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

Background: Crop collections of importance to the Southern Region have been supported since 1949 through a joint partnership, designated as Multi-State Research Project S-009, between the USDA, ARS, Plant Genetic Resources Conservation Unit and the Southern State Agricultural Experiment Stations. For over 60 years, the S-009 Project has served as a major component of the National Plant Germplasm System, and its activities have markedly improved crop technology in the Southern Region, the U.S., and abroad, by providing plant genetic resources and associated information to scientists and educators.

Accomplishments for 2010:

- A total of 28,308 accessions (13,447 in S-009 region) were distributed in 925 orders to users worldwide in 2010. Distributions of Griffin accessions were made to users in 49 states and 47 foreign countries.
- The collection totals 91,022 accessions of 1,546 species and 255 genera with 87.5% available for distribution and 96.8% backed up at Ft. Collins, CO.
- Over 650 accessions were added to the collection including sorghum, peanuts, warmseason grasses, cucurbits, and other crops.
- Currently, 66,449 accessions or 74.3% of the collection have at least one inventory sample stored at -18 C. Seed longevity is improved by storage in -18 C rather than 4 C.
- Germination tests were conducted on 12,544 accessions. Since 2002 when germination testing began, tests have been conducted on 66,162 accessions (74.0% of collection).
- National Program Staff and Area Office provided funds to construct an addition to the ARS Seed Processing building to house a future 4C cold storage room. This would enable us to convert an existing 4C cold room to -18C in order to store bulk seed of the entire Griffin collection in -18C. The addition has been completed, but funds are not yet available for the cold storage room and moveable storage shelves.
- Oil content was determined for the entire okra (>1,200 accessions) and entire castor bean (>1,000 accessions) collections. High oil seed content accessions were identified for use by breeders within both of these collections.
- New switchgrass accessions were characterized for viability, genotype by SSR markers, and ploidy level. These collections increased the usefulness and genetic variability of the U.S. switchgrass collection, which has been widely requested for use in biofuel research.
- Fatty acid variability was determined for several lablab accessions. Capsaicin and
 capsiate levels were determined for chile pepper accessions. Sunn hemp accessions were
 characterized for traits related to cellulosic ethanol potential including glucose content,
 biomass, plant height, and seed production. New regeneration techniques were
 developed for two misc. legumes species. Virus screening for sweetpotato leaf curl virus
 was completed on the sweetpotato collection.
- Digital images of cowpea, sorghum, pepper, and warm-season grass accessions were added to GRIN. Data on pepper root rot and watermelon nematode resistance were added to GRIN.
- Additional accomplishments are reported in the S-009 annual report and minutes (www.ars.usda.gov/Main/docs.htm?docid=9592).

Financial Situation: The President's proposed budgets for FY2011 and FY2012 include an increase in permanent ARS funding for genetic resources, some of which would come to the Griffin location. At this time, Congress has not passed the current FY2011 budget or initiated work on the FY2012 budget; therefore, any ARS budget increase is problematic. Since 2003, federal personnel numbers have decreased from 29 to 20, and program productivity has remained high, meeting clientele needs. However, any reductions in ARS or S-009 funding will result in fewer regenerations, characterizations, and evaluations, and impact other critical operations.

S-009 Budget Request

Maintain the S-009 FY2012 operations budget at the FY2011 level of \$417,723. This budget proposes no increase in operations or salary funds for personnel.

Action Requested: Approval of S-009 FY2012 Budget Request. Action Taken:

PLANT GENETIC RESOURCES CONSERVATION AND UTILIZATION FUNDING REQUEST FOR FY2012 TO THE SOUTHERN ASSOCIATION OF STATE AGRICULTURAL EXPERIMENT STATION DIRECTORS

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		FY2010	FY2011	FY2012		
	Personnel	\$338,349	\$338,349	\$338,349		
	Travel	1,000	1,000	1,000		
	Operations	78,374	78,374	78,374		
	TOTAL	\$417,723	\$417,723	\$417,723		
В.	USDA/ARS			PROJECTED		
		FY2010	FY2011	FY2012		
	Personnel	\$1,673,347	$1,716,700^{c}$	$$1,728,600^{d}$		
	Travel	30,669	25,000	20,000		
	Indirect Research Cost/					
	Other Services	381,889	390,252	392,552		
	Operations	126,974	101,057	91,857		
	Equipment	35,115 ^a	10,000	10,000		
	Construction	94,246 ^b	0	0		
	Building and Field					
	Maintenance/Sup	port <u>80,578</u>	80,578	80,578		
	TOTAL	\$2,422,818	\$2,323,587	\$2,323,587		

^a Includes \$15,000 in temporary funding for peanut thresher.

^b Includes \$84,231 in temporary funding for building addition to house future cold room.

^c Includes hiring peanut curator and abolishing molecular lab support scientist position.

d Includes promotions and step increases. Federal pay is frozen, so no annual pay increases are included.