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The names reflect the close cooperation between the USDA-ARS Cereal Rust Laboratory (CER) and the University of Georgia (UGA): hence, Ceruga-1 through Ceruga-6.

Multiplication and purification of rust-tested, single-head selection progeny rows have been completed. Seed is available through the University of Georgia, USDA-ARS, Dep. of Agronomy, Griffin, GA 30223, and the USDA-ARS Cereal Rust Laboratory, University of Minnesota, St. Paul, MN 55108.

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## REGISTRATION OF PARENTAL LINES

## REGISTRATION OF B95 PARENTAL INBRED LINE OF MAIZE

INBRED B95 (Reg. no. PL-164, PI 561565) is a yellow dent maize (Zea mays L.) line developed cooperatively by the Iowa Agriculture and Home Economics, Experiment Station and the USDA-ARS. The line was released 20 Mar 1992 for its potential value in the production of hybrid seed and as source germplasm in pedigree selection breeding programs of the hybrid seed industry. Breeder seed of B95 is produced by self-pollination. Breeder seed is maintained by the Iowa Agriculture and Home Economics Experiment Station and is distributed (100 seeds per request) by the Committee for Agricultural Development, 23 Curtiss Hall, Iowa State University, Ames, IA 50011.

Inbred B95 was developed from a population of 'Iowa Corn Borer Synthetic No. 1' (BSCB1) after seven cycles of reciprocal recurrent selection [BSCB1(R)C7-55] (1). The other population in the reciprocal recurrent selection program was 'Iowa Stiff Stalk Synthetic' [BSSS(R)Cn]. The line was developed by single-seed descent without selection for seven generations of self-pollination. The line was included initially in the breeding and topcross nurseries at the  $S_7$  generation (F = 0.992). On the basis of topcross performance, the line was advanced by self-pollination in the breeding nursery and included in the crossing nursery to produce single-cross seed with B73 and B89. In singlecross evaluation trials conducted at three locations for 3 yr (1988–1990), its best performance was in crosses with inbred B73. Single-cross B73  $\times$  B95 yielded 14.1% more than B73  $\times$  Mo17 and 11.6% more than LH119  $\times$  LH51, but B73  $\times$  B95 had 29 g kg<sup>-1</sup> (2.9%) more grain moisture than B73  $\times$  Mo17 and 24 g kg<sup>-1</sup> (2.4%) more grain moisture than LH119  $\times$  LH51. Yield of B73  $\times$  B95 (8.88 t  $ha^{-1}$ ) was significantly greater [LSD (0.05) = 0.74 t  $ha^{-1}$ ] than the yields of B73  $\times$  Mo17 (7.78 t ha<sup>-1</sup>) and LH119  $\times$  LH51 (7.96 t ha<sup>-1</sup>). Incidence of stalk lodging was 4.7% and 2.4% less than B73  $\times$  Mo17 and LH119  $\times$  LH51, respectively. Percentage of root lodging in B73 × B95 was 4.6% greater than B73 × Mo17, but the greater root lodging was primarily because of the differences at one of the nine environments. B95 was evaluated in three-way crosses with B73  $\times$  B89 as the tester in the 1990 North Central Corn Breeding Research Committee (NCR-167) AES700 to AES800 maturity trials conducted in six states. B95  $\times$  (B73  $\times$  B89) had the greatest yield (8.93 t ha<sup>-1</sup>) of the 31 three-way crosses ( $\overline{X} = 7.69$  t ha<sup>-1</sup>) and the check hybrid B73  $\times$  Mo17 (8.76 t ha<sup>-1</sup>) included in the trials. B95  $\times$  (B73  $\times$  B89) had 20 g kg<sup>-1</sup> (2%) and 10 g kg<sup>-1</sup> (1%) more grain moisture than B73  $\times$  Mo17 and the experiment average, respectively.

B95 flowers 2 d later than B73 and Mo17 and has plant and ear heights similar to B73. Pollen production is good under most climatic conditions, but silk emergence tends to be delayed under heat and drought stress. Generally, plants produce one ear per plant at moderately high plant densities. Ears have 12 rows of yellow, flinty kernels on red cobs. Ears tend to be shorter than normal under stress. Plants are of moderate height with an upright leaf orientation. With artificial first-generation European corn borer (Ostrinia nubilalis Hübner) infestations, the resistance rating is four (1 = resistance and 9 = highly susceptible). B95 has good plant health with good root strength and excellent stalk strength. B95 has greater potential as a male than as a female in the production of single-cross seed. Maturity classification is AES800.

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