

Soybean Germplasm Committee Report

Zenglu Li

Feb 13, 2017

Germplasm Committee Member

Role	Name	Organization
Ex-Officio	Roy Scott	USDA,-ARS
Ex-Officio	Kelly Whiting	United Soybean Board
Ex-Officio	Randall Nelson	USDA,-ARS
Ex-Officio	Esther Peregrine	USDA,-ARS*
Ex-Officio	Rusty Smith	USDA,-ARS*
Chair	Zenglu Li	University of Georgia*
Vice Chair	Dechun Wang	Michigan State University*
Member	Louise O'Donoughue	Centre de Recherche Sur Les Grains
Member	Thomas Hoffman	Dow Agro Sciences*
Member	Lilian Miranda	Bayer Crop Science*
Member	Qijian Song	USDA,-ARS*
Member	Bob Stupar	University of Minnesota*
Member	Anna Locke	USDA-ARS*

Soybean genetic stocks collection

- The need for a soybean genetic stocks collection developed by various mutagens or transgenic procedures.
- The University of Minnesota has a fast neutron mutant collection developed with a total of 20,000 lines.
- The committee recommended adding a core collection of 500 to 600 lines that have been characterized, published data available if there are no MTA that would restrict seed distribution.
- Dr. Bob Stupar is still characterizing some lines and needs to check on what MTAs may be in effect.

Genotyping New Germplasm

- Genotype new germplasms added to collection with 50K SNP Chips
- Additional chips have been purchased to genotype new accessions and added to the collection this year.
- Based on similarity information, Qijian Song 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 to look at similar lines.

Transgenic Lines to the Collection

- The first transgenic soybean variety PVP will expire in May, 2018
- USDA-ARS has protocols in place for handling transgenics which will be added to the collection.
- Suggest keeping just one representative line for each pedigree to keep the number of accessions added to the collection a manageable size.

Guideline for Line Selection

- International cultivars that have been recently released by established breeding programs will no longer be pure lined.
- Accessions with uncertain pedigrees such as those obtained by collecting trips will still be pure lined.

Curator Position

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

Germplasm Collection

- 339 accessions donated by Vietnam Ministry of Agriculture were planted for pure lining
- In the process of obtaining 208 perennial *Glycine* accessions from Australia
- New germplasm is getting harder to obtain because most countries have MTA restrictions that don't comply with the ARS distribution policy.

Germplasm Distribution

- Distributed 23,031 seed lots from 11,931 accessions
 - 541 requests from 330 individuals.
- 481 domestic requests by 280 researchers from 42 states.
 - 324 requests from Public
 - 113 requests from companies
 - 43 requests from individuals
- 60 international requests (4,475 accessions)
 - 50 scientists in 30 countries

GRIN-Global

- GRIN-Global Release 1.9.8.2 is now available at <http://npgsweb.ars-grin.gov/gringlobal>.
- Users can create accounts to make seed requests online, view their order history and receive email updates about GRIN-Global.
- The software for adding news images to GRIN Global is still being developed.
- When it is finished, there are 2,500 images that are ready to be uploaded

Update on WSRC 10



World Soybean Research Conference Ten
and the 17th Biennial Conference on the Molecular and Cellular Biology of Soybean
September 10-15, 2017

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**Celebrating 250 Years
of the Soybean in
North America**

WSRC 10

- Celebrating 250 years of soybean in North America
- Returning to the United States for the first time in 20 years
- Great opportunity to meet and interact with the researchers from around the world

Registration

	Early Bird Rate (May 31)	Standard Rate (Jun 1 – Sept 7)	On-site registration rate
Non- Profit/Universi ty	\$500	\$675	\$850
Industry	\$600	\$775	\$850
Student/Post Doc	\$290	\$390	\$600

WSRC Program

- Preliminary program will be post soon
 - Contact conveners if you want to present a talk
 - Submit a poster for consideration of oral presentation
- Meeting rooms

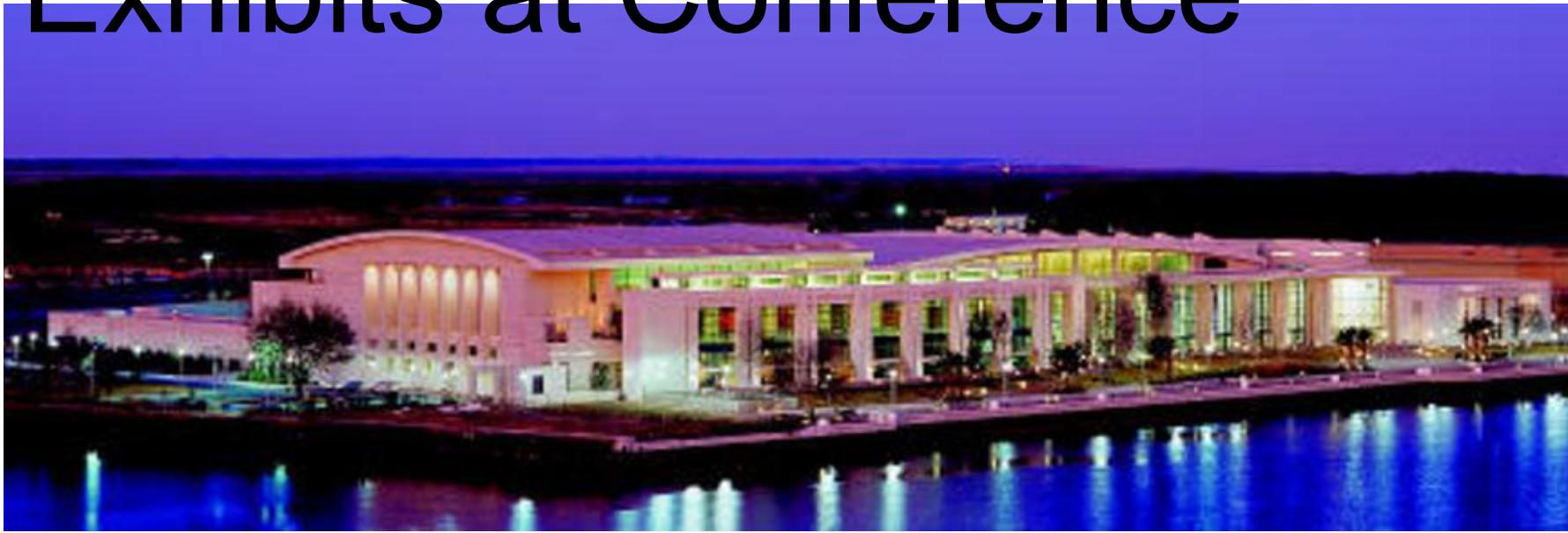


WSRC 2017 10

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**CELEBRATING 250 YEARS OF
SOYBEAN IN NORTH AMERICA**

Welcome Sponsorship and Exhibits at Conference



Contact:

- Organizing Committee Chair
 - Scott Jackson
 - Wayne Parrott
 - Zenglu Li
- Advisory Committee Chair
 - Roger Boerma

See you in Savannah in Sept

