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

Residence Inn, Pullman, Washington

July 27, 2016

**Attendees:**

* Bett, Kristin (k.bett@usask.ca) – University of Saskatchewan, Canada
* Bulyaba, Rosemary (rbulyaba@iastate.edu) – Iowa State University
* Cheng, Wen-Hsing (wc523@msstate.edu) – Mississippi State University
* Cichy, Karen (karen.cichy@ars.usda.gov) – USDA-ARS, East Lansing, MI
* Feng, Xue (xfeng@uidaho.edu) – University of Idaho
* Gang, David (gangd@wsu.edu) – Washington State University
* Goswami, Rubella (rgoswami@desu.edu) – Delaware State University
* Heitholt, Jim (Jim.Heitholt@uwyo.edu ) – University of Wyoming
* Hossain, Khwaja (k.hossain@mayvillestate.edu) – Mayville State University, ND
* Karasev, Alex (akarasev@uidaho.edu) – University of Idaho
* Kelly, Jim (kellyj@msu.edu) – Michigan State University
* Kisha, Ted (theodore.kisha@ars.usda.gov) – Western Region Plant Introduction Station, Pullman, WA
* McClean, Phil (phillip.mcclean@ndsu.edu) – North Dakota State University
* Medina Meza, Ilce (ilce.medinameza@wsu.edu) – Washington State University
* Miklas, Phil (phil.miklas@ars.usda.gov) – USDA-ARS, Prosser, WA
* Moyer, Jim (j.moyer@wsu.edu) – Washington State University
* Myers, Jim (james.myers@oregonstate.edu) – Oregon State University
* Nienhuis, Jim (nienhuis@wisc.edu ) – University of Wisconsin
* Osorno, Juan (juan.osorno@ndsu.edu ) – North Dakota State University
* Pastor-Corrales, Talo (talo.pastor-corrales@ars.usda.gov) – USDA-ARS, Beltsville, MD
* Porch, Tim (timothy.porch@ars.usda.gov) – USDA-ARS, Mayaguez, PR
* Rumney, Jeff (jrumney@usapulses.org) – USADPLC American Pulse Assoc.
* Schlegel, Vicki (vshlegel@unl.edu) – University of Nebraska
* Scholz, Todd (tscholz@usapulses.org) – American Pulses Assoc. & USA Dry Pea & Lentil Assoc.
* Sharp, Richard (rsharpe@wsu.edu) – Washington State University
* Steadman, Jim (jsteadman1@unl.edu) – University of Nebraska
* Stephens, Janice (janice@centralbean.com) – Central Bean Co., Inc.
* Trapp, Jennifer (jtrapp@senecafoods.com) – Seneca Foods
* Urrea, Carlos (currea2@unl.edu) – University of Nebraska
* Waines, J. Giles (giles.waines@ucr.edu) – Univ. of California Riverside
* Williamson, Bruce (b.williamsonbenavid@wsu.edu) – Washington State University
* Winham, Donna (dwinham@iastate.edu) – Iowa State University
* Woolf-Weibye, Andi (bean@bean.idaho.gov) – Idaho Bean Commission

Tim Porch called the meeting to order at 1:00 pm.

1. **Introduction of members and guests**
2. **Approval of Minutes**

Minutes from the last meeting, held at the Niagara Falls, Canada on November 4, 2015, were distributed, reviewed and approved. Phil Miklas motioned for approval and Jim Myers seconded it.

**3)** **Update of PCGC funded projects**

In 2016, one of three proposals submitted entitled, ***“Characterizing the resistance of diverse lima bean lines to agronomically important diseases in the Mid-Atlantic Region of the United States,”*** by T. Mhora et al., University of Delaware, was funded.

Tim Porch asked about new topics to be proposed. Rubella ask if snap beans have been characterized. Jim Myers expressed the utility of such characterization. Jim Nienhius mentioned that there are 150 snap beans in his panel. Snap beans could be characterized for *Aphanomyces* reaction in Wisconsin due to the cool wet environment and Rubella could screen for *rhizoctonia*. Ted Kisha would like to have that information available.

Ted Kisha’s proposal entitled, ***“Evaluation of the nutritional components of the USDA nuña bean collection in comparison with selected common dry beans from diverse market classes and centers of diversity,”*** wasfunded in 2015; data are available in the GRIN. Protein content was between 15 and 25% and a 10-fold difference in antioxidant capacity was found. Nuñas have low stachyose and raffinose and high sucrose content compared to dry beans. It was mentioned that Mark Brick released two nuñas as germplasm. Jim Nienhuis mentioned that he has developed photoperiod insensitive nuñas. Nuñas’ patents were abandoned.

**4) Status of the *Phaseolus* germplam collection**

Ted Kisha, curator for the *Phaseolus* germplam collection, reported on activities. Ted is regenerating 700 accessions per year based on seed viability in the collection. The regeneration is done in the greenhouse because of virus contamination. An ELISA test is being investigated. New accessions were received including heirloom varieties. About 36 descriptors were added to the GRIN. A collection of *P. polystachios* was initiated in Ohio by Ashely Egan of the Smithsonian Institution. Additionally, populations from Indiana, Missouri, and West Virginia were characterized by using AFLP markers. There is a need to collect *P. polystachios* from North Carolina to be tested for reaction to white mold.

Ted wondered how much seed is needed for each accession. Greenhouse space is a limiting factor. Ted continues to deal with the challenge of generating seed from photoperiod sensitive germplasm due to the latitude of the Pullman location. Ted mentioned that EMBRAPA is interested in duplicating the U.S. Core collection, however, Talo mentioned that Brazil does not allow beans out of the country. Steadman mentioned that *rhizoctonia* and *sclerotinia* are not allowed out of Brazil. Puerto Rico is an option, but Tim mentioned the challenge of high temperatures. Ted was wondering about Chile, New Zealand, or Hawaii?

**5) Plans for the crop vulnerability report**

Paul Gepts led the discussion of the need for an update of the *Phaseolus vulgaris* crop vulnerability report. The update of this report is 15 years overdue and we need to work on it now. Paul mentioned the possibility of submitting the report as a white paper in Advances in Agronomy. Ted Kisha and Daniel Debouck were added to the genetic resources section. Tim Porch and Carlos Urrea will take the lead on the abiotic section (environmental stresses/climate change). Rubella Goswami will be working on lima beans. Phil Miklas was added into the phenotypic variation section. Tim Porch will send the *Phaseolus* crop vulnerability outline for discussion. The old report is available in GRIN.

**6) New Business**

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

Jennifer Trapp, Peter Bretting, and Jeff Ronney were added to PCGC members list. Mark Brick, Ken Kmiecik, Alyson Thornton, and Steve Noffsinger were dropped from the PCGC member list. We were not sure about Phil Griffiths.

1. **Exploration Proposals**

It is harder to conduct domestic studies. Tim mentioned that we can decide the emphasis of such exploration proposals. Talo suggested collecting the rust pathogen or other diseases. Talo mentioned that CIAT has a huge rust collection. The issue is how and who is going to maintain the collection in the U.S. A *rhyzobium* collection is another possibility. Tim mentioned collecting dry beans from East Africa. Paul Gepts noted that dry bean collection is not allowed in Mexico anymore.

1. **Next Meeting**

The next meeting will be at East Lansing, Michigan in conjunction with the BIC meeting on November 1, 2017.

After the meeting was adjourned at 2:00 pm, we toured the greenhouses and seed storage facilities.

Respectfully submitted,

Carlos A. Urrea

Secretary