tions in grain quality and seed viability due to preharvest sprouting. Some variation in sprouting susceptibility exists among current cultivars; however, NY6432-18 and NY6708-18 both possess resistance that is superior to current soft white winter wheat cultivars when tested under field conditions in central New York State.

Both lines have acceptable agronomic characteristics. NY6432-18 is moderately high in yield, has a high test weight and good lodging resistance, is resistant to powdery mildew (caused by *Erysiphe graminis* DC. f. sp. *tritici* E. Marchal), and has satisfactory soft wheat milling and baking qualities. NY6708-18 has high grain yield, moderately low test weight, fair lodging resistance, moderate resistance to powdery mildew, and satisfactory soft wheat milling and baking qualities.

Small quantities of seed may be obtained from Mark E. Sorrells, Department of Plant Breeding and Biometry, 252 Emerson Hall, Cornell University, Ithaca, NY 14853.

M. E. SORRELLS AND A. H. PATERSON (2)

References and Notes


Registration of Parental Lines

REGISTRATION OF FOUR PARENTAL INBRED LINES OF MAIZE

N190, N192, N193, and N194 (Reg. no. PL-71, PL-72, PL-73, and PL-74) are yellow dent inbred lines of maize (*Zea mays* L.) developed at the University of Nebraska, Agricultural Research Division, Lincoln. The lines were developed with selfing and concurrent agronomic evaluation for hybrid performance at each stage of inbreeding.

N190 (Reg. no. PL-71) was selected from (CM105×B73)F2, a cross of an early (AES300) Stiff Stalk Synthetic (SSS) line developed at the Morden, Manitoba station in Canada with a midseason (AES800) SSS line developed at Iowa State University. Selection during selfing was primarily for appearance of CM105. The line looks very much like CM105 but flowers about 1 day later. When N190 is crossed with Mo17, the hybrid has outstanding yield and excellent root and stalk strength and is similar in maturity to ‘Pioneer Brand 3732’ based on yield trials grown at North Platte, NE. N190 is an S2 line, and its maturity classification is AES300.

N192 (Reg. no. PL-72) also was selected from (CM105×B73)F2 and is an S3 line. At each stage of inbreeding, plants were chosen for selfing that resembled B73 in appearance. The line looks much like B73, except the leaves are somewhat less upright, and the line flowers about 5 days earlier. When N192 is crossed with Mo17, the hybrid has excellent yield, good root strength, and adequate stalk strength. N192 is about AES600 maturity.

N193 (Reg. no. PL-73) and N194 (Reg. no. PL-74) are sister S4 lines selfed from the same S3. They were directly from a plant appearing in NK(B)RF2, an improved version of ‘Krug’. The plant that was initiated about 2 weeks earlier than other plants in the population may have been an outcross but almost certainly was a volunteer plant because it had a very tough ear, a trait common to Krug germplasm, and looked like two large ears, also a common trait in this population. N193 and N194 produce two ear shoots, but usually only the top ear. Silks are white and easily extruded. Yield, root strength, and stalk strength of several hybrids made with these lines crossed to early Stiff Stalk Synthetic lines have been very good. N193 × N194 has a slight vigor increase, allowing it to be used as female in seed production. Both N193 and N194 flower at about the same time as N190 and are, therefore, classified in maturity.

The lines will be maintained by sib-mating, and seeds may be purchased from the Department of Agronomy, University of Nebraska, Lincoln, NE 68853.

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References and Notes

1. Professor of agronomy, Univ. of Nebraska, Lincoln; and associate professor of agronomy, Univ. of Nebraska, North Platte Station. Published as paper no. 7735, Journal Series, Nebraska Agric. Res. Lab. Registration by the Crop Sci. Soc. of Am. Accepted 21 Oct. 1985.