

By R. L. BERNARD, C. R. MUMAW, and D. R. BROWNING

RESULTS of soybean variety trials are reported here to help growers select varieties best adapted to their areas. Tests in Illinois were made by the Illinois Agricultural Experiment Station and Southern Illinois University in cooperation with the U. S. Regional Soybean Laboratory. Other agricultural experiment stations conduct similar tests in cooperation with the Laboratory each year throughout the soybean-growing region of the United States and Canada. The tests include all recommended varieties, some varieties that were formerly widely grown, and many experimental strains from which future varieties will come. Results of tests of only the varieties are reported here.

The Laboratory has established 9 regional tests, the locations of which range from southern Canada and the northernmost part of the United States (Test 0) to the Gulf Coast (Test 8). Each test consists of varieties that mature at about the same time and each is grown at 12 to 25 locations in the region to which the varieties are adapted.

In Illinois, regional tests were conducted at 7 locations during 1951-1957. From 1954 through 1957 a special test of late-maturing varieties was also made at Ullin and from 1955 through 1957 at Miller City in the southern tip of the state. Yield results are given in Table 1. Varieties in these tests have been planted as early as May 3 and as late as July 6, the average date being May 20. Soil types at the various locations and the length of the growing season are given on page 2. This information will enable growers to compare conditions at the test sites with conditions at their own locations.



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<i>Town and county^a</i>	<i>Soil types</i>	<i>Average date of first fall frost</i>	<i>Average number of days in growing season</i>
Shabbona, DeKalb	Brenton and Flanagan silt loams; Harpster silty clay loam	October 6	152
Dwight, Livingston	Elliot silty clay loam	October 15	173
Urbana, Champaign	Flanagan and Catlin silt loams	October 19	181
Girard, Macoupin	Harrison silt loam	October 19	180
Edgewood, Effingham	Cisne silt loam	October 18	180
Eldorado, Saline	Beaucoup silty clay loam	October 21	191
Carbondale, Jackson	Stoy silt loam	October 23	193
Ullin, Pulaski	Ginat silt loam	October 26	200
Miller City, Alexander	Riley fine sandy loam	October 29	213

^a Test plots at Shabbona and Urbana were located on University Soil and Crop Experiment Fields. Cooperators at the various test locations were: R. R. Bell, Shabbona; L. B. Broom, Ullin and Miller City; C. H. Farnham, Urbana; T. H. Lloyd & Sons, Girard; M. B. Patton, Miller City; O. A. Bossert (F. D. Roeder, F. W. Koenig), Dwight; D. R. Browning, Carbondale; C. J. Wagner, Eldorado; J. A. Wilson, Edgewood; and C. H. Woodard, Ullin.

Long-time averages of such important characteristics as yield, height, lodging, seed quality, and other distinguishing qualities are shown in Table 2. The figures in this table are a very accurate measure of the inherent differences between varieties when they are grown over a wide range of environments, because the varieties were tested at a large number of locations for a period of years. Varieties that performed well in these tests are those that will do well on the different soils and under the different weather conditions to be found in Illinois.

METHOD OF TESTING

Varieties in each test were grown together in single-row plots 19 feet long trimmed to 16½ feet just before harvest. Plots were replicated 4 times at each location. In Illinois, rows were spaced 40 inches apart and seeded at the rate of about 1 bushel to the acre. Records were kept on yield, date of maturity, lodging, height, seed quality, and chemical composition for all varieties in all tests. How varieties were measured for these characteristics is explained below.

Yield is the weight of the seeds when dried to a uniform moisture content and is expressed in bushels per acre. Plots were cut with a single-row mower and bundles threshed with a small thresher. Harvesting by this method avoids most of the usual combine losses.

Maturity was taken as the date on which about 95 percent of the pods were ripe. The plants would normally be dry enough to combine in another 7 to 10 days.

Lodging was rated at maturity on a score of 1 to 5 — 1 meaning almost all plants erect and 5 almost all plants down.

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Height of mature plants was taken as the average height in inches from the ground to the extended tip of the stem.

Seed quality was rated on a score of 1 to 5—1 meaning very good and 5 very poor. Wrinkling, cracking, poor development, and objectionable color were considered in the scoring.

