## Registration of Germplasms

### REGISTRATION OF FC 902 SUGARBEET GERMPLASM

_G. A. Smith and J. O. Gaskill*

FC 902 is a sugarbeet breeding line developed by SEA, USDA in cooperation with the Beet Sugar Development Foundation and the Colorado State University Experiment Station. FC 902 is multigerm diploid and is mostly self-fertile, segregating for genetic male-sterility (about 11% male-sterile plants). It has moderate resistance to both cercospora leaf spot, incited by *Cercospora beticola*, and the curly top virus. FC 902 is about equal to US 41 in curvy-top resistance; its leaf spot resistance is somewhat less than that in US 201. FC 902 was developed from the pool of three individual plant progenies derived from FC 901. The reciprocal topcross method was used to identify FC 901 genotypes with superior resistance to cercospora leaf spot. Results have indicated that FC 902 has good combining ability for sucrose content and sucrose yield. FC 902 flowers after short photothermal induction. FC 902 is recommended for use as a pollinator if resistance to leaf spot and curly top are needed.

Breeder seed is maintained by the SEA, USDA, and is provided to sugarbeet breeders in quantities adequate for reproduction upon written request. Requests for seed should be made to Dr. G. A. Smith, USDA-SEA, Crops Research Laboratory, Colorado State University, Fort Collins, CO 80523.

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### REGISTRATION OF SIX SUGARBEET GERMPLASM LINES

_G. A. Smith and J. O. Gaskill*

Six sugarbeet (*Beta vulgaris* L.) breeding lines were developed by SEA, USDA in cooperation with the Beet Sugar Development Foundation and the Colorado State University Experiment Station. These lines have resistance to cercospora leaf spot, incited by *Cercospora beticola* Sacc. These lines are diploid and flower after short photothermal induction.

**FC 504 (GP No. 42)** is the monogerm, pollen-fertile maintainer line (type 0) of FC 504 CMS. The line has moderate high resistance to cercospora leaf spot (about equal to that in US 201). FC 504 is an inbred line derived from an original cross of US 216 multigerm × SLC 101 monogerm. The line has exhibited good combining ability for root yield.

**FC 504 CMS (GP No. 45)** is the cytoplasmic male-sterile monogerm equivalent of FC 504. FC 502/2 (GP No. 44) is the monogerm, pollen-fertile maintainer line of FC 502/2 CMS. The line has moderate high resistance to cercospora leaf spot (about equal to that in US 201). The inbred line was developed from a cross between SP 561012-0 and US 201.

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