Michigan Soybean Performance Report 1979
Michigan State University Extension Service

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Soybean Performance Report
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The Michigan Soybean Performance Report-1979—provides information to farmers on the relative performance of many varieties available in Michigan.

Comprehensive variety trials were conducted in the southern peninsula at 2 locations: southeastern and central Michigan. Smaller trials were conducted in 10 other Michigan soybean growing areas. Results presented here are designed to aid producers in selecting appropriate varieties for planting in 1980.

Testing Procedure

Commercial entries were obtained voluntarily from seed companies or their representatives. Names and addresses of these companies and their varieties are given in Table 13. Seed of public varieties were supplied by the Michigan Foundation Seed Association. The 2 comprehensive trials were located in Gratiot and Monroe Counties, the 10 smaller trials in Antrim, Bay, Berrien, Calhoun, Delta, Macomb, Monroe, Shiawassee (2) and Tuscola Counties.

Extension and farmer cooperators, planting and harvesting dates, fertilization practices, and soil management groups at the twelve locations are listed in Table 1.

At all locations, each entry was a plot of four rows, 17 feet long. Row spacing was 28 or 30 inches and seeding rate was approximately 8 viable seeds per foot of row. Planting depth was 1½ inches. Each entry was replicated either three or four times and randomized in the field. Thirteen feet of each of two center rows of a plot were harvested for yield determination.

Four-year yield data are presented for varieties in the two comprehensive trials. Previous years' trial locations were as follows: 1978—Monroe and Gratiot Counties; 1977—Monroe and Eaton Counties; and 1976—Lenawee and Eaton Counties. Two year yield data are presented for Bay, Calhoun, Macomb and Tuscola Counties. Testing procedures in previous years were similar to those in 1979.

Evaluation of Characteristics

Descriptions of varietal characteristics are presented below.

Yield—Harvested seed was dried to a uniform moisture. Yields were expressed in bushels per acre at 13% moisture.

Maturity Date—An entry was considered mature when the pods had turned brown and would crack under finger pressure. Dates were recorded by month and day.

Lodging—Lodging ratings were as follows: 1 = almost all plants upright; 2 = all plants leaning slightly or a few plants down; 3 = all plants leaning moderately (45°) or 25% to 50% of the plants down; 4 = almost all plants down. The ratings were made just prior to harvest.

Height—Plant height was measured in inches from the soil surface to the top node of the main stem. The measurement was made in advance of harvest.

Seed Size—The number of seeds per pound was determined as an expression of seed size. The determination of seeds per pound was made on cleaned seed.

Results

Results of the 1979 variety trails are presented in Tables 2 through 12. Values presented are averages of all replications at each location.

Growing conditions were extremely variable among locations. Excessive rain caused severe lodging at the large Monroe County trial. Late planting, early frost, and dry weather resulted in poor varietal performance in Antrim County. Plots were flooded at the Majzel Farm in Shiawassee County. Severe rodent damage occurred on the Shuman Farm in Shiawassee County, prohibiting the collection of data for all but Phytophthora root rot ratings.

LSD (least significant difference) values for yield are presented at the bottom of Tables 2 through 12. Two varieties that may have similar genetic potential for yield may nevertheless differ in yield because of variations in soil fertility and other environmental characteristics among plots at trial locations. To determine if two varieties actually differ in their genetic potential for yield, LSD values can be used. If the difference between two varieties is greater than the LSD (.05) value there is 95% or greater probability that those two varieties actually differ in performance. For example, in the Macomb County trial (see Table 9) the LSD value is 5.0 bu/A. Amsoy 71 yielded 35.0 bu/A whereas Steele yielded 25.7 bu/A. The difference is 9.3 bu/A which is greater than the LSD value, thus Amsoy 71 performed significantly better than Steele. Conversely, the yields of Amsoy 71 and Beeson differ by only 2.8

bu/A which is less than the LSD value. Therefore, the small difference between these two varieties could be the result of environmental factors or experimental error.

Selecting a Variety

Scientific yield trials on an individual's farm for several years would provide the best information on variety performance. Because such trials are impractical for each farmer to conduct, results of variety trials conducted by the university in combination with other helpful information and past experiences can be used by farmers to select a variety.

