

National Plant Germplasm Coordinating Committee

June 1, 2018

Attendees:

Eric Young, SAAESD
Ann Marie Thro, USDA/NIFA (by phone)
Clarence Watson, University of Arkansas
Tim Cupka, ASTA – AgReliant Genetics
Margaret Smith, PBCC – Cornell University
Jim Moyer, Washington State University
Jan Nyrop, Cornell University
Rachel Melnick, USDA/NIFA
Ed Kaleikau, USDA/NIFA
Peter Bretting, USDA/ARS, Office of National Programs, Beltsville
Larry Chandler, USDA-ARS, Plains Area, Ft. Collins, CO
Gan-Yuan Zhong, USDA-ARS, Geneva, NY

1. ARS/NPGS Update – Peter Bretting (powerpoint)
 - NPGS accessions ~ 575,000, increasing 1% a year (2016)
 - Distribution ~ 250,000, stable (2016)
 - Approximately 30% of collection overall is distributed each year
 - Budget stable at \$44 Million in FY'17, FY'18 it's expected to decrease
 - Flat budget is a challenge considering increasing collection size, curator retirements, managing accessions with GE traits and adventitious presence, and applying cryopreservation techniques to extend seed life, and conserving clonally-propagated germplasm
 - Hired a new taxonomist for GRIN Taxonomy at NGRL, Beltsville, to step in when current taxonomist retires next year
 - 2016 Retrospective Review of ARS National Program 301, which covers all of ARS's germplasm, genomics, and breeding efforts.
 - NP 301 External Review Panel Report was delivered a year ago and emphasized how important the NPGS is
 - Among the recommendations to ARS were:
 - Define more clearly the goals, products, final output, and criteria for quality
 - Increase effort in crop improvement in nutritional value based on consumer and industry needs
 - There's a need for training/education in germplasm curation to train the next generation of curators
 - Possibly a distance education course offered collaboratively by land-grant university staff in conjunction with by one of the NPGS Plant Intro Stations
2. PGO & RPIS Update – Gan-Yuan Zhong (powerpoint)
 - 2017 PGO meeting has been postponed until 2018 for budget reasons
 - Critical new issue is distribution of germplasm to fill requests from non-researchers and general public, many of these cases are difficult to handle

- How is impact of distributed accessions determined? Difficult to get specific impact from breeders due to long term nature of crop improvement
 - ARS has approximately a dozen specific examples of impact from NPGS accessions on variety improvement and the profitability and value of specific US crops
3. NIFA Update – Rachel Melnick and Ed Kaleikau (powerpoint)
- Received some budget increases in 2017, but those might go away in 2018 budget
 - In 2016 offered Plant Breeding for Ag Production as Foundational Program in AFRI
 - In 2016 Food Security offered phenomics and Breeding
 - In 2017 offering
 - Water for Food Production Challenge Area
 - Social Implications of Emerging Technologies Foundational Program
 - Food and Ag Cyber informatics and Tools Initiatives, Conference grants in 2017 and Foundational and Challenge grants in 2018
 - Plant breeding priority has increased over past few years and funding in that area has increased
4. Liaison Comments
- AOSCA – Chet Boruff (written report only)
 - ASTA – Tim Cupka
 - Several years of poor commodity prices have led to mergers and a lot of “Chaos”
 - Syngenta and ChemChina
 - Monsanto and Bayer
 - Dow and DuPont
 - Layoffs prior to mergers, especially from Dow, have resulted in larger than normal number of breeders looking for jobs
 - PBCC – Margaret Smith
 - Objectives
 - Collect and disseminate information on US public plant breeding
 - Survey being done now
 - Promote plant genetic resources preservation and utilization
 - Publication submitted to Crop Science on value of NPGS
 - Identify BMP for public sector IP protection
 - Proceedings of 2016 workshop will be released soon
 - Promote public private partnerships to help educate future breeders
 - Communication with federal agencies about issues related to breeding
5. National Genetics Resource Advisory Council – Peter Bretting (powerpoint)
- Council has completed responding to the AC21 report and now is focused more broadly on the following topics
 - Crop genetic resources
 - Animal genetic resources
 - Aquatic genetic resources
 - Tribal genetic resource issues and natural resources
 - New Council members reflect the more diverse portfolio for the Council

- Council has appointed a Crop Vulnerability Subcommittee
 - Also appointed an Animal Genetics Subcommittee to assess needs of animal and aquatic genetic resources
 - Next meeting in July '17 in Kansas City
6. International Treaty – Peter Bretting (powerpoint)
- Ratified by the Senate on September 29, 2016 and US officially became a party to the treaty on March 13, 2017
 - NPGS will have the primary responsibility for implementing the treaty, it doesn't add any obligations to public or private breeders
7. NRSP 10 – Jim Moyer (powerpoint and handout)
- Overall objective is to have genetic information on specialty crops in a common database that also communicates with other databases
 - Four of five databases converted to Tripal
 - Developing tablet application
 - Developing interface with commonly used databases
 - Developing curation tools
 - Developing online version of GENSAS
 - Conducting numerous webinars and workshops
8. Publication – Margaret Smith
- Timely and important information
 - It would be very helpful to produce a “one-pager” of the critical points that can be used with decision-makers to promote NPGS
 - This publication in Crop Science will lend credibility to the issue
9. 2018 Meeting
- Peter will check with NRSP-6 coordinator, John Bamberg, about meeting in Sturgeon Bay at their potato genebank facility
 - Timing for the NPGCC meeting should avoid conflicts with ARS Administrative Council, ASTA, and AOSCA meetings