REGISTRATION OF WISCONSIN 183, 729, AND 741 PEA GERMPLASM
(Reg. Nos. GP 5, 6, and 7)

Earl T. Gritton and D. J. Hagedorn

These three sources of pea (Pisum sativum L.) germplasm were released in 1968 by the University of Wisconsin Agricultural Experiment Station. They were released for reselection or for use as parental material in breeding programs. They are somewhat variable within each line.

Wisconsin 183 (Reg. No. GP 5) was in the F₃ generation when released. The selection from which 'Delwiche Commando' was later released was one of the several parents, but the others are unknown. Plant height is about 70 cm; number of nodes is 19; and first pod at node 15. There are about five pods per plant with four peas per pod. Blossom date is about the same as the cultivar 'New Line Early Perfection', or 3 days later than 'New Season'. Peas are dark green at the processing stage. Seeds are small wrinkled and green. This germplasm is resistant to fusarium wilt (Fusarium oxysporum f. pisi race 1) and bean virus 2. It is variable for resistance to fusarium near-wilt (Fusarium oxysporum f. pisi race 2). It has high processing quality.

Wisconsin 729 (Reg. No. GP 6) is primarily of interest because of its disease resistance. It is the result of a cross between 'Oregon State University 42' × 'New York 59-29'. It was in the F₉ generation when released. Plant height is 105 cm, number of nodes is 24; first pod node about 17. Blossom date is about 1 week later than New Season. There are approximately 8 or 9 pods per plant with five peas per pod. The shelled peas at the processing stage are slightly lighter in color than most freezer varieties. Seeds are large, wrinkled, green to cream. Resistance to powdery mildew (Erysiphe polygoni D.C.), fusarium wilt, fusarium near-wilt, and bean virus 2.

Wisconsin 741 (Reg. No. GP 7) resulted from the same cross as Wisconsin 729, and was also in the F₉ generation when released. Its plant height is about 95 cm, number of nodes 25, and first pod node 20. It blossoms about 1 day later than Wis. 729. There are approximately six pods per plant with 5 or 6 peas per pod. Shelled fresh peas are slightly lighter in color than most freezer varieties. Seeds are large, wrinkled, green to cream. Resistance to powdery mildew and bean virus 2 is carried by this germplasm.

Small amounts of seed of these germplasms are available from either the Department of Agronomy or Department of Plant Pathology, University of Wisconsin.

REGISTRATION OF WISCONSIN 7106 PEA GERMPLASM
(Reg. Nos. GP 8 and 9)

D. J. Hagedorn and Earl T. Gritton

The University of Wisconsin Agricultural Experiment Station has developed and released two new pea (Pisum sativum L.) germplasm-resistant to the pea seed-borne mosaic virus (sometimes called the pea fizzle-top virus). Resistance was obtained from USDA Plant Introduction 1988 and 1989.

Wisconsin 7105 (Reg. No. GP 8) was developed between 'New Season' and the two Plant Introduction lines mentioned above. This germplasm is in the F₂ generation, and the specific morphological and physiological characters of the plants are somewhat variable and fixed; generally the determinate, medium green, 60 cm long and has 2 pods per node with 4 or 5 peas per pod. Seeds are green and wrinkled. Resistance to the pea seed-borne mosaic virus is the most distinguishing characteristic.

Wisconsin 7106 (Reg. No. GP 9) is the result of a cross between 'Dark Skin Perfection' and the two Plant Introduction lines mentioned previously. Plant type in this germplasm is in the F₉ generation, characterized by dark green, determinate variety, 60 cm long, bearing mostly 2 pods per node, with 4 or 5 peas per pod. Seeds are wrinkled and green. It is distinctive in being resistant to the pea seed-borne mosaic virus.

Wisconsin 7105 and 7106 are being used as parental lines either the Department of Agronomy or Department of Plant Pathology, University of Wisconsin, Madison.

Registration of Parental Lines

REGISTRATION OF SUGARBEET PARENTAL LINES
(Reg. Nos. PL 1 to 6)

J. S. McFarlane, I. O. Skoyen, and R. T. Lewellen

The following sugarbeet (Beta vulgaris L.) inbred, cytoplasmic male-sterile, and open-pollinated parental lines were developed through research at the University of Wisconsin: C562 (Reg. No. PL 1) -- A type 0 selfed with moderate resistance to both fusarium wilt and bean virus 2. It represents an increase of an S₉ selection from the multigerm NB1 inbred and the monogerm inbred. The line contributes increased sucrose concentration to hybrid combinations. Plant vigor and first pod node 20. It blossoms about 1 day later than New Season. There are approximately six pods per plant with five peas per pod. Blossom date is about the same as the cultivar 'New Line Early Perfection', or 3 days later than 'New Season'. Peas are dark green at the processing stage. Seeds are large, wrinkled, green to cream. Resistance to powdery mildew and bean virus 2 is carried by this germplasm.

Small amounts of seed of these germplasms are available from either the Department of Agronomy or Department of Plant Pathology, University of Wisconsin.

Beet Sugar Development Foundation, and Growers Association. Seed of the lines is maintained at the U.S. Agricultural Research Station, P.O. Box 5098, Salinas, California.

C562 (Reg. No. PL 1) -- A type 0 selfed with moderate resistance to both fusarium wilt and bean virus 2. It represents an increase of an S₉ selection from the multigerm NB1 inbred and the monogerm inbred. The line contributes increased sucrose concentration to hybrid combinations.