REGISTRATION OF GERMLASM

Registration of Tift #5 S-1 Pearl Millet

Tift #5 S-1 PEARL MILLET [Pennisetum glaucum (L.) R. Br. Subsp. monodii (Maire) Brunken (a weedy relative of pearl millet)] germplasm (Reg no. GP-29, PI 564586) was developed cooperatively by the USDA-ARS and the University of Georgia, Coastal Plain Experiment Station, Tifton, GA. It was released by the two agencies in March 1992.

Tift #5 S-1 is a bulk of equal quantities of seed from 114 accessions (1) originating from Senegal, Mali, and Niger. Seeds were bulked from ≥30 sibbed plants from each accession growing in the field. Bulked seed were dried to 10% moisture, and stored in an air-tight container at 5 °C.

Tift #5 germplasm is comprised of accessions with genes for resistance to rust caused by Puccinia epidactylica Ellis & Barth, var indica Ramachar & Cummins, leaf spot caused by Pyricularia grisea (Cooke) Sacc., smut caused by Moesziomyces penicillariae (Bref.) Vanky, and downy mildew caused by Sclerospora graminicola Sacc. Schroet. Nineteen of 22 accessions tested in Senegal (West Africa) were resistant to downy mildew. Eight of 33 accessions tested for smut resistance were resistant at Tifton. A sample of >1000 plants from the bulked population segregated for 32% and 86% rust and leaf spot resistant plants, respectively. It has genes for increased forage yield and cytoplasmic-genic male steril-