Chemical composition, including percentage of oil and protein in the seeds, was determined by analysis at the U. S. Regional Laboratory at Urbana and was calculated on a dry-weight basis.

SOYBEAN VARIETIES

Most improved varieties have been developed by crossing two or more varieties and making selections from the resulting progenies. The parentage of varieties in these tests and that of a few other varieties sometimes grown in Illinois are given in Table 3.

Choosing an Adapted Variety

When choosing a soybean variety, a grower should consider both the general yield performance of varieties (Table 2) and their yield performance in his particular area of the state (Table 1). To select a variety best suited to his own needs, a grower should also consider characteristics other than yield, especially maturity and lodging.

Varieties differ greatly in the length of time they require to reach maturity. In addition, latitude, planting date, weather, and soil type all affect time of maturity. The same variety will mature earlier in southern than in northern Illinois. The reason is that the period of daylight during the summer is slightly shorter in southern than in northern Illinois. This reaction of soybeans to the length of day also explains why varieties adapted to the long summer days of the Far North mature very early in Illinois and why other varieties adapted to the short summer days of the southern states mature very late or not at all in Illinois.

A week's difference in planting date will usually change time of maturity by only 2 or 3 days. Drouth, hot weather, and disease can cause soybeans to mature earlier or later than they normally do. Dark heavy soils will usually delay maturity, while light sandy soils will hasten it.

In spite of all these variations, the relative maturities of varieties will remain about the same. For example, Clark at Urbana matured 6 days later than Lincoln, and wherever they are grown together, Clark will be several days later than Lincoln.

Full-season varieties generally yield more than those that mature very early. However, the variety selected must be early enough to mature before the first killing frost and before the onset of late fall

rains. If soybeans are to be followed by a winter grain, they must mature early enough to be harvested before the planting time of the fall-sown crop.

Varieties Recommended for Illinois

For the area of the state to which each variety in these tests is adapted, see the maps on pages 4 and 5. The heavily shaded parts of the maps show the area to which a variety is best adapted. In the lightly shaded area to the north of the heavily shaded area, a variety may be grown as a late-maturing soybean if planted early. In the lightly shaded area south of the area to which it is best adapted, a variety may be used for late planting or when an early variety is needed to precede winter grain. The commercial acreage of these varieties in 1957 is shown below.

Variety	Percent of total acreage in area indicated*				Acreage in state	
	North	North central	South central	South	perct.	Total
Hawkeye.....	51	56	28	8	39	1,940,000
Harosoy.....	35	27	28	1	25	1,240,000
Adams.....	1	6	24	23	14	690,000
Clark.....	0	1	11	44	10	500,000
Lincoln.....	4	6	7	2	6	300,000
Others.....	9	4	2	22	6	298,000
Total.....	100	100	100	100	100	4,970,000

* Calculated from data supplied by the Illinois Crop Reporting Service.

Chippewa is the earliest variety recommended in Illinois. It should be grown in the northern two tiers of counties when a variety earlier than Harosoy or Hawkeye is desired. It has excellent resistance to lodging and shattering and high yield for an early variety. It is several inches shorter than other recommended varieties.

Harosoy matures 9 days later than Chippewa. It has consistently outyielded most other varieties in northern Illinois. However, Harosoy is more susceptible to lodging than Hawkeye and has a lower oil content. Because of its earliness and ability to produce high yields, it is a good variety to choose to precede fall-planted grain in central Illinois.



Hawkeye, about 3 days later than Harosoy, is now the leading variety in total acreage in this state. In 1957 it was grown on 39 percent of the acreage in soybeans in Illinois. It has large, usually high-quality seeds, excellent resistance to lodging, and is a good variety for the northern half of the state.

Adams, 3 days later than Hawkeye, will generally outyield Hawkeye and in some cases Harosoy in the central half of the state, but its resistance to lodging is poorer than that of Hawkeye. Adams has a higher oil content than any other recommended variety. In south-central Illinois it is planted extensively to precede winter wheat. In order to avoid green stems at harvest, this variety should not be planted before May 15.

Lincoln, 3 days later than Adams, was formerly the leading variety in the state. Although it has dropped in popularity, it is still a suitable variety for central Illinois and will sometimes outyield the earlier varieties in that area. Its lateness and moderate tendency to lodge are factors against it.

