

## **Soybean Germplasm Committee Meeting Minutes Feb. 13, 2017**

The meeting was called to order by chair Zenglu Li and those present introduced themselves.

Members present were:

Zenglu Li, Chair and Public Breeder South (University of Georgia, Athens, GA)

Dechun Wang, Vice Chair and Public Breeder North (Michigan State University, East Lansing, MI)

Rusty Smith, *ex officio*, Associate Curator (USDA-ARS, Stoneville, MS)

Esther Peregrine, *ex officio* Assistant Curator (USDA-ARS, Urbana, IL)

Thomas Hoffman, Private Breeder North (Dow Agro Sciences, Indianapolis, IN)

Lilian Miranda, Private Breeder South (Bayer Crop Science, Pikeville, NC)

Qijian Song, Molecular geneticist, genomicist (USDA-ARS, Beltsville, MD)

Teresa Hughes, Pathologist (Monsanto, St. Louis, MO)

Anna Locke, Physiologist (USDA-ARS, Raleigh, NC)

Bob Stupar, Genomicist (University of Minnesota, Minneapolis, MN)

Members not present:

Kelly Whiting, *ex officio* United Soybean Board representative

Roy Scott, *ex officio* Nation Program Staff representative

Louise O'Donoghue, Canadian Breeder (CEROM, Saint-Mathieu-de-Beloeil, Quebec)

Visitors:

Pengyin Chen, University of Arkansas, Fayetteville, AR

Rouf Mian, USDA-ARS, Raleigh, NC

Guo-Liang Jiang, Virginia State University, Petersburg, VA

The minutes from 2016; the 2016 Soybean Germplasm Collection Report submitted by Esther Peregrine, and the 2017 National Germplasm Resources Laboratory submitted by Gary Kinard were reviewed and discussed. The main topics of discussion were:

-Soybean genetic stocks collection. There has been discussion among the soybean research community about the need for a soybean genetic stocks collection to preserve the many lines that are being developed by various mutagens or transgenic procedures.

The University of Minnesota has a fast neutron mutant collection developed in 2007 with a total of 20,000 lines. The committee recommended adding a core collection of 500 to 600 lines that have characterized, published data available if there are no material transfer agreements that would restrict seed distribution. Bob Stupar was still characterizing some lines and needs to check on what MTAs may be in effect.

-Qijian Song is still working on the data from genotyping the collection with 50K SNPs. He has compiled a list of accessions that are unique and those that are similar. These two lists will be added to GRIN Global so that researchers can choose to search only among unique accessions when requesting germplasm unless they have a specific reason for wanting to look at similar lines. Additional chips have been purchased to analyze new accessions that are being pure lined and added to the collection this year.

-The first transgenic soybean variety PVP certificate will expire in May, 2018. ARS has protocols in place for handling transgenics. In the case of soybeans, separate equipment will be needed to prevent cross-contamination with conventional soybeans. It was suggested that perhaps keeping just one representative line for each transgene would keep the number of accessions added to the collection a manageable size.

-An additional 208 perennial Glycine accessions will soon be added to the collection through Steve Hughes from the Australian Pastures Genebank at the South Australian Research and Development Institute in Adelaide. New germplasm is getting harder to obtain because most countries have MTA restrictions that don't comply with the ARS distribution policy.

-International cultivars that have been recently released by establish breeding programs will no longer be pure lined since there is no reason to expect mixtures in these accessions. Accessions with uncertain pedigrees such as those obtained by collecting trips will still be pure lined.

-The curator vacancy left by Randy Nelson was discussed. The committee stressed the need for this position to be filled as soon as possible.

Zenglu Li will contact members about the points discussed and also review the committee roster for the length of each member's term of service.

Respectfully submitted,

Esther Peregrine, Assistant Soybean Curator