National Plant Germplasm Coordinating Committee (NPGCC) Notes

June 13, 2013

- 1. Peter Bretting NPGS Update
 - The NPGS conserves 560,000 samples of 14,700 species at 20 genebank locations
 - Acquisition, maintenance, regeneration, and documentation are highest priorities; distribution, characterization, and evaluation are lower priority
 - Distribution of accessions ~ 310,000 in 2012, 250,000 in 2011
 - President FY'14 budget proposed increases for ARS of 2% above FY '12 budget; \$581,000 new funds proposed for NPGS
 - House mark-up gave 5.6% above FY'13, or 2% below FY'12, Senate mark-up will occur during the week of 17-21 June 2013.
 - ARS National Program 301: Plant Genetic Resources, Genomics, and Genetic Improvement wrote a new Action Plan for 2013-17
 - o All new individual scientists' plans in NPGS have been approved
 - NPGS now managing seed stocks of differential lines and collections of microbe strains for host-plant resistance studies and breeding
 - Working on standardizing Crop Vulnerability Statements that are developed, reviewed and updated by the Crop Germplasm Committees
 - o Standard statement will now include:
 - o Introduction to the crop
 - o Urgency and extent of crop vulnerabilities and threats to food security
 - o Status of plant genetic resources in NPGS available for reducing genetic vulnerabilities
 - Other genetic resource capacities
 - o Prospects and future developments for the crop
 - Working on revising the overall NPGS Manual of Procedures to update it and make it web based with links to other key documents
 - FAO just released a new set of genebank standards

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- 2. Gary Pederson Regional Plant Introduction Stations Report
 - PGOC meeting by conference call this year to save travel costs
 - Working on standard response to respond to non-research requests for seed
 - Working on disclaimer to requestor to indicate that if plant line is off PVP it may still be protected by a utility patent(s), rather than saying it has no IP protection as currently being done

- Significant discussions ongoing about how to handle GMO lines when they begin to come off patents in 3-4 years.
 - o NPGCC should play a leading role with developing operational policies related to these lines, along with PGOC, and with guidance from NGRAC.

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- 3. National Genetic Resources Advisory Council Meeting Report (NGRAC)
 - Peter Bretting & Gary Pederson are ex-officio members, but were actively involved in discussions during the meeting
 - Jerry Arkin attended to explain National Plant Germplasm Coordinating Committee?s mission and role in the NPGS
 - Committee is very knowledgeable and everyone contributed to the discussions
 - Precise role of this group is somewhat unclear relative to AC-21 & NAREEE Board, this is being discussed
 - Issues addressed during the meeting include:
 - o Effective means of communicating importance of genetic resources
 - o Genetic diversity and vulnerability
 - o International genetic resources
 - o Intellectual property rights issues
 - o Reconciling decreasing resources for genebanks and increasing demand for germplasm
 - o Maintaining seed purity as GMO crop lines go off patent

4. Ed Knipling

- NGRAC group underway, Secretary is very interested in the council?s work and particularly in advice on how
 to maintain co-existence at all forms of agriculture; GMO & non-GMO, large & small, organic & traditional,
 etc.
- Secretary has recently asked for update on gene banks and how germplasm is being protected
- Budget across the board cuts in FY'13 at 7.8% for ARS, FY'14 President budget restored cuts with 10% increase to be used for strategic priorities
 - o Germplasm is one of the priorities
 - o Environmental stress adaptation is another high priority
- House budget increase was about half of the President's proposal
- Some resources will be used to invest in "big data" infrastructure, hardware, software, and personnel
- Public access to publications and data generated with federal funding
 - o ARS response have to define what constitutes "data" that should be made public. National Agricultural Library will do some rule-making related to this

• ARS infrastructure report last April - prioritized by condition and priority of research activity. Will need to invest \$100-150 Million per year. Southeast poultry facility at Athens is highest priority and was in President budget proposal, but not in House markup. Some gene bank facilities are in high priority list.

5. Chet Boruff - AOSCA Report

- AOSCA maintains varietal and genetic purity using standardized methods
- Native species are now being certified and standard tests being improved
- Biotech stewardship AOSCA standards have been adopted by APHIS
 - o Standards do allow for a tolerance of some unintended presence
 - o New programs being developed for Additional Certification Requirements (ACR) to cover GMO's
 - o Now doing molecular or genetic testing if particular varieties call for it
- Organic Seed-Finder website new site to allow customers to find organic seed supplies and suppliers for many different crops
- AC-21 report on seed quality
 - o AOSCA has developed standard called Purity Plus to identify non-GMO seed
 - o AC-21 has called for a Non-GMO Finder website similar to the organic seed finder
- Need a more neutral term for genetically modified crops than GMO, Biotech is a better term
- Seems to be a decline nationally in the number of seed certification labs, how many do we really need around country?
 - o Lab budgets are declining and some are struggling
 - Industry as a whole is moving toward out-sourcing certification ex MN Crop IMP has closed their lab and uses private labs
 - o AOSCA?s goal is to ensure uniformity across all labs

6. Kay Simmons

- House budget markup specifically mentions importance of classical plant breeding
- 7. David Baltensperger National Association of Plant Breeders (NAPB) Report
 - NAPB met in Tampa last week, included 150+ grad students
 - Originated out of the Plant Breeding Coordinating Committee (SCC-80)
 - Issues
 - o Specialty crops resources, particularly biotech activity and capacity
 - o Plant breeding education, NAPB has heavily engaged students

8. Ann Marie - NIFA Report

- New reporting code FOS 1081 for plant breeding in REEport to distinguish plant breeding from other research related to genetic improvement
- New Plant Breeding Working Group internal to REE mission area, it's purpose is:
 - o Develop understanding of priority needs and opportunities for U.S. public plant breeding, especially federal sector; and optimize complementarities of public and private efforts
 - o Provide resulting information and insights to support REE leadership in their comprehensive planning and decision making processes.
- How can we make impacts of NPGS more visible?
 - o Need to document how past germplasm has enabled current successes in agriculture industry
- New AFRI Foundational Program Plant Breeding for Agricultural Production
 - o Environmentally sound approaches to improve plants and protect them from biotic and abiotic stress

9. AC-21 Report

- Seed quality section's recommendations are most relevant for NPGCC
- Peter Bretting asked for the NPGCC's assistance as USDA develops the plan called for on page 25 of AC-21's report to monitor and maintain purity of publicly held germplasm
- Peter will contact Tom Burr and Eric Young to move this action forward

10. Dan Upchurch

• Working on implementing GRIN Global within National Plant Germplasm System