Clark resembles Lincoln, but is 6 days later, more resistant to lodging, and higher yielding. It has outyielded most other varieties, whether earlier or later, in southern Illinois tests and should replace all Wabash and Perry acreage. Even in the southern tip of the state, Clark has outperformed the later varieties. It can be grown as far north as Champaign county, but for best yields this far north it must be planted early.



**Table 1.—SOYBEAN YIELD TRIALS: Nine Locations, 1951-1957;
Average of Four Replications**

(Varieties listed in order of maturity, early to late)

Variety	Average per acre, period indicated	Yearly average per acre						
		1951	1952	1953	1954	1955	1956	1957
		<i>bu.</i>	<i>bu.</i>	<i>bu.</i>	<i>bu.</i>	<i>bu.</i>	<i>bu.</i>	<i>bu.</i>
Northern Illinois, Shabbona								
Test 1	<i>1951-1957</i>							
Chippewa.....	33.4	28.8	24.0	28.9	35.9	35.1	39.2	41.7
Monroe.....	31.4	29.0	21.0	25.4	31.9	35.6	38.1	38.5
Blackhawk.....	31.9	28.7	19.8	27.8	35.2	35.5	36.6	39.9
Test 2								
Blackhawk.....	30.5	28.6	17.3	24.9	33.6	35.1	34.3	39.9
Harosoy.....	35.1	29.7	24.4	31.2	30.9	41.0	41.3	47.3
Hawkeye.....	31.6	26.0	17.2	27.7	34.2	38.6	35.2	42.4
Adams.....	32.4	22.7	20.9	30.9	35.1	37.6	36.3	43.3
Lincoln.....	31.3	23.9	20.7	27.6	32.1	33.9	36.4	44.3
North-central Illinois, Dwight								
Test 2	<i>1951-1957</i>							
Chippewa.....	.....	.....	.....	.....	.....	.....	38.4	37.1
Blackhawk.....	31.3	37.4	24.8	26.3	38.0	20.1	35.4	37.3
Harosoy.....	35.9	40.6	29.0	31.4	45.4	21.5	41.9	41.7
Hawkeye.....	34.2	40.5	28.4	26.6	46.4	17.2	39.9	40.4
Adams.....	36.3	39.7	27.9	33.3	47.3	19.9	43.2	42.9
Lincoln.....	33.8	37.4	25.6	29.1	42.1	20.4	38.5	43.4
Test 3								
Lincoln.....	33.1	36.7	25.7	25.4	43.0	20.3	37.0	43.4
Clark.....	32.1	34.9	21.5	23.6	42.1	22.6	37.9	42.1
East-central Illinois, Urbana								
Test 2	<i>1951-1957</i>							
Chippewa.....	.....	.....	.....	.....	.....	.....	42.9	40.0
Blackhawk.....	32.1	43.1	24.4	24.1	32.1	25.6	42.2	33.2
Harosoy.....	38.1	50.4	32.8	33.0	36.8	26.1	43.4	44.2
Hawkeye.....	35.1	44.6	33.3	24.2	37.8	25.7	40.3	40.1
Adams.....	38.5	51.7	32.1	30.7	36.9	29.1	43.1	45.9
Lincoln.....	37.0	48.2	36.9	29.7	34.4	26.0	39.5	44.1
Test 3								
Lincoln.....	35.7	46.7	36.6	27.1	35.0	20.8	39.5	44.1
Bavender Special..	.....	.....	.....	.....	.....	.....	40.0	46.6
Clark.....	37.3	51.9	32.4	25.6	37.7	24.6	43.1	45.5
Test 4								
Chief.....	.....	47.5	30.0	24.6	29.5	17.7	37.6	.....
Clark.....	38.7	52.2	36.8	33.2	37.4	22.5	43.1	45.5
Wabash.....	33.4	47.2	31.6	22.7	31.6	20.3	37.2	43.1
Perry.....	36.6	47.0	35.0	29.2	34.6	22.5	40.0	47.7

(Table is continued on next page.)

