Registration of Crop Varieties

CLARK 63 SOYBEANS
(Reg. No. 39)
L. F. Williams and R. L. Bernard

'CLARK 63' soybeans (Glycine max (L.) Merr.) originated as a composite of 13 F₂ plant progenies from a cross between 2 backcrosses, [Clark (4) × S54–1714] × [Clark (6) × Blackhawk], in a cooperative program of the Illinois and Missouri Agricultural Experiment Stations and U. S. Regional Soybean Laboratory. Prior to release, Clark 63 was identified by the designation SL1. It is classed in maturity Group IV and is adapted to the area where Clark is grown. Clark was registered in 1958 (Reg. No. 20, Agron. J. 50: 690).

Distinguishing characteristics of Clark 63: Flower—purple; pubescence—tawny; pod—brown; seedcoat—dull yellow; and hilum—black.

In these traits and in other respects, Clark 63 appears indistinguishable from Clark in the absence of disease. The distinguishing features are the high degree of resistance of Clark 63 to bacterial pustule caused by Xanthomonas phaseoli var. sojense and to Phytophthora rot caused by Phytophthora megasperma var. sojae. The resistance to pustule is due to a single recessive gene transferred from the CNS variety through strain S54–1714, which is a selection from Clark × [(Lincoln (2) × Richland) × (Lincoln × CNS)]. The Phytophthora resistance is due to a single dominant gene transferred from the Blackhawk variety.

Regional tests indicate that Clark 63 performs similarly to Clark in the absence of Phytophthora rot, whereas when the disease is moderate or severe the yield of Clark 63 is appreciably higher than that of Clark. No estimates are available for the effects of pustule on yield of the two varieties.

Clark 63 was released in 1963 in Illinois, Indiana, Iowa, Kansas, Missouri, and Ohio. The Missouri Agricultural Experiment Station is responsible for maintenance of breeder seed.

Other information on Clark 63 has been published:

Registered under a memorandum of understanding between the Crops Research Division, ARS, USDA, and the American Society of Agronomy. Received June 8, 1964.

HAWKEYE 63, HAROSOY 63,
CHIPPEWA 64 SOYBEANS
(Reg. No. 40, 41, 42)
R. L. Bernard

'HAWKEYE 63' originated as a composite of plant progenies from the backcross Hawkeye (7) × Blackhawk, in a cooperative program of the Illinois Agricultural Experiment Station and the U. S. Regional Soybean Laboratory. Hawkeye 63 was identified by the designation L59g-2R. It is classed in maturity Group II and is adapted to the area where Hawkeye is now grown. Hawkeye was registered in 1955 (Reg. No. 6, Agron. J. 45: 327).

Distinguishing characteristics of Hawkeye 63: Flower—purple; pubescence—gray; pod—brown; seedcoat—dull yellow; hilum—imperfect black.

In the above traits and in other respects Hawkeye 63 is indistinguishable from Hawkeye in the absence of disease. The one distinguishing feature is the high degree of resistance of Hawkeye 63 to the root and stem rot caused by Phytophthora megasperma var. sojae. This resistance is due to a single dominant gene transferred from the Blackhawk variety.

Regional tests indicate that Hawkeye 63 performs very close to Hawkeye in the absence of disease, whereas when Phytophthora rot is moderate or severe the yield of Hawkeye 63 is appreciably higher than that of Hawkeye.

Hawkeye 63 was released in 1963 in Illinois, Iowa, Kansas, Missouri, South Dakota, and Ohio. The Illinois Agricultural Experiment Station is responsible for maintenance of breeder seed.

'HAROSOY 63' originated as a composite of 3 F₂ plant progenies from the backcross Harosoy (8) × Blackhawk, in a cooperative program of the Illinois Agricultural Experiment Station and the U. S. Regional Soybean Laboratory. Prior to release, Harosoy 63 was identified by the designation L59g-1R. It is classed in maturity Group II and is adapted to the area where Harosoy is now grown. Harosoy was registered in 1955 (Reg. No. 47: 542).

Distinguishing characteristics of Harosoy 63: Flower—purple; pubescence—gray; pod—brown; seedcoat—dull yellow.

In the above traits and in other respects Harosoy 63 is indistinguishable from Harosoy in the absence of disease. The distinguishing feature is the high degree of resistance of Harosoy 63 to the root and stem rot caused by Phytophthora megasperma var. sojae. This resistance is due to a single dominant gene transferred from the Blackhawk variety.

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