REGISTRATION OF F-1072 LIMA BEAN GERMPLASM

F-1072 LIMA BEAN (Phaseolus lunatus L.) germplasm (Reg. no. GP-45) was released by SEA-USDA in 1978. It is resistant to races A, B, and C of downy mildew (caused by Phytophthora phaseoli Thaxt.), but is susceptible to race D (1). It has a bush growth habit and is a 'Fordhook'-type lima bean with green cotyledons.

F-1072 arose from a cross of P.I. 195342 and F-369. P.I. 195342, resistant to races A, B, and C of downy mildew, is a pole-type lima bean from Guatemala with small, white seeds. F-369, a sister line of F-169 (2), has a bush growth habit and produces Fordhook-type seeds with green cotyledons.

Populations were grown and screened for mildew resistance in the greenhouse at Beltsville, MD. Seeds were bulked from plants in the F7 generation that were similar in growth habit, homozygous for mildew resistance, and produced seeds with green cotyledons.

In field tests in Delaware, Maryland, and New Jersey, F-1072 yielded slightly less than 'Fordhook 242'. It reached the prime marketable stage of maturity in 73 days and produced plants and seeds slightly smaller than those of Fordhook 242.

F-1072 offers combined resistance to races A, B, and C of downy mildew. Its green seed coat and cotyledons enable it to maintain high quality for several days. Small quantities of seeds can be obtained from the Plant Pathology Lab., Plant Protection Inst., Beltsville Agric. Res. Ctr., Beltsville, MD 20705.

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References and Notes


REGISTRATION OF CAL-5 GUAYULE GERMPLASM

CAL-5 (Reg. no. GP5) is a product of interspecific hybridization between the rubber bearing shrub, guayule (Parthenium argentatum Gray) and its nonrubber producing tree-like relative, P. tomentosum var. stramonium (Green) Rollins (1). It was released by the University of California, Davis in 1984.

In October 1980 several thousand F2 and BC1 seedlings derived from crosses of the above species were planted in a 4 ha breeding nursery near McFarland, CA. For comparison and further backcrossing, a row of selected diploid guayule seedlings was also planted after each four rows of the F2 and BC1 plants.

Early samplings of 150 F2 and BC1 plants at the age of nine and 15 months showed that the majority of the plants sampled did not contain rubber. The next sampling for the rubber content was made from November 1982 through February 1983 when plants were 26 to 28 months old. Approximately 81% of the 1109 F2 and BC1 plants sampled had either no rubber or their rubber content was less than

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