Table 1. — Continued
(Varieties listed in order of maturity, early to late)

Variety	Average per acre, period indicated	Yearly average per acre						
		1951	1952	1953	1954	1955	1956	1957
		<i>bu.</i>	<i>bu.</i>	<i>bu.</i>	<i>bu.</i>	<i>bu.</i>	<i>bu.</i>	<i>bu.</i>
West-central Illinois, Girard (Clayton, 1951-1953)								
Test 3 <i>1955-1957</i>								
Harosoy.....	37.7	....	....	....	....	34.1	42.4	36.5
Hawkeye.....	35.0	....	....	24.9	....	30.2	42.0	32.8
Adams.....	38.7	31.7	32.1	....	....	37.1	45.0	34.1
Lincoln.....	35.9	32.5	33.2	25.5	....	32.5	39.1	36.2
Clark.....	41.8	39.2	34.9	28.1	....	38.3	46.1	41.0
Test 4								
Chief.....	....	33.8	34.5	28.5	....	....	35.4	....
Clark.....	42.6	41.6	41.5	28.2	....	40.6	46.1	41.0
Wabash.....	34.4	31.0	36.5	30.8	....	33.4	35.6	34.3
Perry.....	38.0	34.4	38.3	27.2	....	34.0	37.1	42.8
South-central Illinois, Edgewood (Brownstown, 1952-1953)								
Test 3 <i>1955-1957</i>								
Harosoy.....	38.9	....	....	....	....	33.0	43.0	40.7
Hawkeye.....	32.9	....	....	10.9	....	29.2	38.8	30.6
Adams.....	34.5	35.8	26.5	....	....	31.5	40.4	31.6
Lincoln.....	34.9	34.6	26.6	10.6	....	32.6	37.7	34.3
Bavender Special..	....	....	....	....	....	....	39.6	....
Clark.....	39.1	47.0	27.2	10.5	....	34.2	40.1	43.1
Test 4								
Chief.....	33.5	32.4	21.6	8.4	....	27.7	35.5	37.3
Clark.....	39.6	43.9	27.2	7.2	....	35.6	40.1	43.1
Wabash.....	35.4	36.5	21.8	3.1	....	28.3	37.2	40.8
Perry.....	34.9	40.7	23.6	6.2	....	30.6	37.1	37.1
Roe ^a.....	....	....	....	....	....	....	26.6	39.5
Roe ^b.....	....	....	....	....	....	....	25.5	29.0
Southern Illinois, Eldorado								
Test 3 <i>1954-1957</i>								
Harosoy.....	35.2	....	....	....	30.8	33.6	38.0	38.5
Hawkeye.....	29.7	....	....	22.1	23.7	32.3	28.4	34.3
Adams.....	31.7 ^d	37.3	25.4	....	....	32.8	35.6	31.8
Lincoln.....	32.7	39.2	31.4	25.3	29.1	31.1	34.9	35.5
Clark.....	39.3	52.1	38.5	31.3	34.3	43.5	39.3	40.0
Test 4 <i>1951-1957</i>								
Chief.....	33.2	39.4	31.2	33.4	27.9	29.7	33.1	37.5
Clark.....	40.6	47.6	36.0	46.4	33.9	41.1	39.3	40.0
Wabash.....	34.1	41.4	28.7	36.3	30.4	31.8	33.7	36.2
Perry.....	35.9	43.3	36.4	33.5	33.9	29.3	35.4	39.7
Roe ^a.....	....	....	....	....	....	....	37.6	36.4
Roe ^b.....	....	....	....	....	....	....	31.5	36.4
Dorman.....	....	....	....	....	....	....	33.7	31.0
Smith Super.....	....	....	....	....	....	....	26.3	....
Southern Illinois, Carbondale								
Test 3 <i>1956-1957</i>								
Harosoy.....	26.9	....	....	....	....	....	37.0	16.8
Hawkeye.....	25.7	....	....	....	....	....	33.9	17.4
Adams.....	29.0	....	....	....	....	....	37.7	20.2
Lincoln.....	25.9	....	....	....	....	15.6	34.0	17.7
Clark.....	28.3	....	....	....	....	20.4	35.0	21.6

(Table is concluded on next page.)

