REGISTRATION OF BONUS SOYBEAN1
(Reg. No. 90)

A. H. Probst2, F. A. Laviolette3, J. R. Wilcox4,
K. L. Athow4, and T. S. Abney4

'BONUS' soybeans Glycine max (L.) Merr.] is an F1 plant selection from the cross [C1266R (Sel. from 'Harosoy' × C1079) × C1253 (Sel. from 'Blackhawk' × Harosoy)]. Hybridization, selection, and preliminary testing were done at the Purdue Agricultural Experiment Station in cooperation with the Plant Science Research Division, Agricultural Research Service, U. S. Department of Agriculture.

Following preliminary testing from 1969-1968, this strain was designated CI474 and evaluated in 49 regional tests in 1969-1970. The tests were conducted by research workers of the U. S. Regional Soybean Laboratory, Plant Science Research Division, Agricultural Research Service, and cooperating agricultural experiment stations in California, Delaware, Illinois, Indiana, Kansas, Kentucky, Maryland, Missouri, Nebraska, New Jersey, Ohio, and Texas. Bonus was released on August 1, 1971.

Bonus is an early Group IV variety maturing 2 days earlier than 'Cutler 71' and 7 days earlier than 'Kent.' Yield of Bonus is similar to 'Cutler' or Cutler 71, and slightly higher than that of Kent. The soybean has long percentage points higher in protein than either Cutler 71 or Kent and is similar in oil percentage. Bonus is approximately 5 cm taller than Cutler 71 and 10 cm taller than Kent. Bonus has purple flowers, gray pubescence, brown pods, and dull yellow seeds with imperfect black hila. One hundred seeds weigh approximately 17.4 g. It is resistant to phytophthora rot and susceptible to frogeye leaf spot race 2.

Bonus is adapted as a full-season variety from approximately 37° to 40° N latitude in the United States. Purdue University Agricultural Experiment Station, Lafayette, Indiana 47907, will maintain breeder seed.

REGISTRATION OF AMSOY 71 SOYBEAN1
(Reg. No. 91)

A. H. Probst, F. A. Laviolette, J. R. Wilcox,
K. L. Athow, and T. S. Abney

'AMSOY 71' soybean [Glycine max (L.) Merr.] is the composite of four F1 lines from the backcross Amsoy4 × C1253 (Blackhawk × Harosoy). Hybridization, selection, and development of Amsoy 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 its release in 1970, Amsoy 71 was designated as CX407BC. The four lines composed as Amsoy 71 were CX407BC-50, -58, -310 and -326. These lines had been tested individually in Indiana in the period 1967-1969 and proved nearly identical.

The four lines were evaluated in Uniform Regional Tests in 1969, prior to testing as Amsoy 71, by research workers of the U. S. Regional Soybean Laboratory and releasing agricultural experiment stations in Illinois, Iowa, Indiana, Michigan, Minnesota, Missouri, Nebraska, Ohio, South Dakota and Ontario, Canada. Amsoy 71 also was tested in California, Kansas, New Jersey and Wisconsin.

Amsoy 71 was released because of its resistance to phytophthora rot. Amsoy 71 and Amsoy are similar in yield and other characteristics in the absence of phytophthora rot. Both varieties have purple flowers, gray pubescence, tan-colored pods and shiny yellow seeds with yellow hila.

Amsoy 71, like Amsoy, is of group II maturity and is adapted to approximately 40° to 43° N latitude in the United States. The Purdue University Agricultural Experiment Station will maintain breeder seed.

REGISTRATION OF COLUMBUS SOYBEAN1
(Reg. No. 92)

E. L. Mader and C. D. Nickell

'COLUMBUS' soybeans Glycine max (L.) Merr] originated as a F1 plant selection at the Kansas Agricultural Experiment Station from a cross made at the Purdue Agricultural Experiment Station, C1069 ('Lincoln X Ogden') × 'Clark.' Before its release in 1971, Columbus was designated K62-7221.

Columbus was in preliminary tests in 1964 and 1965, conducted by research workers of the U. S. Regional Soybean Laboratory, Plant Science Research Division, Agricultural Research Service, and releasing experiment stations in Oklahoma and Kansas. It also has been tested in California, Delaware, Illinois, Indiana, Kentucky, Maryland, Mississippi, Missouri, Nebraska, New Jersey, Ohio, and Virginia.

Columbus is of late Group IV maturity, averaging eleven days later than 'Clark 63' and 4 days later than Kent and is best adapted to Oklahoma and Kansas. It is similar to 'Kent,' Clark 63, and 'Cutler' in growth type, seed appearance, and chemical composition. It has purple flowers, tawny pubescence, brown pods, and shiny-yellow seeds with black hila. The chief advantage of Columbus is that it yields more than Clark 63, Cutler, or Kent in Kansas and Oklahoma.

Columbus is resistant to shattering and moderately resistant to purple seed stain. It is susceptible to phytophthora rot and bacterial pustule. Additional information on Columbus has been published.

The Kansas Agricultural Experiment Station will maintain breeder seed.

REGISTRATION OF MACK SOYBEAN1
(Reg. No. 93)

C. E. Caviness, R. D. Riggs, and H. J. Walters

'MACK' soybeans (Glycine max (L.) Merr.) was developed by the Arkansas Agricultural Experiment Station in cooperation with the U. S. Regional Soybean Laboratory. Prior to its release in 1971, Mack was identified as R68-105. It is classed as maturity group V and is resistant to Phytophthora megasperma var. sojae, A. A. Hilde, causal agent of phytophthora rot and race 3 of soybean-cyst nematode, Heterodera glycines, Ichi- nohe. Mack originated from a bulk of seven uniform F1 lines from the cross [NC25 (3) × 86D15-1612] × RA9-12-2 × 'Lee 68.' The parents of Mack have the varieties 'Peking,' 'Scott,' 'Lee,' and a sister line to 'Davis' in their background.

The combined resistance of Mack will provide growers with a productive variety of group V maturity that is suited for plant-