REGISTRATION OF A GERMLASM LINE
OF SOYBEAN
(Reg. No. GP 18)
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The soybean [Glycine max (L.) Merr.] line, A1, was developed cooperatively by the Iowa Agriculture and Home Economics Experiment Station, ARS, USDA, and the Ohio Agricultural Research Development Center. This group III maturity breeding line, resistant to race 3 of Phytophthora var. sojae A. A. Hildebr., is released for use in soybean breeding programs.

A1 is an F₃ selection from the cross 'Anoka' X 'Wayne' and offers resistance to phytophthora rot race 3 is derived through Mack. Arskoy and Mack are resistant.

A1 matured 2 days later than 'Wayne' and has purple flowers, tawny pubescence, and black hilum. Agronomic characteristics are shown.

Seeds of A1 will be maintained and distributed by the Committee for Agricultural Development, Iowa State University, Ames, IA 50010.

REGISTRATION OF SIX SUNFLOWER PARENTAL LINES
(Reg. No. PL 1 to 6)
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Six confectionery sunflower (Helianthus annuus L.) inbred lines were developed cooperatively by the North Dakota and Texas Agricultural Experiment Stations and the ARS, USDA. The lines were released because of their potential value in production of high-yielding, rust-resistant (Puccinia helianthi Sch.) confectionery hybrids and for further use in breeding programs. 'HA 285,' 'HA 286,' 'HA 287,' and 'HA 288' are inbred lines with normal cytoplasm, which were converted to cytoplasmic male-sterility for use as female parents in production of hybrid seed. 'RHA 280' and 'RHA 282' are fertility-restorer lines, with potential variable as male parents.

HA 285 (Reg. No. PL 1) was reselected from Menn RR-18-1, which traces to the large-seeded rust-resistant variety 'Mennonite RR,' developed by Agriculture Canada, Morden, Manitoba. HA 285 is early in maturity and rust-resistant. It has black seeds (achenes) with white stripes. It contributes high yield and high test weight to hybrids.

HA 286 (Reg. No. PL 2) was selected from a large-seeded open-pollinated variety from Israel. It has a vigorous plant type, midseason maturity, and rust-resistant. Seeds are black stripes and somewhat irregularly shaped. HA 286 are extremely vigorous, with good yields.

HA 287 (Reg. No. PL 3) was selected from 'MG4,' Mennonite RR, 'Mingren,' and 'Comin' line selected from the variety 'Mennonite' in Minnesota, Crookston, Minn. HA 287 is short in maturity, and rust-resistant. Seeds are black and with a relatively large nutmeat (kernel).

HA 288 (Reg. No. PL 4) was selected from MG4. It has a vigorous plant type. It is highly self-fertile and results in good seed yields. HA 288 is midseason and resistant to rust. Seeds are thin-hulled with white stripes.

RHA 280 (Reg. No. PL 5) was selected from large-seeded confectionery variety 'Sundak.' It has purple flowers, tawny pubescence, and the seed has a black hilum. Agronomic characteristics are acceptable.

RHA 282 (Reg. No. PL 6) was developed in the Rf₂ gene for fertility restoration of male-sterile lines into a line selected from 'Bonita Giant Manchurian' X 'Mennonite RR.' RHA 282 has male-sterile cytoplasm, possesses rust-resistant. It has black seeds with white stripes. Hybrids produced have been high-yielding, with a high percent of black seeds.

RHA 282 (Reg. No. PL 6) was developed in the Rf₂ gene for fertility restoration of male-sterile lines into a line selected from 'Bonita Giant Manchurian' X 'Mennonite RR.' RHA 282 has male-sterile cytoplasm, but carries a low frequency of plant type of basal branching, which extends the production. RHA 282 seed color is predominantly black stripes, but seeds with a brown color are prevalent. RHA 282 contributes high yield to its hybrid progeny and seed production.