REGISTRATION OF C35/1 AND C35/2
SUGARBEET GERMPLASMS

SUGARBEET (Beta vulgaris L.) germplasms C35/1 (Reg. no. GP88) and C35/2 (Reg. no. GP89) were released in 1983. These lines were developed by USDA-ARS, in cooperation with the California Beet Growers Association, Ltd., and the Beet Sugar Development Foundation. Both of these lines have a high level of resistance to bacterial vascular necrosis and half that of Speight G-28. The disease index of Bel 921 was 2.3 and that of Speight G-28 4.5.

REGISTRATION OF C40
SUGARBEET GERMPLASM

SUGARBEET GERMPLASM (Beta vulgaris L.) C40 (Reg. no. GP90) was released in 1983. This line was developed by USDA-ARS, in cooperation with the California Beet Growers Association, Ltd. and the Beet Sugar Development Foundation. This line was developed for its susceptibility to bacterial vascular necrosis and rot incited by Erwinia carotovora betavasculorum. Seed stocks will be maintained at the U. S. Agric. Res. Stn., P. O. Box 5098, Salinas, CA 93915. Small quantities of seed will be provided to sugarbeet breeders upon written request.

C40 is a self-sterile, multigerm, green hypocotyl line developed from previously released C13 (Reg. no. PL5). C40 is highly susceptible to Erwinia root rot (98% infection). C40 was derived from C13 by two cycles of mass selection for susceptibility to Erwinia (1). Halves of photothermally induced sugarbeet were selected for seed production on the basis of the susceptibility of their corresponding halves in the greenhouse to several isolates of the bacterium. C40 should be similar to C13 for curly top and virus yellows resistance but it bolts easier than C13. Some of the plants in C40 will be cytoplasmic male sterile or partially male sterile. C40 should be useful as a standard susceptible check in evaluating environmental variation in field tests, greenhouse tests, or selection plots inoculated with Erwinia. It may also be useful in a breeding program as a topcross tester for screening progenies for reaction to Erwinia.

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References and Notes


REGISTRATION OF BEL 921 BROWN SPOT RESISTANT FLUE-CURED TOBACCO GERMPLASM

Bel 921 is a flue-cured tobacco (Nicotiana tabacum L.) (Reg. no. GP20) breeding line. Bel 921 was developed from a cross of 'NC 95' X Beinhart 1000-1 (TI 1561) and advanced to the F2 generation. A brown spot resistant plant was then crossed to 'Speight G-28' and advanced to the F3 generation and backcrossed to Speight G-28. Bel 921 was in the F3 generation from the last cross when released on 1 July 1982. The line was developed by the USDA-ARS. Bel 921 was released primarily because of its resistance to brown spot which is a serious foliage disease of tobacco in the Southeastern United States. The disease is caused by the fungus Alternaria alternata (Fr) Deissl. Beinhart 1000-1 has a much higher level of resistance to brown spot than has previously been obtained in flue-cured tobacco (2,3) and is the major source of brown spot resistance in Bel 921. NC 95 and Speight G-28 are flue-cured cultivars with moderate tolerance to brown spot. In 3 years of replicated tests in Beltsville, Md., brown spot severity on Bel 91 averaged about half that of Speight G-28. The disease index of Bel 921 was 2.3 and that of Speight G-28 4.5.

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References and Notes