REGISTRATION OF WILLIAMS SOYBEAN¹
(Reg. No. 94)
R. L. Bernard* and D. A. Lindahl²

'Williams' soybean [Glycine max (L.) Merr.] is the progeny on an F2 plant selected from the cross of 'Wayne' × L57-0034. Williams was developed in a cooperative breeding program of the U. S. Regional Soybean Laboratory and the Illinois Agricultural Experiment Station. The parent line L57-0034 is a selection from 'Clark' × 'Adams.' The F2 through F5 was grown in plant progeny rows in a breeding nursery near Eldorado in southern Illinois under conditions of severe stress on seed quality and pod set. Selections were made each year for good seed quality, pod-set, plant vigor, and lodging resistance.

Williams has been tested under the designation L66L-108 in regional Uniform Test III in the states of Delaware, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Missouri, Nebraska, New Jersey, Ohio, and South Dakota. These tests have shown it to be late Group III maturity, about 3 days later than 'Wayne,' 1 day later than 'Calland,' and 6 days earlier than 'Cutler.' It is superior to these varieties in lodging and shattering resistance, in visual seed quality rating, and in oil content. It has averaged slightly higher in yield over the region tested and is adapted to the southern part of the North Central States.

Williams is similar to Wayne in having moderate susceptibility to phytophthora rot (Phytophthora sojae Kaufmann and Gerdemann), high resistance to bacterial pustule [Xanthomonas phaseoli (Smith) Dows. var. sojensis (Hedges) Starr and Burkholder], high susceptibility to downy mildew [Peronospora manshurica (Naum.) Syd.], and a moderate susceptibility to iron chlorosis in soils with high pH. Descriptive characters of Williams are: white flower, tawny pubescence, tan pod wall, shiny yellow seed coat, black hilum (a slightly lighter black than Wayne, Calland, or Cutler).

Williams was released in 1971 by the agricultural experiment stations of Illinois, Indiana, Iowa, Kansas, Maryland, Missouri, Nebraska, and Ohio. The Illinois Agricultural Experiment Station is responsible for maintenance of breeder seed.

¹Registered by the Crop Science Society of America. Received April 1, 1972.
²Research Geneticist and Agronomist (Research Assistant), respectively, ARS, USDA, and *Professor of Plant Genetics, Department of Agronomy, University of Illinois, Urbana-Champaign, Ill.

REGISTRATION OF RIO SWEET SORGHUM¹
(Reg. No. 113)
D. M. Broadhead²

'Rio' sweet sorghum (Sorghum bicolor [L.] Moench) was selected from the progeny of a cross between 'Rex' (MN 23) and PI 152959 (MN 1048) that was made at Meridian, Miss. The cultivar was selected from an F2 progeny in 1949 and evaluated under the breeding number, Mer. 55-1. Rio panicles are usually 20 to 30 cm long, semicompact, and irregularly shaped. The lemma is awnless. The seeds are medium size and have a white chalky seedcoat over a brown subcoat (testa). The endosperm is mostly conicous.

'Rio' was released in 1965. Breeder seed stocks are maintained by the U. S. Regional Soybean Laboratory and the Illinois Agricultural Experiment Station. The parent line L57-0034 is a selection from 'Clark' × 'Adams.' The F2 through F5 was grown in plant progeny rows in a breeding nursery near Eldorado in southern Illinois under conditions of severe stress on seed quality and pod set. Selections were made each year for good seed quality, pod-set, plant vigor, and lodging resistance.

Rio has been tested under the designation L66L-108 in regional Uniform Test III in the states of Delaware, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Missouri, Nebraska, New Jersey, Ohio, and South Dakota. These tests have shown it to be late Group III maturity, about 3 days later than 'Wayne,' 1 day later than 'Calland,' and 6 days earlier than 'Cutler.' It is superior to these varieties in lodging and shattering resistance, in visual seed quality rating, and in oil content. It has averaged slightly higher in yield over the region tested and is adapted to the southern part of the North Central States.

Williams is similar to Wayne in having moderate susceptibility to phytophthora rot (Phytophthora sojae Kaufmann and Gerdemann), high resistance to bacterial pustule [Xanthomonas phaseoli (Smith) Dows. var. sojensis (Hedges) Starr and Burkholder], high susceptibility to downy mildew [Peronospora manshurica (Naum.) Syd.], and a moderate susceptibility to iron chlorosis in soils with high pH. Descriptive characters of Williams are: white flower, tawny pubescence, tan pod wall, shiny yellow seed coat, black hilum (a slightly lighter black than Wayne, Calland, or Cutler).

Williams was released in 1971 by the agricultural experiment stations of Illinois, Indiana, Iowa, Kansas, Maryland, Missouri, Nebraska, and Ohio. The Illinois Agricultural Experiment Station is responsible for maintenance of breeder seed.

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REGISTRATION OF CL. 58-37 SUGARCANE¹
(Reg. No. 28)
L. M. Weetman and E. H. Todd³

'Cl. 58-37' is a sugarcane clone selection from the cross 'C.P. 52-64' × 'Cl. 54-119' and is derived from Saccharum officinarum L., S. spontaneum L., and S. barberi (Physalodes spectabilis) × S. officinarum. It was released in 1965. Breeder seed stocks are maintained by the Foundation Seed Program, Mississippi State College, and the U. S. Sugar Crops Field Station, Clewiston, Fla. 33440.

REGISTRATION OF CL. 59-2 SUGARCANE¹
(Reg. No. 29)
L. M. Weetman and E. H. Todd³

'Cl. 59-2' is a sugarcane clone selection from the cross 'Cl. 54-140' × 'Cl. 54-1910' and is derived from Saccharum officinarum L., S. spontaneum L., and S. barberi (Physalodes spectabilis) × S. officinarum. It was released in 1965. Breeder seed stocks are maintained by the Foundation Seed Program, Mississippi State College, and the U. S. Sugar Crops Field Station, Clewiston, Fla. 33440.