hypersensitive. The “bond” type straw was maintained. Selection within and between the first pair of crosses as well as testing were carried out over a 18-year period, emphasizing crown rust resistance. Plants were selected also for H. victoriae resistance utilizing artificial inoculation in the greenhouse. Lodil was last selected in the F_2 generation for yield starting with the F_3 in 1958. Yield tests were continued at several other locations in Wisconsin in 1959, and in the North Central states (2,3,4). The average yield was in the upper quartile in the North Central states’ trials, and in Wisconsin was highest (8), although Garry slightly outyielded Lodil in later tests.

Bushel weights were higher than for Garry, but lower than for such varieties as Garland and ‘Beebee.’ Though plant height is tall, lodging resistance of Lodil is in the better group of varieties in North Central tests, and with less lodging in Wisconsin (10) except for Goodfield. Lodil was near that of Garland and Dodge.

Panicles are large and open, and hull color is a light yellow, but may be dull reddish-yellow when weathered. Kernels are long and tend to double occasionally.

Simons (2) reported that Lodil is susceptible in the seeding stage to crown rust races 293, 294, and 321. Lodil showed some crown rust resistance in Kansas in 1966 (8). Yield readings of rust on Lodil have averaged less than for Dodge (10), yet it is believed that resistance of Dodge and ‘Portage’ may be more useful. Lodil has the ABd stem rust genotype, and is resistant to stink. Stem Septoria response is intermediate; but Lodil is susceptible to red leaf.

Lodil does well on fertile soils, and has yielded 66 bushels per acre under farm conditions, according to one report. High yields have been reported in nearby states (5,7.9,11) but the variety did poorly in Kansas (6).

Literature Cited


Registration of Frio Safflower

Registration of Semmes Soybeans1

1 Registered by the Crop Science Society of America. Received April 25, 1966.

Edgar E. Hartwig1

'Semmes' soybeans (Glycine max (L) Merr.) originated as an F_1 plant selection from the cross D51-5427 × D49-2491. D51-5427 is a selection from 'Raboy' × 'Ogden,' while D49-2491 is closely related and similar to the variety 'Lee.' Semmes was developed in a cooperative program of the Delta Branch of the Mississippi Agricultural Experiment Station and the U.S. Regional Soybean Laboratory. Prior to release Semmes was identified by the number D60-12327. Classed in maturity group VII, it is adapted for production in the southern half of Arkansas and on the alluvial soils of Mississippi and Louisiana.

Distinguishing characteristics of Semmes are purple flowers, gray pubescence, tan pod walls, yellow seed coats, and imperfect blanch. It is resistant to bacterial pustule, wildfire, target spot, and Phytophthora rot. It appears to be equal to Lee in seed holding and is also similar to Lee in seed size. It is susceptible to the root-knot nematode (Meloidogyne incognita var. aera). Semmes matures 4 days later than Lee, but begins flowering 10 to 14 days later.

Semmes has been tested on a regional basis for a 3-year period. It has performed excellently on the lower-lying soil where Phytophthora rot reduces the efficiency of varieties in yellow in production. While only 4 inches taller than Lee on sandy loam, Semmes has averaged 8 inches taller on clay soil. The lowest pods are higher from the ground than those of Lee.

1 Registered by the Crop Science Society of America. Received April 29, 1966.

Research Agronomist, Crops Research Division, ARS, USDA, working in cooperation with the Delta Branch, Mississippi Agricultural Experiment Station, Stoneville, Miss.