Phil Miklas motioned for approval and Paul Gepts seconded it.

1. **ARS-NGRL Update**

Peter Bretting, USDA-ARS Office of National Programs, gave a PowerPoint presentation through an internet connection about the ‘National Plant Germplasm System: 2018 Status, Prospects, and Challenges.’ The germplasm banks are mostly located in land grant universities. Most demand for germplasm comes from universities, and only 1/3 is from private industry. The NPGS currently has steady funding but is constrained by a low budget and retiring personnel which affects its ability to acquire wild relatives of dry beans. Genetic resource management entails acquisition, management, regeneration, documentation and data management, as well as distribution, characterization, evaluation, enhancement, and research in support of the NPGS priorities. Peter Bretting also talked about the Plant Genetic Resource Management Training Initiative where students are being trained via distance learning/*in situ*, thereby increasing awareness of the diversity of the collection and its role in conservation. Paul Gepts asked about the extent to which acquisition activities are impacted by legal regulations constraining exchange of germplasm. Peter Bretting talked about international regulations. An issue is that countries have diverse interpretations of the treaties, such as The International Treaty on Plant Genetic Resources for Food and Agriculture (FAO) and the Nagoya Protocol on Access and Benefit Sharing (a 2010 supplementary agreement to the 1992 Convention on Biological Diversity), and this affects exchange and collection of germplasm in specific countries. There was also discussion about the regulation of digital sequence data in *ex situ* collections.

Gary Kinard, USDA-ARS, joined the meeting through internet and mentioned that Dr. Melanie Schori joined the USDA-ARS National Germplasm Resources Lab as a Botanist as was replacing Quinn Sinnott. He talked about the international convention for acquisition of germplasm and mentioned that the exploration proposals were due July 20, 2018, but proposals may still be accepted. He encouraged finishing the Crop Vulnerability Report as soon as possible.

1. **Update of PCGC funded projects**

In 2017, no PCGC projects were funded. A 2018 proposal entitled, ‘Evaluation and association analysis of soybean cyst nematode resistance in USDA common bean germplasm,’ was approved for funding ($29,934). Tim Porch encouraged people to apply for PCGC grants. The call for new proposals will be around April, 2019 and the RFA will be sent out to the community.

T. Mhora et al. will report on their 2016-funded project, ‘Characterizing the resistance of diverse lima bean lines to agronomically important diseases in the mid-Atlantic region in the United States’ at the BIC in November 2019.

**5) Status of the Phaseolus Germplasm Collection**

Ted Kisha mentioned that his report is similar to last year’s. There are 17,541 accessions in the bean collection, more than 400 accessions were regenerated, 59 *Polystachyus* were added to the collection, and 3,169 packets of 2,379 accessions were distributed. Photoperiod continues to be a challenge. There were some issues distributing seeds to the E.U. because of common bacterial blight regulations. Brazil has requested the US collection, but does not want to share their dry bean collection. An ELISA test for BCMV is being implemented. Ted Kisha is implementing IPM in the greenhouse. Nematodes are used to kill soil-borne pathogens. He also announced that he is planning to retire by the end of the year.

Regarding Ted Kisha’s presentation about heirloom beans and phenolic content, Jim Kelly asked whether all of the samples were collected from the same location, noting that phenolics can change based on time and location. Ted Kisha has acquired his black bean checks from the U.S. collection, but will request current and widely-grown cultivars. He currently is not looking at whether there are differences in beans between locations.

**6) Status of the Crop Vulnerability Report**

Paul Gepts, leader of the *Phaseolus vulgaris* Crop Vulnerability Report, noted that progress has been made and he will circulate a draft of the report. Peter Bretting mentioned that the reports are being simplified. Paul Gepts presented a quad chart format that summarizes vulnerability & threats, NPGS status and impacts, capacity, and priority issues. The group identified replacement of dry bean breeders (capacity building) as a threat, fewer people eating dry beans as a vulnerability, and the greater emphasis on genomics rather than breeding as a problematic priority issue. An additional goal is to enhance the exchange of germplasm between CIAT and the U.S. and to work to implement treaties more effectively. Phil Miklas suggested sending the vulnerability report to the U.S. bean industry once it is completed. The goal is to complete submissions to the report by the end of August so that it can be sent out to the bean community for review.

**7) New business**

**a. Change of Committee Officers, Membership**

Carlos Urrea sent e-mails inviting the Idaho Bean Commission, ADM, ProVita, Gentec, and Trinidad Benham to join the PCGC committee. They appreciated the invitation, but have other commitments. A representative of ADM may join the committee during the next BIC meeting.

**b. Exploration proposals**

No exploration proposals are currently being funded and no proposals were submitted.

**c. Next meeting**

The next meeting will be in Fargo, ND in November, 2019 after the Bean Improvement Cooperative (BIC) meeting.

**d. Other?**

Jim Kelly asked whether commercial black and red beans were included in Ted Kisha’s work on phenolics. Ted Kisha responded that they were not. Jim Kelly mentioned that it will be good to set up a baseline with current cultivars. Juan Osorno seconded Kelly’s concern. Ted Kisha encouraged people to send him their black and red beans.

8) The meeting was adjourned at 12:00 P.M.

Respectfully Submitted:

Carlos A. Urrea

Secretary