The primary consideration in selecting a variety is harvestable yield. Yield performance over several years should be considered, if available, when evaluating a variety. Preference should be given to data obtained in the nearest variety trial. However, all trials should be considered in determining a variety's performance under various environmental conditions.

Considerations other than yield are important in selecting a variety and in some cases result in choosing a variety with only moderate performance. Selecting a variety with a proper maturity date is of prime importance. From past weather data, farmers can determine the percent probability of when the first frost will occur in the fall. Choosing a variety that will reach maturity (see maturity date definition) just prior to the average date of the first damaging frost will normally result in best yields. Farmers growing soybeans for the first time may wish to contact neighbors to determine what varieties typically mature before frost in their area. When large acreages are planted to soybeans, growing varieties of different maturities provides staggered maturity dates for a longer harvest season.

The degree of lodging varies among varieties. Plants lodged in variety trials are manually picked up and threshed, thus potential yield losses are not reflected in the yields reported. Lodging ratings should be used to evaluate potential losses. Farmers who have experienced lodging in the past and have had problems combining these beans may want to select a variety more lodging resistant. Alternately, a variety susceptible to lodging may be planted at a slightly lower population in an effort to increase standability. Data on lodging should be evaluated over all locations to determine a particular variety's lodging characteristics.

Seed size should be noted when selecting planting rates. Planting rates based on number of seeds per foot of row eliminates seed size bias.

Many diseases can be found in soybean fields in Michigan. The diseases which contribute most significantly to yield reduction are seed and seedling diseases and root rot and stem rot diseases. Root rots of soybeans are generally recognized when plants prematurely turn yellow, wilt or die. Less noticeable is the yield reduction that occurs when root rots destroy part of the root system and reduce the uptake of water and minerals, but cause no visible symptoms to above-ground parts. The fungi that cause root rots often survive in the soil for several years, even in the absence of a host plant. Once root rot fungi are established in a field, control is difficult even with rotation.

Phytophthora root rot affects young seedlings as well as older plants. This is reflected in reduced stands and disease symptoms such as yellowing, wilting or dying of older plants of susceptible varieties. Ratings in Table 11 show how race 1 of the fungus affects susceptible and resistant varieties. Differences between susceptible varieties may be the result of several factors that affect resistance. Differences in yield among varieties in Table 11 may reflect the presence of root rot, although the disease ratings and yield data presented are from different farms.

Thielaviopies or black root rot appears to affect younger plants more severely than older plants, and can reduce stands under certain environmental conditions. Differences in the stand counts and yields shown in Table 10 are in part due to high levels of black root rot in the Monroe field plot. Black root rot also occurred on the Majzel Farm plots in Shiawassee County.

Brown stem rot is primarily a disease of older plants and causes premature death. Yield losses of up to 30% have been reported as a result of this disease. This disease was also prevalent in the Monroe plots (Table 10). Differences in susceptibility are indicated by the number of plants affected within each variety. A rating of 1 indicates that less than 10% of the plants were affected, and a rating of 4 indicates that more than 75% were affected. See Table 10 for an explanation of the other ratings. Significant differences in yields between varieties in the disease plots may be the result of one or more diseases. A comparison of yields from Table 10 with yields of the same varieties in Table 2 may give some indication of the role of diseases in reducing yield.

New varieties with resistance to one or more diseases are presently being developed, particularly varieties resistant to phytophthora root rot. Seed dealers or Cooperative Extension Service personnel should be consulted for information on varietal disease resistance characteristics.

It is often beneficial for growers to select a few good varieties for planting each year. Yield determination and careful field evaluation during the growing season will add to the grower's knowledge of varietal performance and allow better selection in following years.

Use of Data

All data presented, except the 1978-79 and 1976-79 yield averages, are of varietal performance in 1979. Order of the varieties in no way implies superiority of one over another.

The presentation of data for the entries tested does not suggest approval or endorsement of varieties by the authors or by those responsible and involved with conducting the performance trials.

The authors regret any errors that may appear in this bulletin.

Table 1. Variety Trial Information.

