REGISTRATION OF PARENTAL LINES

The milling and baking quality data indicated that the inbred lines range in kernel hardness from soft to very hard and dough-mixing properties from weak to strong.

Small quantities of seed of the nine germplasm lines are available from the authors or from Dr. R.M. de Pauw, Gene Resources of Canada, Res. Branch, Agric. Canada, Box 1030, Swift Current, Sask. S9H 0X2, Canada. Registration by the U.S. Dept. of Agriculture,博士 accepted 25 June 1984.

References and Notes
3. Sallans, B.J., and R.D. Tinline. 1965. Resistance in 'Neepawa' and 'Glenlea', obtained from the 1981 trials. The nine lines all had significantly lower root rot disease index ratings than Neepawa, implying that they were more resistant than Neepawa, which is classified as resistant (1). The nine lines differ substantially for field reaction to leaf and stem rust [caused by Puccinia recondita Rob. ex Desm. f. sp. tritici and P. graminis Pers. f. sp. tritici Eriks. and Henn.].

Four lines yielded significantly more grain than the control cultivar Neepawa. All lines were equal to or later maturing than Neepawa. The lines differed for height, seed size, and photoperiod response.

Registration of Parental Lines

REGISTRATION OF ND101 AND ND256
PARENTAL LINES OF MAIZE

ND101 and ND256 (Reg. no. PL67 and PL68) are yellow dent maize (Zea mays L.) inbred lines developed at the Agricultural Experiment Station, North Dakota State University, Fargo. These lines, alone and in hybrid combinations, were evaluated for yield and agronomic performance. Both inbreds were released in 1984 because of their apparent potential as parents to produce early hybrids with good yields, low ear moisture, and good resistance to lodging. These inbreds are adapted to short-season areas such as central and eastern North Dakota. Breeder seedstocks are maintained by the North Dakota Agricultural Experiment Station and can be obtained in germplasm quantities (50 kernels) from H.Z. Cross, Agronomy Dep., North Dakota State Univ., Fargo, ND 58105.

ND101 (Reg. no. PL67) was selected from nine generations of selfing and selection. It was medium tall with ear placement slightly below midpoint of the stalk. Plants have medium-long, wide leaves, and medium-sized tassel. Large diameter ears are medium to large, have from 16 to 20 rows of deep kernels. This inbred was susceptible to common root rot (Diplodia maydis) and root lodging resistance. It had near average GCA for grain yield, stalk lodging resistance, and grain moisture at harvest and below average GCA effects for root lodging resistance. Maturity classification AES 100.

ND256 (Reg. no. PL68) also was selected from nine generations of selfing and selection. It was susceptible to common root rot, stalk rot, eyespot, and northern leaf spot (caused by Diplodia maydis). It was also susceptible to common root rot, stalk rot, eyespot, and northern leaf spot (caused by Diplodia maydis). It was also susceptible to common root rot, stalk rot, eyespot, and northern leaf spot (caused by Diplodia maydis). It was also susceptible to common root rot, stalk rot, eyespot, and northern leaf spot (caused by Diplodia maydis) and second generation European corn borer. In diallel tests in eastern and central North Dakota, ND101 has demonstrated high specific combining ability (SCA) for yield with CM 105. Its general combining ability (GCA) for yield, stalk lodging resistance, and test weight. This inbred silks 5 days earlier than CM 105 at Fargo and is AES 100. Small quantities of seed of the nine germplasm lines are available from the authors or from Dr. R.M. de Pauw, Gene Resources of Canada, Res. Branch, Agric. Canada, Box 1030, Swift Current, Sask. S9H 0X2, Canada. Registration by the U.S. Dept. of Agriculture, November 1984.