REGISTRATION OF PARENTAL LINES

REGISTRATION OF SD40 PARENTAL LINE OF MAIZE

SD40 (Reg. no. PL-75) is a yellow dent maize (Zea mays L.) parental line developed at the Agricultural Experiment Station, South Dakota State University, Brookings, SD. This line was evaluated for agronomic performance in hybrid combination for yield and moisture. SD40 was released in March 1985 because of its potential to produce competitive hybrids for central and southern South Dakota.

SD40 was derived by selfing an individual plant of Pioneer Hybrid 3709. Selfing was practiced for eight generations with selection for desirable plant, ear, and root traits. SD40 was evaluated for 3 yr at Brookings and would be considered intermediate to late flowering because it silked 2 days after A632, 4 days after A619, 11 days after CM105, and 13 days after A654.

Plants are approximately 120-cm tall with ear placement approximately 75-cm above the ground. It is light green in appearance and has narrow and distinctly upright leaves, small tassels and a red cob. Ear length is about 15 cm and ears are borne on 7.5-cm shanks. There are from 12 to 14 rows of medium size kernels on each cob. Moisture content of the seed generally has been about 20% 60 days after pollination. It has good vigor, ear fill, stalk strength, and stay green, acceptable husk looseness, and roots. It has good combing ability with both A619 and A632, producing a 4-yr average of 8.34 Mg ha⁻¹ with A619 and 7.89 Mg ha⁻¹ with A632 compared to 8.36 Mg ha⁻¹ for Pioneer 3901 when tested at Brookings. Full location and year data are available on request.

Corncobor (Ostrinia nubilalis Hubner) resistance ratings on a 1 to 9 scale, averaged 3.00 in trials conducted in 1984–1985. SD40 has good resistance to northern corn leaf blight [Exserohilum turcicum (Pass.) Leonard & Suggs] and acceptable resistance to Diplodia stalk rot [Diplodia maydis (Berk.) Sacc.]. Breeder seedstocks are maintained by South Dakota Foundation Seeds and can be obtained in germplasm quantities (50 kernels) from South Dakota State University Foundation Seed, Box 2125, Brookings, SD 57007.

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REGISTRATION OF SD41 PARENTAL LINE OF MAIZE

SD41 (Reg. no. PL-76) is a yellow-dent inbred of maize (Zea mays L.) developed at the Agricultural Experiment Station, South Dakota State University, Brookings, SD. This line was evaluated for agronomic performance and in hybrid combination for yield and moisture. SD41 was released in March 1985, because of its potential to produce competitive hybrids for central and southern South Dakota.

SD41 was derived by selfing a single plant of the cross SDp309 X W64A. Selfing was practiced for eight generations with selection for desirable plant, ear, and root traits. At Brookings, SD41 is intermediate to late flowering, because reaction to leaf diseases similar to that of Newton. It is cyto- genetically stable.

Small quantities of seed of KS85WGRCo1 are available upon written request. It is requested that appropriate recogni-
tion of the source be given when this germplasm contributes to research or development of new cultivars. Seed stocks are maintained by the Wheat Genetics Resource Center, Department of Plant Pathology, Throckmorton Hall, Kansas State University, Manhattan, KS 66506.

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References and Notes


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