REGISTRATION OF CULTIVARS

Registration of ‘Millo Blanco’ Sorghum

‘Millo Blanco’ (Reg. CV-132, PI 550725), a robust, photoperiod-sensitive, one-dwarf forage sorghum [Sorghum bicolor (L.) Moench], was purified from a Puerto Rican selection of Millo Blanco by mass selection and selfing for five generations and was released by the Tropical Agriculture Research Station of the USDA-ARS in 1990. The origin of Millo Blanco is unknown; however, it has been used by Puerto Rican farmers for many generations. It is classified as race durra-bicolor (1) and working group subglabrescens milo (2). In Puerto Rico and Georgia, it has shown good resistance to rust (caused by Puccinia purpurea Cooke) and excellent resistance to anthracnose [caused by Colletotrichum graminicola (Ces.) G.W. Wils.] (D.T. Rosenow, personal communication, 1995). Millo Blanco contributed to the development of the sorghum population PR5BR, a potentially good source of resistance to maize dwarf mosaic virus and to anthracnose.

The seeds of Millo Blanco are large and covered by heavy glumes with long awns. Panicle shape is semicompact, its stalk is dry (white midrib), it has strong adventitious roots, and purple plant color. It is reported to be highly tolerant to high concentrations of Mn and moderately tolerant to high Al concentrations (3). The line is a maintainer (B-line) in the A1 cytoplasmic-genetic male-sterile system. The critical photoperiod for Millo Blanco is 11.1 h or less, corresponding to the Class 1 category of Miller et al. (4). The high yield potential of Millo Blanco makes it an excellent forage crop for use in biomass production in the tropics and subtropics and as a valuable source line for the development of photoperiod-sensitive forage hybrids.

Recognition of the source should be indicated whenever this cultivar is used for research or breeding purposes. Seed will be maintained by and requests should be directed to the corresponding author for the first five years after registration, and thereafter from the USDA-ARS Tropical Agriculture Research Station, Box 70, Mayaguez, PR 00681, or the U.S. National Plant Germplasm System via Internet access to GRIN (5).

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References and Notes

Registration of ‘CU 263’ Tobacco

‘CU 263’ flue-cured tobacco (Nicotiana tabacum L.) (Reg. no. CV-112, PI 593657) was developed by the Clemson University Pee Dee Research and Education Center and was released in 1995 because of its resistance to the tobacco budworm (F.; syn. Helicoverpa virescens) and its good yield characteristics.

CU 263 was developed from the cross ‘Speight G-28’ (2) using the pedigree breeding method with initial selection in the F2 generation. The initial cross was made in 1976. Individual plants were selected through the F6 generation based on plant type and resistance to tobacco budworm. CU 263 was tested in the Flue-cured Tobacco Regional Small Plot Test in 1992 and 1994, and in the Regional Farm Test in 1993 and 1994. It was in the F11 generation at the time of release.

CU 263 is the first insect-resistant tobacco released in the United States. It has moderate resistance to tobacco budworm. The resistance is a type of antibiosis, and larval growth and survival on CU 263 are reduced. When budworm damage is visually rated, there is approximately 50% less damage on CU 263 than on ‘NC 326’ or ‘NC 203’. CU 263 is susceptible to tobacco aphid (Myzus nicotianae Blackman) and tobacco hornworm (Manduca sexta (L.)).

Days to flower for CU 263 is similar to NC 326, averaging 68 d after transplanting. CU 263 is normally topped at a height of 105 cm, and produces an average of 19.5 leaves per plant of medium length and width. The yield of CU 263 averaged 2856 kg ha⁻¹ for NC 2326 and 3010 kg ha⁻¹ in the 1994 Regional Farm Test (1). The Regional Farm Test encompasses 13 farms across a five-state area. Price per pound was better for CU 263 than the standard cultivars NC 2326 and NC 95.

Cured-leaf of CU 263 is predominantly orange in color, medium bodied, and smooth to medium textured. CU 263 met all standards for chemical content, smoke flavor, filling value, and usability established under the Minimum Standards Program for flue-cured tobacco.

CU 263 is widely adapted to the growing region of flue-cured tobacco and should be of particular value in areas where tobacco budworm is a persistent problem. Breeder seed of CU 263 will be maintained at the Pee Dee Research and Education Center. Foundation seed will be distributed by the South Carolina Foundation Seed Association, Clemson, SC 29634.

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References and Notes