Table 1. — Concluded

(Varieties listed in order of maturity, early to late)

Variety	Average per acre, period indicated	Yearly average per acre						
		1951	1952	1953	1954	1955	1956	1957
		<i>bu.</i>	<i>bu.</i>	<i>bu.</i>	<i>bu.</i>	<i>bu.</i>	<i>bu.</i>	<i>bu.</i>
Southern Illinois, Carbondale (Continued)								
Test 4	1956-1957							
Chief.....	27.7	....	....	....	....	18.0	34.3	21.0
Clark.....	28.3	....	....	....	....	20.7	35.0	21.6
Wabash.....	23.1	....	....	....	....	15.6	29.2	17.0
Perry.....	29.3	....	....	....	....	19.6	36.5	22.1
Roe ^a	24.9	....	....	....	....	....	29.0	20.7
Roe ^b.....	....	....	....	....	....	....	....	21.1
Dorman.....	26.3	....	....	....	....	....	30.1	22.4
Smith Super.....	....	....	....	....	....	....	20.0	....
Southernmost Illinois, Ullin^c								
	1955-1957							
Chief.....	26.3	....	....	....	....	18.5	30.3	30.1
Clark.....	33.4 ^d	....	....	....	19.0	26.4	....	36.6
Wabash.....	26.8	....	....	....	....	21.6	30.1	28.6
Perry.....	31.4	....	....	....	17.8	24.1	35.4	34.7
Dorman.....	28.9	....	....	....	19.0	20.7	32.7	33.2
S100.....	....	....	....	....	18.4	21.0	32.3	....
Smith Super.....	....	....	....	....	17.3	14.9	23.8	....
Ogden.....	29.2	....	....	....	21.2	18.0	35.8	33.8
Lee.....	30.9	....	....	....	25.7	22.6	35.4	34.8
Southernmost Illinois, Miller City^c								
	1955-1957							
Chief.....	31.6	....	....	....	....	25.6	30.1	39.2
Clark.....	39.7 ^d	....	....	....	....	33.9	....	46.9
Wabash.....	33.9	....	....	....	....	28.3	32.1	41.2
Perry.....	37.1	....	....	....	....	33.5	35.9	41.8
Dorman.....	36.2	....	....	....	....	38.0	32.5	38.2
S100.....	....	....	....	....	....	32.7	29.1	....
Smith Super.....	....	....	....	....	....	17.2	23.7	....
Ogden.....	34.6	....	....	....	....	30.5	33.5	39.7
Lee.....	37.5	....	....	....	....	38.2	43.3	30.9

^a Seeded at about 60 pounds per acre as are all other varieties.

^b Seeded at about 10 pounds per acre in 1956 and 20 pounds per acre in 1957, to test the low seeding rates being recommended by the promoters of this variety.

^c Average of three replications.

^d Adjusted to a comparable basis with other variety means.

Table 2.—AGRONOMIC TRAITS AND SEED COMPOSITION OF VARIETIES

(Long-time averages from tests at several locations)

