REGISTRATION OF WAYNE SOYBEANS

(Reg. No. 51)

R. L. Bernard

'Wayne' soybeans (Glycine max (L.) Merr.) originated as the progeny of an F1 plant selected from the cross L49-4091 x 'Clark' made in 1953. The parent line, L49-4091, carries the 'CNS' type of resistance to bacterial pustule, was in Uniform Tests in 1951 to 1953, and is an F3 plant progeny from the cross [F2 Lincoln (2) x Richland] x (F1 Lincoln x CNS). Wayne was developed in a cooperative program of the Illinois Agricultural Experiment Station and the U.S. Regional Soybean Laboratory. It is classified in maturity Group III, and its area of adaptation is in the southern part of the North Central States.

Distinguishing characters of Wayne: flower -- white; pubescence -- tawny; pod -- brown; seed coat -- shiny yellow; and hilum -- black.

Regional tests of Wayne from 1961 to 1964 have shown it to be consistently higher in yield, slightly later in maturity, and similar to 'Shelby' and 'Ford' in other characteristics (Table 1).

Table 1. Mean performance of Wayne, Shelby, and Ford soybeans in 77 tests during 1961 to 1964 at locations in the area where these varieties are adapted.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Seed yield</th>
<th>Relative Lodg.- Plant height</th>
<th>Seed weight</th>
<th>Seed protein</th>
<th>Seed oil</th>
<th>Maturity, kg/ha</th>
<th>Quality</th>
<th>100</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wayne</td>
<td>38.4</td>
<td>2280</td>
<td>51.7</td>
<td>17.1</td>
<td>41.5</td>
<td>40.5</td>
<td>34.6</td>
<td>20.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ford</td>
<td>36.8</td>
<td>2280</td>
<td>-1.1</td>
<td>17.1</td>
<td>40.5</td>
<td>34.6</td>
<td>34.6</td>
<td>20.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shelby</td>
<td>33.4</td>
<td>2280</td>
<td>3.1</td>
<td>16.7</td>
<td>40.9</td>
<td>34.6</td>
<td>34.6</td>
<td>20.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Lodging score: 1 (poor) to 5 (good). Seed quality: perfect to 1 (poor): shrivelled, wrinkled, defective seed coat, etc.

Under some growth conditions, there is a tendency for the stems to remain green after the pods ripen. In soils with very high pH, Wayne shows iron chlorosis more severely than other commonly grown varieties. It is susceptible to artificial inoculation with the Phytophthora root organism, but appears to have some degree of resistance in the field as indicated by high yields in field tests where susceptible varieties were reduced in yield by this disease. Wayne is resistant to bacterial pustule, wildfire, and frogeye (race 1) leafspot diseases.

Wayne was released in 1961 in Illinois, Indiana, Iowa, Kansas, Missouri, and Nebraska. The Illinois Agricultural Experiment Station is responsible for maintenance of breeder seed.

Other information on Wayne has been published:


REGISTRATION OF PICKETT SOYBEANS

(Reg. No. 52)

Charles A. Brim and J. P. Ross

'Pickett' soybeans (Glycine max (L.) Merr.) originated as an F1 selection from the cross of NC55-1 x [D49-2491 (6) x Durman]. NC55-1 is a cyst nematode (Heterodera glycines) resistant selection from the backcross [Lee (4) x Peking]. D49-2491 is a sister selection of the variety Lee which was converted to a type having white flowers and gray pubescence. Lee was registered in 1958 (Reg. No. 23, Agron. J. 50:690). Pickett was developed in a cooperative program of the North Carolina Agricultural Experiment Station and the U.S. Regional Soybean Laboratory. Prior to release, Pickett was designated NCI-2-2. It is classified in maturity group VI and is adapted to the area where Lee is grown.

Pickett has purple flowers, gray pubescence, tan pod walls, shiny yellow seed coat, and imperfect black hilum. Except for pubescence and hilum color, Pickett appears similar to Lee in the absence of the cyst nematode. Pickett has shown a high degree of resistance toien strains of the cyst nematode at Clayton, North Carolina; Portageville, Missouri; and Ridgely, Tennessee, but not at Holland, Virginia. Resistance to the cyst nematode was transferred from the variety Peking. Pickett is also resistant to bacterial pustule, wildfire, and target spot.

In 32 regional tests in 1965, Pickett yielded 2.2 bushels per acre less than Lee. However, on cyst-nematode infested soil at Clayton, N. C. and Ridgely, Tenn., Pickett exceeded Lee in yield by 13.5 and 11.5 bushels per acre, respectively. Pickett is expected to reduce the hazards of soybean production on soils now infested with cyst nematodes where a variety of Lee maturity is adapted. Since there is little or no reproduction of cyst nematodes on Pickett, the variety will prove effective in reducing the chance of spreading the pest to new areas.

Pickett was released in 1965 in Arkansas, Missouri, North Carolina, Tennessee, and Virginia. The North Carolina Agricultural Experiment Station will be responsible for the maintenance of breeder seed.

Other information on Pickett has been published:

1 Registered by the Crop Science Society of America. Received April 8, 1966.

2 Research Agronomist and Pathologist, Crops Research Division, ARS, USDA, N. C. State University, Raleigh, N. C.


REGISTRATION OF WESTMONT WHEAT

(Reg. No. 449)

E. R. Hahn

'Westmont' (Triticum aestivum L. em. Thell.), C.I. 12920, is a selection from the cross Rio-Red X Nebred, which was made in 1942 at the Sherman Branch Experiment Station, Moro.

1 Registered under a memorandum of understanding between the Crops Research Division, ARS, USDA, and the American Society of Agronomy. Received Jan. 19, 1966.


3 Registered under the Crop Science Society of America. Received March 18, 1966. Published with the approval of the Director of the Montana Agricultural Experiment Station as Paper No. 753.

4 Professor of Agronomy, Plant and Soil Science Department, Montana State University, Bozeman.