Tift N75 will be vegetatively maintained and distributed by USDA-ARS, Coastal Plain Experiment Station, Tifton, GA 31793. Vegetative cuttings will be made available to individuals who wish to evaluate and/or use this clone.

WAYNE W. HANNA* AND WARREN G. MONSON (1)

References and Notes


Wayne W. Hanna, W. G. Monson, and P. R. Utley (1)

REFERENCES AND NOTES


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REGISTRATION OF EIGHT MAIZE GERMPLASM SOURCES FOR GRAY LEAF SPOT (GLS) RESISTANCE

Maize synthetics PA Composite I (GLS) C1, PA Composite II (GLS) C1, PA Composite III (GLS) C1, and PA Pith Path Composite (GLS) C1, (Reg. no. GP-172 through GP-179) (PI 517960 through PI 517967) each in a high yield (HY) and a low disease (LD) subpopulation were developed through a cooperative research effort by personnel of the Departments of Agronomy and Plant Pathology of the Pennsylvania Agricultural Experiment Station. They were developed to serve as germplasm sources for breeding for resistance to Cercospora zeae-maydis Tehon and Daniels. The maturity classification of these populations is within the 800 AES range.

Breeder's seedstocks of these eight germplasm sources, released in 1987, are maintained by the Pennsylvania Agricultural Experiment Station and may be obtained in 200-kernel lots from M. W. Johnson, Agronomy Department, Tyson Building, Penn State University, University Park, PA 16802.

These germplasm sources were developed in 1981 by outcropping four previously developed synthetics to a pollinator parent derived from a mixture of equal parts of seed of three hybrids (Pioneer hybrids X6362, 3325A, and 3328) chosen as resistance sources for gray leaf spot (GLS). The pollinator surrounded rows of the synthetics. Seed parents were detasseled prior to silking and pollen shedding. Selection of plants within the female rows was made on the basis of disease resistance, relative maturity, and standing plants at harvest. Bulked seeds of selected plants from each of the four synthetics were used to make up four GLS populations. In 1982, each population was planted in a 20-row block and sib-mated. A total of 120 ears were selected from each population for evaluation in replicated tests together with a GLS resistant check hybrid, Pioneer X7382. In 1983, they were planted (using no-till technology) into debris of the previous year's