Variety	Acre yield	Maturity ^a	Lodging ^b	Height	Seed quality ^b	Seeds per pound	Seed composition	
							Protein	Oil
	<i>bu.</i>	<i>date</i>	<i>score</i>	<i>in.</i>	<i>score</i>	<i>no.</i>	<i>perct.</i>	<i>perct.</i>
Average of 8 years, 1949-1956, at 15 locations in the North Central states								
Test 1								
Chippewa..	30.9	Aug. 29	1.5	33	1.8	3000	41.2	20.4
Monroe....	28.4	Sept. 2	2.4	39	1.6	3000	42.2	19.6
Blackhawk.	30.1	Sept. 4	1.9	35	1.6	2900	40.8	20.5
Average of 5 years, 1952-1956, at 22 locations in the North Central states								
Test 2								
Blackhawk.	30.4	Sept. 4	1.9	34	2.0	2900	40.7	21.0
Harosoy...	34.2	Sept. 7	2.2	38	1.9	2700	41.2	20.6
Hawkeye...	33.4	Sept. 10	1.8	37	1.7	2600	41.1	21.0
Adams.....	34.5	Sept. 13	2.2	39	1.6	3100	39.7	21.4
Lincoln....	34.5	Sept. 16	2.3	40	1.8	3200	40.5	21.0
Average of 5 years, 1952-1956, at 21 locations in the North Central states								
Test 3								
Lincoln....	31.4	Sept. 16	2.2	39	2.3	3200	40.6	21.4
Clark.....	36.0	Sept. 22	1.8	40	1.8	2900	40.5	21.4
Average of 6 years, 1951-1956, at 15 locations in the North Central states								
Test 4								
Chief.....	28.6	Sept. 22	3.0	48	2.4	3700	41.1	20.4
Clark.....	33.3	Sept. 22	2.0	39	2.1	2900	40.6	21.5
Wabash....	28.7	Sept. 23	2.4	42	2.0	3200	40.3	21.3
Perry.....	31.1	Sept. 28	2.0	40	2.5	2900	41.3	21.3
Average of 2 years, 1956-1957, at 3 locations in southern Illinois ^c								
Harosoy....	35.7	Sept. 7	1.3	34	2.1	2900	40.4	21.5
Hawkeye....	30.6	Sept. 8	1.2	33	2.1	2600	40.9	22.2
Adams.....	32.9	Sept. 10	1.5	35	1.7	3300	39.7	22.3
Lincoln....	32.4	Sept. 13	1.7	38	2.1	3200	40.1	22.0
Clark.....	36.5	Sept. 22	1.6	39	2.3	3000	40.6	21.7
Wabash....	32.4	Sept. 24	1.9	41	2.0	3200	....	....
Perry.....	34.7	Sept. 27	1.6	37	3.1	2800	....	....
Roe.....	31.6	Oct. 3	2.7	43	2.5	3600	42.0	19.5
Average of 3 years, 1955-1957, at 2 locations in southernmost Illinois ^d								
Chief.....	29.0	Sept. 20	3.1	48	2.6	3800	40.8	21.0
Clark ^e	36.6	Sept. 20	1.3	40	2.3	3100	39.4	22.7
Wabash....	30.3	Sept. 20	2.1	40	2.4	3400	39.1	22.4
Perry.....	34.2	Sept. 24	1.5	37	2.9	3000	40.2	22.2
Dorman....	32.6	Oct. 6	3.2	43	1.8	3600	40.1	20.8
Ogden....	31.9	Oct. 23	2.8	46	2.1	3000	40.2	20.5
Lee.....	34.2	Oct. 23	3.3	43	2.1	3700	40.8	20.4

^a Dates are for the latitude of Urbana with mid-May planting date, except for southern and southernmost Illinois, where local dates are presented. The same variety will mature earlier in southern Illinois than it will in northern Illinois.

^b Lodging and seed quality were rated on a score of 1 to 5, 1 meaning almost all plants erect and seed quality very good.

^c Variety tests at Edgewood, Eldorado, and Carbondale include varieties from Regional Tests 2, 3, and 4.

^d Variety tests at Ullin and Miller City include varieties from Regional Tests 4, 5, and 6. Maturities were not observed in 1955 at Miller City and Ullin. Heights were not observed in 1955 at Miller City.

^e 1955 and 1957 data only. Averages were adjusted to a comparable basis.

Other Varieties

Blackhawk is 6 days later than Chippewa and 3 days earlier than Harosoy. It was recommended for northern Illinois previous to the release of Chippewa.

Monroe is 4 days earlier than Chippewa. It lodges badly, has low oil content, and does not yield well enough to be recommended in Illinois.

Earlyana is 7 days later than Chippewa, yields less, has low oil content, and lodges badly. It was formerly grown to some extent in northern Illinois.

Korean (or Early Korean) matures at the same time as Harosoy. It is very large-seeded, short, and bushy. Its low yield and low oil content have kept it from being recommended for commercial production.

Richland is about 1 day later than Hawkeye. Hawkeye outyields Richland and has largely replaced it in northern and central Illinois. One of the outstanding characteristics of Richland is its ability to stand up well. It has been used in crosses to develop such varieties as Blackhawk, Hawkeye, Clark, and Chippewa.

Bavender Special, which matures at about the same time as Adams, has yielded well in tests, but is not recommended because it lodges badly and has a rather low oil content. This variety produces some 4-seeded pods and a large proportion of 3-seeded pods.

Dunfield also matures at about the same time as Adams and was formerly widely grown in this state. It has been replaced by Lincoln and other improved varieties.

Illini, which matures at about the same time as Lincoln, branches more than most varieties and is very susceptible to lodging. It was formerly the leading variety in Illinois. Lincoln which outyields Illini was released in 1944 and rapidly replaced it.