County	Coop. Extension Service Cooperator	Farmer Cooperator	Address	Soil Mgt. Group	Planting Date	Fertilizer	Harvest Date
ANTRIM	Burton Stanley	Dick Shiels	Rt. 1 Elmira	5a	6-12	250 lbs. 6-24-24	9-28
BAY	Russell Howes Arenac County	Wm. Mueller & Son Elevator	Pinconning	1.5b	5-17	200 lbs. 0-0-60 250 lbs. 8-25-3	10-18
BERRIEN	Clare Musgrove	Paul & Warren Strefling	Rt. 1 Galien	2.5b-s	5-24	300 lbs. 5-10-30	10-27
CALHOUN	James Swart	Jeff Fountain	16086 22½ Mi. Rd., Marshall	3a	5-18	100 lbs. 0-0-60	10-26
DELTA	Dr. Richard Leep Don Pellegrini	Herman Robere	Fayette	2.5a	6-5	300 lbs. 6-24-24	10-16
GRATIOT	Gregory Varner	Clarence Reeves	Baldwin Road Ithaca	2.5c	5-31	250 lbs. 6-24-24	10-25, 10-26
MACOMB	Simo Pynnonen St. Clair County	Roy Grennia	1395 Kronner Rd. Richmond	2.5c	5-23	200 lbs. 0-0-60	10-18
MONROE	Paul Nevel	Raymond Shepherd	10456 Secor Rd. Temperance	5a	6-2	200 lbs. 5-10-10 2% Mn	10-24
MONROE	Paul Nevel	Vernon Winkleman	3084 Dennison Rd. Dundee	2.5b	5-16	200 lbs. 3-17-40 2% Mn	10-22
SHIAWASSEE	Dick Austin	John Majzel	851 E. Cronk Rd. Corunna	2.5c	5-21	200 lbs. 12-12-12	10-16
SHIAWASSEE	Dick Austin	Leo Shuman	5547 S. Byron Rd. Durand	2.5b	5-23	200 lbs. 6-26-26	10-30
TUSCOLA	Don Kebler	Charles Witkovsky	Cleaver Road Caro	2.5c	5-17	150 lbs. 6-24-24	10-16

Table 2. Southeastern Michigan — Monroe County

Variety	1979 Yield (Bu/A)	1976-1979 Avg. Yield (Bu/A)	Maturity Date	Lodging	Height (inches)	Seed Size (seeds/lb)
Early to Medium Maturity						
Hark	47.8	34.6	9-30	3.3	41	2340
Hodgson 78	49.8		9-22	2.8	40	2377
Weber	48.4		9-22	3.2	39	3068
Coles	45.4	33.5*	9-29	3.5	44	2225
Evans	44.3	32.6	9-11	3.4	39	2522
AG-GRO GP104	55.9		9-27	3.0	40	2281
AG-GRO GP134	43.0		9-22	2.9	37	2045
Agripro AP 10	50.5		9-24	3.3	40	2402
Agripro 14	47.7	37.7	9-22	3.3	39	2293
Anderson APS 150	52.6		10-3	3.8	45	2389
Asgrow A1564	50.2		9-23	3.2	40	2293
Dairyland DSR 171	53.4		9-27	3.1	42	2522
FFR 0005	45.8		9-22	3.5	38	2671
Jacques J84A	42.2		9-19	2.9	40	2609
NK Multivar 42	47.3		9-22	2.2	36	2389
NK S1346	48.6	34.2	9-23	2.0	35	2270
NK S1244	39.9		9-22	2.9	35	2352
Peterson 1980	57.0		9-26	3.4	41	2594
Peterson 1677	51.1	41.2	9-22	3.2	35	2873
Pfizer CX 155	55.1		10-1	3.5	39	2522
Pfizer EC 185	53.4		10-1	3.3	39	2495
Pride B070	38.0		9-11	3.6	36	3153
Smith Douglas S-D 619	40.9		9-22	3.6	40	2162
SRF 150P	50.5	36.5	10-4	3.8	45	2536
Hyland 7806	45.5		9-23	3.7	38	2215
Voris 135	44.6	37.2*	10-1	3.7	43	2536
LSD (.05) =	5.7					

