dominantly medium-size yellow seeds. They may contain as much as 20%, white seeds. Their panicles are semi-compact, and the cultivars are lodging resistant. They produce short, upright, dark green leaves. All three carry the Pg2 and Pg4 genes for reaction to stem rust. They are susceptible to the Cloning race of Ustilago avenae (Per). Rest, and to barley yellow dwarf virus. By definition, Multiline M68, Multiline M69, and Multiline M70 cultivars are heterogeneous for crown rust reaction. Each is a cultivated unit with population resistance to P. coronata avenae. Multiline denotes that the cultivar is a composite of near-isogenic lines; M denotes midseason maturity; 68, 69, or 70 denotes the year in which foundation seed lots of specific cultivars were released. As additional near-isogenic lines with new crown rust resistance genes become available and (or) race structure of the crown rust population changes, composition of the Multiline M oat cultivars will be changed to provide the best possible protection from the crown rust fungus. Future cultivars will be named in accordance with the naming system outlined herein.

Breeder seed of near-isogenic lines used in the development of Multiline M oat cultivars is distributed by the Iowa Agriculture and Home Economics Experiment Station, Iowa State University, Ames, Iowa.

REGISTRATION OF WISCONSIN PEA CULTIVARS

(Reg. Nos. 2 to 6)

Earl T. Gritton and D. J. Hagedorn

The University of Wisconsin Agricultural Experiment Station has released five processing pea (Pisum sativum L.) cultivars. Four of these, "Wisconsin 7101," "Wisconsin 7102," "Wisconsin 7103," "Wisconsin 7104," are resistant to the powdery mildew disease (Erysiphe polygoni DC) which has been of increased concern in the midwest in recent years. The fifth cultivar, "Wisconsin 7107," exhibits modified foliage characteristics due to reduced stipule size.

Powdery mildew resistance was obtained from a selection originating in the cross 'Oregon State University 42' × 'New York 50-29.' The reduced stipule character, due to the gene st, and carried on chromosome III, was transferred from two lines, numbers 565 and 1493, developed at the Weibullsholm Plant Breeding Institution, Landskrona, Sweden.

Wisconsin 7107 (Reg. No. 2) is a freezer type developed by backcrossing the Wisconsin powdery mildew resistant selection to the recurrent parent, 'Sprite.' Progeny of the fourth backcross mating were advanced to the F2 generation, where resistant plants with desirable type were selected. Seed harvested from these plants has been increased for distribution. Wisconsin 7101 closely resembles the recurrent parent, 'Sprite,' but differs from other cultivars of this type in possessing good resistance to the powdery mildew disease. It is a determinate-vined pea of about 60 cm height with 15 or 16 nodes. The first pod is formed on the 11th node and there are generally 2 pods per node and at least 5 pods per plant. There are at least 5 peas per pod. The vines, pods, and shelled peas are medium green. Processing stage is reached at about 63 days. This cultivar closely resembles New Season except for its reduced stipules. The small stipules may permit greater light penetration into the canopy and allow better aeration, resulting in the reduction of physiological and pathological problems now encountered.

Wisconsin 7101, 7102, 7103, 7104, and 7107 are being made available as public cultivars.

REGISTRATION OF CUTLER 71 SOYBEAN

(Reg. No. 89)

A. H. Probst1, F. A. Lavolette2, J. R. Wilcox3, K. L. Athow4, and T. S. Abney5

'CUTLER 71' soybean [Glycine max. (L.) Merr.] is the composite of six F2 lines from the cross Cutler × Kent-Rps rps-SL5. Hybridization, selection, and the development of Cutler 71 were done at the Purdue University Agricultural Experiment Station in cooperation with the Plant Science Research Division, Agricultural Research Service, U. S. Department of Agriculture. Before release Cutler 71 was designated G481.

Cutler 71 was grown in Uniform Regional Tests in 1969-1970 by research workers of the U. S. Regional Soybean Laboratory and releasing agricultural experiment stations in Delaware, Illinois, Indiana, Kansas, Kentucky, Missouri, and Nebraska. Cutler 71 was also tested in California, Maryland, New Jersey, Ohio, and Texas.

Cutler 71 was released because of its resistance to phytophthora root rot. Cutler 71 and Cutler are similar in yield and other characteristics in the absence of phytophthora root rot. Both

1 Registered by the Crop Science Society of America. Received July 18, 1971.
2 Associate Professor of Agronomy and Professor of Plant Pathology, University of Wisconsin, Madison, 53706.
3 Registered by the Crop Science Society of America. Contribu-
4 tion from the Purdue University Agricultural Experiment Sta-
5 tion, Lafayette, Ind. 47907, and Plant Science Research Division of the Purdue University Agricultural Experiment Station and publication No. 699 of the U. S. Regional Soybean Laboratory. Received November 1971.
6 Research Agronomist, Research Geneticist, and Research Plant Pathologist, Plant Science Research Division, ARS, USDA, and Professor and Associate Professor of Agronomy, and Assistant Professor of Plant Pathology, respectively, Purdue University, Lafayette, Ind.
7 Associate Professor and Professor of Plant Pathology, respect-
8 ively, Purdue University, Lafayette, Ind.