The remaining 204 plants ranged from 1 to 7% in their rubber content with an average of 2.4%. Open-pollinated seed obtained from those 204 plants were bulked to produce the Cal-5 germplasm.

The plants which contributed seed to Cal-5 were highly variable with respect to flowering date, degree of blooming, head size, seed size, amount of seed production, size, shape and color of leaves, and mode of branching. They ranged from 40 to 115 cm in their height and 60 to 165 cm in their spread. Their average for height and spread was 68.8 and 106.5 cm, respectively. Most of the F2 and BC1 plants were larger than diploid guayule plants of the neighboring rows which ranged 40 to 72 cm and 74 to 110 cm in their height and spread.

The McFarland nursery was found to be highly infected with Verticillium dahliae Kleb which eliminated many of the plants in late spring and early summer of 1981. Proportionately, however, the disease killed more diploid guayule plants (70%) than the plants derived from the interspecific hybridization (43%). The 204 F2 and BC1 plants used to produce Cal-5 remained healthy and appeared resistant to Verticillium wilt.

The Cal-5 germplasm is expected to increase the genetic variability currently available to guayule breeders and researchers. It combines the rubber producing capability of guayule with the desirable characteristics of P. tomentosum var. stramonium which are vigor, high biomass production and resistance to Verticillium wilt. Its further backcrossing to selected diploid guayule plants is expected to improve the rubber content of the later generations.

Limited quantities of seed are available for distribution until present supply is exhausted. Written requests for seed should be addressed to Dr. A. Estilai, Guayule Project, USDA Cotton Res. Stn., 17053 Shafter Avenue, Shafter, CA 93263.

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References and Notes


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REGISTRATION OF B88 GERMLASM

INBRED B88 (Reg. no GP-139) is a yellow, dent maize (Zea mays L.) inbred line developed by the USDA Cotton, Economics Experiment Station and the USDA-ARS. The line was released because of its potential in programs of the hybrid seed industry. The line, produced by self pollination, is maintained by the Iowa Agriculture and Home Economics Experiment Station and distributed in germplasm quantities by the Committee for Agricultural Development, Dept. of Agronomy, Iowa State University.

Inbred B88 was developed from BS6(RC)C2. BS6 was obtained by crossing BSCB1(C)2, two populations in a reciprocal recurrent selection program (1). After four generations of sib mating by hand pollinations, BS6 was chosen as a recurrent selection. The tester for BS6 was BSCB1(C)2; i.e., for BS6 was BSCB1(C). B88 was selected from BS6 which were recombined to give BS6(RC)C7. B88 is similar to B73 for dates of pollen shed, silk emergence.