(Continued)

Monroe County (continued)

Variety	1979 Yield (Bu/A)	1976-1979 Avg. Yield (Bu/A)	Maturity Date	Lodging	Height (inches)	Seed Size (seeds/lb)
Medium to Late Maturity						
Nebsoy	48.5		9-30	3.3	48	2624
Beeson	46.6	38.9*	10-4	3.5	45	2293
Corsoy	52.7	42.3	10-1	3.5	47	2522
Harosoy 63	45.1	36.6	9-30	3.7	47	2377
Wells II	45.5		9-29	3.2	45	2522
Corsoy 79	53.1		10-1	3.8	51	2551
Century	53.5		10-6	3.6	46	2305
Amsoy 71	46.9	38.2	10-5	3.8	51	2377
Harcor	57.2		10-3	3.9	45	2671
Vickery	57.6		10-1	3.8	43	2609
ACCO 201	47.4		9-23	3.5	41	2352
AG-GRO GP224	51.4		10-3	3.7	47	2270
AG-GRO GP244	50.0		10-7	3.8	47	2402
AG-GRO GP266	51.1		10-8	3.8	44	2293
AG-GRO GP288	51.9		10-8	3.9	52	2293
Agripro 18	49.9	36.8	9-24	3.6	43	2640
Agripro 200	51.1		9-28	3.1	44	2508
Agripro 225C	54.4		9-29	3.3	44	2236
Agripro 20	50.0	39.2	10-3	3.6	48	2389
Anderson APS 200	50.7	41.0*	10-1	3.5	48	2402
Anderson APS 300	49.9		10-12	3.7	59	2402
Asgrow A2440	54.7		10-1	3.5	46	2768
Asgrow A2575	55.2		10-4	3.5	46	2495
Asgrow A2656	49.2		9-30	3.7	49	2495
Asgrow XP2858	48.8		10-5	3.6	38	1974
Callahan 8220	48.5		10-3	3.4	46	2640
Callahan 9250	54.3		10-6	3.4	47	2248
Callahan 50140EX	53.2		10-4	3.2	44	2172
Dairyland DSR 207	49.5		10-2	3.3	43	2152
Dairyland DSR 232	47.3		10-4	3.6	48	2655
FFR 2743	42.7		10-2	3.3	46	2389
FFR 223	46.0	38.0*	10-3	3.8	51	2340
FFR 224	42.1		10-11	3.9	41	2686
FFR 2762	51.9		10-4	4.0	55	2565
Gries G285	48.5		10-7	3.7	44	2281
Gries G290	48.7		10-9	3.7	51	2536
Jacques J102	57.6		9-30	3.7	43	2441
NK S2596	53.8		10-2	3.0	37	2193
NK S1492	47.3	38.8	9-29	3.4	41	2967
NK S1474	48.2	39.1	10-3	3.8	43	2551
NK Multivar 52	53.2		10-3	3.1	38	2121
Peterson 2180	54.2		10-1	3.4	43	2248
Peterson 3100 Brand	47.3	40.0*	10-1	3.3	41	2441
Peterson 2477	51.6	41.6*	10-3	3.5	45	2522
Peterson 2480	55.1		10-4	3.8	43	2377
Peterson 105-P Brand	50.5	39.6*	10-4	3.8	47	2365
Peterson 2877	52.7	37.6*	10-5	3.8	47	2481
Peterson 3105	51.3	42.9	10-10	3.8	50	2536
Pfizer CB 200	56.0		10-3	3.9	49	2402
Pfizer CB 244	52.7		10-6	3.9	48	2352
Pfizer CX 275	49.7		10-6	3.7	47	2064
Pfizer CX 276	48.3		10-7	3.9	45	2467
Pfizer CX 290	49.0		10-6	3.7	46	2402
Pride B216	54.3	40.1	9-27	3.3	40	2508
Pride B220	52.8		10-2	3.5	45	2270
Bethesda	46.0		10-5	3.7	53	2281
Rupp Seeds RS2300	53.0		9-27	3.2	45	2454
Smith Douglas S-D830 NR	48.3		10-11	3.9	62	2671

