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 63 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 2011:

- A total of 32,512 accessions (18,233 in S-009 region) were distributed in 946 orders to users worldwide in 2011. Distributions of Griffin accessions were made to users in 47 states and 46 foreign countries.
- The plant genetic resources collection totals 91,223 accessions of 1,545 species and 255 genera with 87.7% available for distribution and 97.1% backed up at Ft. Collins, CO.
- Over 500 accessions were added including sorghum, cowpeas, clovers, and grasses.
- Currently, 67,204 accessions or 74.8% 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 10,198 accessions. Since 2002 when germination testing began, tests have been conducted on 71,628 accessions (79.7% of collection).
- National Program Staff and Area Office provided funds to construct a new 4C cold room with moveable storage shelves within an addition to the ARS Seed Processing building completed last year. An existing 4C cold room will be converted to -18C in order to store bulk seed of the entire Griffin collection in -18C for improved seed longevity.
- Fatty acid content was determined for the entire U.S. castor bean (>1,000 accessions) and sesame (>1,200 accessions) collections. Seed oil content was determined for the entire U.S. watermelon (>1,000 accessions) collection for potential as an oil seed crop.
- Ploidy level was determined for the entire St. Augustine and seashore paspalum collections. Salt tolerance was determined for the entire seashore paspalum collection.
- A method was developed to detect all genotypes from a normal oleic x high oleic peanut cross. Fatty acid composition of each genotype was quantified in 500 peanut progeny.
- A plant collection trip was conducted in Alabama, Florida, Georgia, and South Carolina and obtained 60 new accessions of naturalized Sorghum halepense for sorghum gene flow studies, switchgrass for bioenergy research, and indiangrass for genetic diversity.
- With vegetable industry plant pathologists, differential sets of four vegetable crops have been established and distributed to researchers for identification of disease races.
- Over 660 castor accessions were genotyped with 15 SSR markers for further genetic classification. A population of over 1,900 mutant watermelon seeds was developed for a mutant TILLING study with ARS cooperators in Charleston, SC. A total of 92 peanut accessions were successfully evaluated under quarantine to produce disease-free seed.
- Digital images of cowpea, sorghum, cucurbit, and watermelon accessions were added to GRIN. Data on pepper capsaicin content, peanut core selection, sorghum, and sweet sorghum were added to GRIN.

- 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).

Financial Situation: The President's proposed federal budget for FY2013 includes an increase in permanent ARS funding for genetic resources, some of which would come to the Griffin location. The previous two President's budgets proposed increases for Griffin which did not materialize in the final FY budgets. Hopefully, this year the increase will be in the final budget.

S-009 Budget Request
Increase the S-009 FY2013 budget by $14,000 to $431,723 to support reclassification of three S-009 technicians who have taken on increased responsibility in seed regeneration efforts.

Action Requested: Approval of S-009 FY2013 Budget Request.
Action Taken:

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

BUDGET

A. S-009

	FY2011	FY2012	REQUESTED FY2013
Personnel	$338,349	$338,349	$352,349
Travel	1,000	1,000	1,000
Operations	78,374	78,374	78,374
TOTAL	$417,723	$417,723	$431,723

B. USDA/ARS

	FY2011	FY2012	PROJECTED FY2013
Personnel	$1,719,209	$1,737,218	$1,765,400[d]
Travel	24,204	24,535	24,535
Indirect Research Cost/ Other Services	351,362	346,065	350,466
Operations	101,148[a]	120,542	87,959
Equipment	45,097[b]	10,000	10,000
New Cold Room	124,901[c]	0	0
Building and Field Maintenance/Support	80,580	80,580	80,580
TOTAL	$2,446,501	$2,318,940	$2,318,940

[a] Decreased by temporary assessment of $24,983 to help pay for ARS location closures.
[b] Includes $23,294 in temporary funding for lab freezer and moveable storage shelves.
[c] Temporary funding for new 4C cold room.
[d] Includes 0.5% proposed federal pay increase.