Registration of Crop Cultivars

REGISTRATION OF POMONA SOYBEAN
(Reg. No. 108)
C. D. Nickell and F. W. Schwenk

‘POMONA’ soybeans (Glycine max (L.) Merr.) originated as a F, plant selection at the Kans. Agr. Exp. Stn. from a cross made at the Purdue Agr. Exp. Stn., CL266 [‘Harosoy’ × (‘Lincoln × Ogden’)] × CL265 [‘Harosoy’ × (‘Lincoln × Ogden’)]. Before its release in 1974, Pomona was designated K1004.

Pomona was in preliminary tests in 1972 and uniform tests in 1973 and 1974, conducted by research workers of the ARS, USDA and coop. exp. stns. in Illinois, Kansas, Missouri, Delaware, Indiana, Iowa, Kentucky, Maryland, Nebraska, New Jersey, Ohio, Oklahoma, Pennsylvania, Texas, Virginia, and Mississippi.

Pomona is of Group IV maturity, averaging 5 days later than ‘Cutler 71’ and the same as ‘Kent.’ It is best adapted to Illinois, Kansas, and Missouri. It is similar to Cutler 71 and Kent in growth type, seed appearance, and chemical composition. It also has purple flowers, tawny pubescence, brown pods, and seeds with black hila. Seeds are yellow with a dull-coat luster. The chief advantage of Pomona is that it yields more than Cutler 71 and Kent and shatters less than Kent.

Pomona resists frog eye (race 2) leaf spot (Cercospora sojina) and powdery mildew (Microsphaera diffusa). It is susceptible to phytophthora rot (Phytophthora sojae) and bacterial pustule (Xanthomonas phaseoli var. sojensis). Pomona has a high level of tolerance to the herbicide (metribuzin).

The Kansas Agr. Exp. Stn. will maintain breeder seed.

1Registered by the Crop Science Society of America. Contribution no. 1459, Department of Agronomy and contribution no. 619, Department of Plant Pathology, Kans. Agr. Exp. Stn. Received Nov 18, 1974.

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REGISTRATION OF MARYLAND 64 TOBACCO
(Reg. No. 78)
C. G. McKee

‘MARYLAND 64’ tobacco (Nicotiana tabacum L.), tested as Md. 64-3, was developed and released by the Md. Agr. Exp. Stn. College Park, Md. The new cultivar was developed from a cross of ‘Catterton’ and ‘Wilson.’ The pedigree breeding method was used in developing Maryland 64. Following the initial cross, plants were selected for agronomic performance and disease reactions and advanced to the F, generation by selfing. Maryland 64 was released in 1967 for grower use in 1968.

Maryland 64 is a light air-cured (Type 32) cultivar with a high level of resistance to fusarium wilt and a medium level of resistance to black root rot. In addition, the new cultivar has a high level of resistance to bacterial leaf spot and to tobacco mosaic virus. The new cultivar is highly resistant to tobacco mosaic and wildfire. Resistance to tobacco mosaic virus is maintained by replacing the susceptible parent, ‘Wilson,’ in the pedigree each generation by selfing.

Maryland 64 is similar to Wilson in chemical composition, and it is well adapted to Maryland. Total alkaloid content of Maryland 64 is similar to Wilson and total N content is intermediate between the two parents. Additional information on performance and management has been published.

Certified and breeder seed will be maintained by the Md. Agr. Exp. Stn., College Park, MD 20742.

REGISTRATION OF MARYLAND 872 TOBACCO
(Reg. No. 79)
M. K. Aycock, Jr., H. A. Skoog, and B. V. Davis

‘MARYLAND 872’ tobacco (Nicotiana tabacum L.) was developed and released cooperatively by the Md. Agr. Exp. Stn. and the ARS, USDA. The new cultivar was one of a cross between ‘Maryland 609’ and a ‘Wilson’-type breeding line. Information on Maryland 609 has been published. Within each generation was conducted for plant type and tobacco mosaic resistance. After stabilizing for these reactions, it was also tested for wildfire [Pseudomonas (Foster) F. L. Stevens] and fusarium wilt [Fusarium Schlecht f. nicotianae (J. Johnson) Snyd. & Hans.].

The 10th generation from the original cross was released in 1973 for growers’ use in 1974.

Maryland 872 is a light air-cured (Type 32) cultivar with resistance to tobacco mosaic and wildfire and moderate resistance to fusarium wilt. It is the first cultivar of Type 32 released with wildfire resistance. The excellent tobacco mosaic and wildfire resistance of Maryland 609 was combined with the sarsaram wilt resistance of Maryland 872.

Maryland 872, tested as M 872, was evaluated in tests at the tobacco experimental farm and at farms in southern Maryland. The 3-year averages for Maryland 872 and Maryland 609 were very similar in plant height, leaves/plant, and internode length. The new cultivar has a compact plant appearance, and the leaves are more upright than those of Maryland 609. Maryland 872 has long, broad leaves, and the new cultivar is similar in quality to Maryland 609. It is about 2 days earlier in flowering than Maryland 609, and similar in quality. It is superior to Maryland 609 in yield and value/ha. In addition, the new cultivar is superior to Maryland 609 in weather fleck tolerance, frost resistance, and it contains less nicotine. Additional information on performance and management has been published.

Breeder and certified seed will be maintained by the Md. Agr. Exp. Stn., College Park, MD 20742.