(Continued)

Monroe County (continued)

Variety	1979 Yield (Bu/A)	1976-1979 Avg. Yield (Bu/A)	Maturity Date	Lodging	Height (inches)	Seed Size (seeds/lb)
Smith Douglas S-D724	52.3		10-2	3.4	57	2671
Smith Douglas S-D834 Improved	50.1		10-8	3.9	48	2415
SRF 200	44.5	39.0	10-6	3.7	50	2551
SRF 250	48.1		10-3	3.1	41	2785
SRF 74-5897 (Exp.)	49.1		10-11	3.9	51	2415
Falcon	46.0		9-29	2.8	41	2495
Hyland 7901	48.4		10-6	3.4	43	2259
Voris B200	52.6	42.4	9-28	3.5	45	2671
Voris 207	51.6		9-27	3.6	50	2702
Voris 247	49.4		10-2	3.2	41	2281
Voris 285	43.7		10-8	3.9	49	2522
V. R. Seeds Viking	46.4	36.7*	10-3	3.8	50	2624
V. R. Seeds Duke	47.6		10-1	3.4	47	2293
V. R. Seeds Burr	48.2	38.1*	10-6	3.5	42	2293
V. R. Seeds Classic I	49.2	40.3*	10-8	3.8	48	2609
V. R. Seeds Bishop	43.8		10-6	3.9	51	2671
LSD (.05) =	6.1					

3 year yield average only

Table 3. Central Michigan — Gratiot County

Variety	1979 Yield (Bu/A)	1976-1979 Avg. Yield (Bu/A)	Maturity Date	Lodging	Height (inches)	Seed Size (seeds/lb)
Early to Medium Maturity						
Hark	41.5	35.8	10-3	1.5	40	2172
Hodgson 78	42.7	40.1	10-2	1.7	40	2873
Weber	44.8		10-1	2.2	39	2142
Coles	35.9	39.0*	10-4	1.8	45	2495
Evans	47.5	37.6	9-26	1.3	38	2655
ACCO 101	45.2		10-2	1.8	42	2855
AG-GRO GP104	41.4		10-2	1.7	38	2536
AG-GRO GP134	42.2		10-1	2.0	42	2389
Agripro AP 10	45.3		10-3	2.7	39	2873
Agripro 14	44.4	40.5*	10-2	1.3	39	2495
Anderson APS 150	44.2		10-6	1.5	46	2802
Asgrow A1564	43.2		9-30	1.5	41	2671
Callahan 9160	48.0		10-5	2.7	46	2671
Dairyland DSR 141	43.1		10-2	2.0	41	2838
Dairyland DSR 171	39.8		9-30	1.5	41	2508
FFR 0005	38.9		10-2	2.0	40	2987
Jacques J84A	36.0		9-28	1.8	42	2655
NK Multivar 31	37.9		9-23	1.7	38	2624
NK S1346	41.6	40.0	9-28	1.3	35	2215
NK Multivar 42	42.6		10-1	1.2	37	2402
NK S1244	37.9	36.2	9-30	1.7	40	2495
NK S0512	38.4		9-20	1.7	36	2183
Peterson 1980	48.4		10-4	2.0	43	2551
Peterson 1677	46.6	42.2*	10-3	1.8	39	2891
Pfizer CX 155	50.5	41.6*	10.6	2.8	43	2352
Pfizer EC 185	44.1		10-4	2.8	43	2551
Pride B070	35.9		9-21	1.7	34	2609
SRF 150P	48.5	40.8	10-3	1.5	42	2481
Hyland 7806	45.4		9-29	1.8	34	2640
Voris 135	44.3	39.1*	10-7	1.8	42	2389
Voris B100	45.6		10-6	2.7	44	2929
V.R. Seeds Erik	39.5		10-5	3.0	48	2293
V.R. Seeds Beam	36.4	36.3*	10-5	2.2	43	2377
LSD (.05) =	6.8					

(Continued)

Gratiot County (continued)

