

Registration of A/B N127-A/B N132 Grain Sorghum Parental Lines

SIX GRAIN SORGHUM [*Sorghum bicolor* (L.) Moench] A1 cytoplasmic-genetic male sterile parental lines, A/B N127 through A/B N132 (Reg. no. PL-247 through PL-252, PI 562605 through PI 562610), jointly developed by the USDA-ARS and the Agricultural Research Division, Institute of Agriculture and Natural Resources, University of Nebraska, were released in April 1992. These parental lines are unique in having been derived from the RP2B (1) population (developed from Ameri-

source of the germplasm if used in development of a new germplasm, parental line, cultivar, or hybrid.

J. F. PEDERSEN,* B. E. JOHNSON,
AND R. D. LEE (2)

References and Notes

1. Ross, W.M., S.D. Kindler, and H.L. Hackerott, T.L. Harvey, A. Sotomayor, O.J. Webster, and K.D. Kofoid. 1977. Registration of RP1R and RP2B Sorghum Germplasm. *Crop Sci.* 17:983.
2. J.F. Pedersen, USDA-ARS Wheat, Sorghum and Forage Unit, Dep. of Agronomy, Univ. of Nebraska, Lincoln, NE 68583-0915; B.E. Johnson and R.D. Lee, Dep. of Agronomy, Univ. of Nebraska, Lincoln, NE 68583-0915. Joint contribution of the USDA-ARS and the Nebraska Agric. Res. Div. Journal Series no. 10015. Registration by CSSA. Accepted 31 March 1993. *Corresponding author.

Table 1. Morphological and agronomic characteristics of 6 Nebraska A/B sorghum inbred lines and several common A-lines.

Inbred	Plant color†	Midrib color	Seed color	Plant height	Anthesis (50%)
				cm	days
N127	R‡	G††	W	110	83
N128	P	G	W	135	83
N129	P	G	W	115	87
N130	P	G	W	105	89
N131	P/R	W	W	110	83
N132	P	G	W	100	84
Wheatland	P	G	R	105	87
CK 60	P	G	W	120	83
Martin	P	G	R	110	77

† All data from 1992, Location = Lincoln, NE.

‡ R = red, P = purple.

†† G = green, W = white.

can and exotic lines from Uganda and from the Texas A&M-USDA/ARS Sorghum Conversion Program), and offer genetic diversity as potential seed parents, or as source material for continued sorghum improvement.

The six lines were developed from an original group of 150 RP2B S₁s produced by Dr. William Ross (USDA-ARS Research Geneticist, retired) in 1974. These were planted head to row at the University of Nebraska Agricultural Research and Development Center, Mead, NE, in 1975. In 1976 72 S₂s selected for acceptable plant type were crossed to A1 Martin/KS4 F₁. Eight backcrosses with continued selection for acceptable agronomic characters were made during the period 1977-1987 to develop the male-sterile version of each line. During 1989-1991, the lines were evaluated in yield trials at Mead and/or Lincoln, Nebraska, in hybrid combination using Tx432 and Tx2741 as males. Six A/B pairs, each with 11 backcrosses, were selected for release on the basis of fertility and uniformity. No breakdown of sterility at Lincoln, Mead, or North Platte, NE, was observed for these six parental lines.

Morphological and agronomic descriptions of N127 through N132 are shown in Table 1. Average hybrid yield performance at five location-year combinations (Mead and Lincoln, NE; 1989-1991) was comparable to commercial checks. No information is available for specific disease or insect reactions.

Germplasm quantities of seed of A/B N127 through A/B N132 will be maintained and distributed by the corresponding author upon written request. Recipients of seed are asked to make appropriate recognition of the

Published in *Crop Sci.* 33:1427-1428 (1993).