

**PI 599669. *Beta vulgaris* L.**

Breeding. Population. FC 727. Pedigree - FC703 (50% of the genetic contribution) and three high sucrose sources - Polish AJ, -ZZ (16%), the Spanish line Aula Dei 13 (21%), and American Crystal's 67-436 (13%). Eight generations of mass selection for resistance to *Rhizoctonia* root rot and four simultaneous generations of mass selection of individual roots for high sucrose. Multigerm (MM), non O-type, and 51% green hypocotyls. Excellent resistance to *Rhizoctonia* root rot when tested under strong disease pressure. Some resistance to *Cercospora* leaf spot. No tolerance to curly top virus. Relatively good combining ability for sucrose yield when used as a pollinator on several diverse CMS lines. Potential for use as pollinator or population from which to choose pollinators with good combining ability. Should contribute to synthesis of high sucrose hybrids with resistance to *Rhizoctonia* root rot.

The following were collected by Peter Kulakow, Kansas State University, Department of Agronomy, Crop, Soil, and Range Sciences, Manhattan, Kansas 66506-5501, United States; Denise K. Klenda, Kansas State University, Department of Agronomy, 2004 Throckmorton Hall, Manhattan, Kansas 66506-5501, United States; Michael Horak, Kansas State University, Department of Agronomy, 2004 Throckmorton Hall, Manhattan, Kansas 66506-5501, United States. Donated by Denise K. Klenda, Kansas State University, Department of Agronomy, 2004 Throckmorton Hall, Manhattan, Kansas 66506-5501, United States. Received 10/10/1997.

**PI 599670. *Amaranthus arenicola* I. M. Johnst.**

Wild. A; Ames 23972. Collected 08/13/1997 in Kansas, United States. Latitude 37 deg. 58' 19'' N. Longitude 100 deg. 51' 26'' W. 1 mile east of Garden City, Finney County. Soil sandy, near the Arkansas River.

**PI 599671. *Amaranthus arenicola* I. M. Johnst.**

Wild. B; Ames 23973. Collected 08/13/1997 in Kansas, United States. Latitude 37 deg. 48' 31'' N. Longitude 100 deg. 27' 15'' W. 1 mile south of Ingalls, Gray County. Soil sandy, near the Arkansas River.

**PI 599672. *Amaranthus arenicola* I. M. Johnst.**

Wild. C; Ames 23974. Collected 08/13/1997 in Kansas, United States. Latitude 37 deg. 43' 55'' N. Longitude 99 deg. 56' 6'' W. Fort Dodge, Ford County. Soil sandy, near the Arkansas River.

**PI 599673. *Amaranthus arenicola* I. M. Johnst.**

Wild. D; Ames 23975. Collected 08/13/1997 in Kansas, United States. Latitude 37 deg. 55' 23'' N. Longitude 99 deg. 24' 34'' W. Kinsley, Edwards County. Soil sandy, near the Arkansas River.

The following were developed by David A. Dierig, USDA, ARS, U.S. Water Conservation Laboratory, 4331 E. Broadway, Phoenix, Arizona 85040, United States. Received 11/18/1997.

**PI 599674. *Parthenium argentatum* A. Gray**

Breeding. Population. AZ-1. Compared in field tests to the released lines N565 and 11591 after 2 and 3 years of growth. Produced more rubber after 2 and 3 years and more biomass after 3 years than the checks.