Chief matures at the same time as Clark and is 6 to 10 inches taller than other varieties. It is still grown on land of low fertility in southern Illinois where its added height is an advantage. Because of its lower yield and lower oil content, Chief is not recommended.

Wabash is about 1 day later than Clark. Clark outyields it by about 5 bushels, has a higher oil content, and much better resistance to lodging. Clark should replace Wabash everywhere in southern Illinois.

Perry is about 6 days later than Clark. When it was released, it was the highest yielding variety in southern Illinois. Now Perry too should be replaced by the earlier, higher yielding Clark variety.

Roe is a variety developed by A. Roe of Mulberry Grove, Illinois. It averages 12 days later than Clark, is about 5 inches taller, but more prone to lodging. Roe is not recommended because of its poor yield and low oil content. Its yield was usually lower at the low rates of seeding being recommended by its promoters than at the normal 1-bushel rate.

Dorman is about 2 weeks later than Clark. It was released by the Mississippi Agricultural Experiment Station in 1952 as an early variety for the mid-south. Tests show that Dorman matures satisfactorily in southernmost Illinois, but yields less and is more susceptible to lodging than Clark.

S100 matures at the same time as Dorman and yields about as well, but its oil content is much lower.

Smith Super is a selection made by H. W. Smith of West Frankfort, Illinois. It is a few days later than Dorman, but its yield has been low in the Ullin and Miller City tests.

Ogden is a commonly grown variety in the southern United States. It is about 2 weeks later than Dorman and 4 weeks later than Clark, and is grown in the bottomlands of extreme southern Illinois. It has not been outstanding in the Ullin and Miller City tests, and because it matures so late it is not recommended in Illinois.

Lee is a new southern variety that has done well in yield tests. Since, however, it is usually later than Ogden, it would be endangered by frost even in the Cairo area. For this reason, it is not recommended in Illinois.

Table 3.—Origin and Identifying Characteristics of Some Soybean Varieties

Variety	Parentage or origin	Year released	Flower color	Pubescence ^a color	Hilum ^b color
Recommended varieties					
Chippewa.....	Lincoln X (Lincoln X Richland)	1954	Purple	Brown	Black
Harosoy.....	Mandarin X (Mandarin X A.K.)	1951	Purple	Gray	Light yellow
Hawkeye.....	Mukden X Richland	1948	Purple	Gray	Dilute black ^c
Adams.....	Illini X Dunfield	1949	White	Gray	Buff
Lincoln.....	Mandarin X Manchu	1944	White	Brown	Black
Clark.....	Lincoln X (Lincoln X Richland)	1953	Purple	Brown	Black
Other varieties					
Monroe.....	Mukden X Mandarin	1949	White	Gray	Light yellow
Blackhawk.....	Mukden X Richland	1951	White	Gray	Buff
Earlyana.....	Natural hybrid in Dunfield	1943	Purple	Brown	Light yellow
Korean (Early Korean).....	Korean introduction	about 1946	White	Brown	Black
Richland.....	Manchurian introduction	1938	Purple	Gray	Gray
Bavender Special.....	Farmer selection	about 1945	Purple and white	Brown	Black and brown
Dunfield.....	Manchurian introduction	1922	White	Gray	Buff
Illini.....	Selection from A.K.	1927	White	Gray	Buff
Chief.....	Illini X Manchu	1940	Purple	Gray	Dilute black ^c
Wabash.....	Dunfield X Mansoy	1949	White	Gray	Buff
Perry.....	Patoka X L37-1355	1952	Purple	Gray	Dilute black ^c
Roe.....	Farmer selection from Lincoln	about 1954	White	Gray	Buff
Dorman.....	Dunfield X Arksoy	1952	White	Gray	Buff
S100.....	Rogue in Illini	1949	White	Gray	Buff
Smith Super.....	Farmer selection	about 1953	White	Gray	Buff
Ogden.....	Tokyo X P. I. 54610	1940	Purple	Gray	Dilute black ^c
Lee.....	S100 X CNS	1954	Purple	Brown	Black

^a Short hairs on leaf, stem, and pod. Color best observed on mature plants.

^b The hilum is the eye or seed scar where the seed is attached to the pod. Seed coats of all varieties listed are light yellow, except those of Ogden and Smith Super which are light green.

^c Center of hilum is black, margin is buff.