## MULTI-STATE RESEARCH PROJECT S-009 PLANT GENETIC RESOURCES CONSERVATION AND UTILIZATION

**Gary Pederson:** After almost 16 years serving as the Research Leader of the USDA, ARS, Plant Genetic Resources Conservation Unit (PGRCU), I will be retiring on Jan. 3, 2017. I would like to personally thank the Southern Directors for their excellent support of the S-009 Multi-State Project during my tenure. We have made a lot of progress during this time:

	Number of accessions	
	2001	2016
Collection size	81,660	92,499
Available accessions	68,163 (83%)	82,999 (90%)
Backed up at Ft. Collins	69,483 (85%)	90,587 (98%)
Germination testing at Griffi	84,118 (93%)	
Stored in -18C at Griffin	31,879 (40%)	77,066 (85%)
-18C seed storage facilities	1,061 sq ft	1,897 sq ft
Distributions	16,917	35,376

## **Accomplishments for 2015:**

- A total of 35,376 accessions (14,391 in S-009 region) were distributed in 940 orders to users worldwide in 2015. Distributions were made to users in 45 states and 39 countries.
- The plant genetic resources collection totals 92,499 accessions of 1,548 species and 257 genera with 89.7% available for distribution and 97.9% backed up at Ft. Collins, CO.
- Currently, 77,066 accessions or 84.9% of the seeded accessions in the collection are stored at -18 C. Seed longevity is improved by storage in -18 C rather than 4 C.
- Germination tests were conducted on 6,045 accessions. Since 2002 when germination testing began, tests have been conducted on 84,118 accessions (92.7% of collection).
- Seed oil content evaluations continued on the entire cultivated peanut collection with two accessions identified with high oil content for use in peanut breeding programs. We hope to complete seed oil content evaluations on the entire peanut collection in 2016.
- Seed oil content and fatty acid composition was determined for 200 acc. of eggplant and fatty acid, protein, and mineral content was characterized on 85 acc. of finger millet.
- The peanut core, mini collection, and commercial standards were evaluated in the field at Citra, FL, for multiple morphological, genetic, and biochemical traits over a two-year period. Molecular markers are being utilized to analyze the genetic diversity to associate markers with the traits evaluated in the field.
- After several years in the planning, a new germplasm information system (GRIN-Global) was released to replace GRIN. There will be a learning curve for NPGS personnel and public users to effectively utilize this new germplasm information network.
- An extensive phenotypic characterization of all sweetpotato accessions over multiple years was conducted by ARS researchers in SC. These data will be added to GRIN and will make the sweetpotato collection the best characterized collection at Griffin.
- A plant collection trip was conducted in the Northeast U.S. (CT, RI, NH, VT, ME, NY, and MA) adding 74 new switchgrass, big and little bluestem, and other warm-season grass accessions to the collection.
- Three ornamental little bluestem cultivars were developed in cooperation with the University of Georgia.

- Shyam Tallury, previously peanut breeder at Clemson University, was hired as the new ARS peanut curator at PGRCU. He started his position on November 1, 2015.
- All available S-009 annual reports and minutes since 1949 are now posted as searchable PDF files online (www.ars.usda.gov/Main/docs.htm?docid=9592).

**Personnel:** The S-009 farm manager (Donnie Hice) left to take another position this year. Adam Gregory has taken on many of the farm and facility operation responsibilities of the previous farm manager position. The proposed budget increase includes a 3% pay increase for all permanent employees as proposed by the University of Georgia for all employees, associated benefit increases, and funding for reclassification of Adam's position from Research Technician III to Agricultural Specialist due to his increased responsibilities in farm and facility operations.

## S-009 Budget Request

Increase the S-009 FY2017 personnel budget in the amount of \$14,328 for a total S-009 budget of \$479,892. This request reflects a 3% increase in University of Georgia salaries, associated benefits, and funding for reclassification of Research Technician III to Agricultural Specialist (Adam Gregory). The state budget has not yet been decided; however 3% is the current expected University of Georgia salary increase.

**Action Requested:** Approval of S-009 FY2017 Budget Request.

## PLANT GENETIC RESOURCES CONSERVATION AND UTILIZATION FUNDING REQUEST FOR FY2017 TO THE SOUTHERN ASSOC. OF STATE AGRIC. EXPT STATION DIRECTORS

A.	S-009 Budget			REQUESTED	
	G	FY2015	FY2016	FY2017	
	Personnel	\$373,251	\$386,190	\$400,518	
	Travel	1,000	1,000	1,000	
	Operations	78,374	78,374	78,374	
	TOTAL	\$450,625	\$465,564	\$479,892	
В.	USDA/ARS Budget			PROJECTED	
		FY2015	FY2016	FY2017	
	Personnel	\$1,615,614	\$1,751,840 <sup>b</sup>	\$1,779,869 <sup>b</sup>	
	Travel	25,474	30,000	30,000	
	Indirect Research Cost/				
	Other Services b	396,353	365,310	371,461	
	Operations	197,440	44,413 (164	,926) <sup>c</sup> 130,746	
	Equipment	219,208 a	10,000	10,000	
	Building and Field				
	Maintenance/Support 83,913		88,175	88,175	
	TOTAL	\$2,538,002	\$2,410,251	\$2,410,251	
	a				

<sup>&</sup>lt;sup>a</sup> Includes \$127,751 in temporary funding in FY15 for Rapid N analyzer, moveable seed storage shelves in -18C seed storage room, T-12 lighting, and safety items.

<sup>&</sup>lt;sup>b</sup> Includes salary increase of 1.3% in FY17 and 1.6% in FY17.

<sup>&</sup>lt;sup>c</sup> 5% holdback of \$120,513 for ARS animal control issues. Funds should be put back into budget in July, 2016.