

# REPORT TO THE SORGHUM and MILLET CROP GERMPLASM COMMITTEE

April 9, 2025

Melanie L. Harrison, Sorghum & S9 Millet Curator

## STATUS OF THE COLLECTION

There are 17 taxa included in the S9 millet collection with 2,505 total accessions (Table 1). These include pearl millet, finger millet, and kodo millet. The sorghum collection continues to be the largest crop collection maintained at the Griffin, GA location with 48,592 accessions. Currently, 97% of the sorghum accessions and 94% of the S9 millet accessions are available for distribution. Ninety-three percent of the sorghum germplasm and 98% of the S9 millet germplasm is backed up at the National Laboratory for Genetic Resources Preservation (NLGRP) in Fort Collins, CO.

**Table 1.** Status of the USDA Sorghum and S9 Millet Germplasm Collection as of January 6, 2025.

	<u>Sorghum</u>	<u>S9 Millets</u>
<b>Total Number of Taxa</b>	26	17
<b>Total Number of Accessions</b>	48592	2505
<b>Number of Available Accessions</b>	47109	2353
<b>Number of Accessions Backed Up</b>	45364	2445
<b>Number of Accessions at -18C</b>	45083	2505
<b>Number of Viability Tests</b>	45182	2505

## DISTRIBUTIONS

For the 2024 calendar year, 11,687 accessions of sorghum germplasm, including genetic stocks, were distributed. A total of 2983 accessions of S9 millets were distributed (Table 2). Most accessions were domestic distributions with 79% for sorghum and 81% for S9 millets.

**Table 2.** Distributions of sorghum and S9 millet germplasm during the 2024 calendar year.

<b>Cooperator Affiliation</b>	<b>Number of Accessions Sorghum</b>	<b>Number of Accessions S9 Millets</b>
Foreign commercial company	1271	0
Foreign genebank	3	0
Foreign individual no affiliation	0	0
Foreign non-commercial organization	1196	560
U.S. state agencies and all universities	3417	1667
Agricultural Research Service	408	1
U.S. commercial company	5017	755
U.S. individual no affiliation	0	0
U.S. non-profit organizations	367	0
U.S. federal agency (not AID or ARS)	8	0
<b>Total Distributions</b>	<b>11687</b>	<b>2983</b>

## ACQUISITIONS

Dr. Gloria Burow, USDA-ARS, Lubbock, Texas donated 772 accessions of the ARS\_BT623\_NAM\_ESCT population to the collection which were designated as PIs 707061 through 707832. The populations are defined by the descriptor “subset of a population” and can therefore be found using the descriptor search feature on GRIN-Global (<https://npgsweb.ars-grin.gov/gringlobal/descriptors>) under Sorghum Genetic Stocks. They are currently being processed into the collection and should be available for distribution soon.

## REGENERATION AND MAINTENANCE

Regenerations of sorghum continue to be performed in Puerto Rico in collaboration with the USDA, ARS, Tropical Agriculture Research Station. Regenerated seeds are sent back to Griffin, GA for processing into the collection. Each regeneration sample has a germination test prior to storage. All newly regenerated accessions are split into two inventories - a 500 seed sample for long term -18°C storage and the remaining seed at 4°C for distributions. If the current backup inventory at Fort Collins, CO has low germination or seed quantity, a new backup inventory is sent from the newly regenerated seed.

## ACKNOWLEDGEMENTS

Thanks to Nick Stigura (USDA-ARS, IT Specialist) for providing the data for this report and to Tiffany Fields (USDA-ARS, Seed Storage Manager) for oversight of the sorghum seed cleaning, processing, and distribution activities at the Griffin, GA location. Thanks also to the PGRCU seed storage team (Jill Cunningham, Sylvia Jones, and Cassa Munroe) for their assistance in sorghum distributions, germinations, and seed processing.