Variety	1979 Yield (Bu/A)	1976-1979 Avg. Yield (Bu/A)	Maturity Date	Lodging	Height (inches)	Seed Size (seeds/lb)
Medium to Late Maturity						
Nebsoy	34.4		10-7	1.2	36	2987
Beeson	37.4	41.8*	10-8	1.0	41	2987
Corsoy	41.7	39.7	10-6	2.3	40	2768
Harosoy 63	29.6	31.8*	10-5	2.2	44	3338
Wells II	45.1		10-6	1.0	43	2467
Corsoy 79	38.9		10-7	2.2	40	2838
Century	36.1		10-12	1.8	41	2768
Amsoy 71	38.7	37.9*	10-9	1.8	43	2820
Harcor	43.2		10-7	2.7	40	2855
Vickery	39.7		10-6	2.2	40	2855
ACCO 201	40.4		10-4	1.0	39	2910
AG-GRO GP224	37.1		10-13	2.2	42	2838
AG-GRO GP244	36.9		10-10	2.0	42	2820
AG-GRO GP266	34.0		10-15	1.3	42	2838
Agripro 18	41.3	39.5*	10-4	1.2	39	3338
Agripro 200	40.7		10-4	2.0	39	3243
Agripro 225C	37.9		10-4	1.3	37	3603
Agripro 20	39.1	38.7*	10-9	1.5	41	2820
Anderson APS 200	37.2	39.9*	10-10	1.8	41	2671
Asgrow A2440	41.9		10-7	2.7	40	3027
Asgrow A2575	38.3		10-9	1.8	41	2671
Asgrow A2656	43.0		10-7	1.5	42	2686
Callahan 8220	39.4		10-9	2.3	40	2719
Jacques J102	39.0		10-8	2.3	41	2702
NK S2596	40.9		10-8	1.2	35	3007
NK S1492	39.5	40.4	10-9	1.7	38	2624
NK S1474	39.1	40.3	10-11	3.5	40	2873
NK Multivar 52	43.8		10-9	1.5	34	2967
Peterson 2180	41.9		10-6	1.7	38	3007
Peterson 3100 Brand	41.3	38.2	10-6	1.5	40	3027
Peterson 2477	38.9	37.7*	10-8	1.3	41	2873
Peterson 2480	39.2		10-11	1.7	39	2624
Peterson 105-P Brand	37.9	40.2*	10-8	2.5	44	2820
Peterson 2877	39.8	38.5*	10-9	2.3	41	2892
Peterson 3105	35.6	38.6	10-13	2.7	44	2785
Pfizer CB 200	36.7		10-9	2.5	41	2987
Pfizer CB 244	37.2		10-10	1.7	41	2838
Pfizer CX 275	33.9		10-12	1.5	41	2892
Pfizer CX 276	33.1	36.9*	10-10	2.5	43	2948
Pfizer CX 290	38.8		10-12	2.5	44	2785
Pride B216	39.6	40.0	10-7	1.2	37	2987
Pride B220	41.7		10-7	1.0	38	2768
Rupp Seeds RS 2300	30.7		10-3	1.0	37	2892
SRF 200	37.3	37.0	10-10	1.7	44	2873
SRF 250	40.6		10-7	1.0	38	3266
SRF 74-5897 (Exp.)	34.8		10-12	1.0	43	2389
Falcon	35.8		10-5	1.0	38	2838
Hyland 7901	36.7		10-11	2.0	39	2551
Voris B200	37.0	40.1*	10-6	1.8	40	3027
Voris 207	36.1		10-6	1.7	41	2892
Voris 247	42.0		10-5	1.0	36	2655
Voris 245	44.3	39.6	10-7	2.8	43	3088
V.R. Seeds Viking	36.0	38.0*	10-9	2.8	44	3243
V. R. Seeds Duke	33.8		10-8	2.2	42	2855
V.R. Seeds Burr	37.2		10-10	1.5	39	3220
V.R. Seeds Classic I	34.8		10-11	2.3	43	3131
LSD (.05) =	6.5					

*3 year yield average only

Table 4. Antrim County

Variety	1979 Yield (Bu/A)	Maturity Date*	Height (inches)	Lodging
Ada	16.8	9-27	25	1.0
Altona	13.5	9-20	23	1.0
Clay	14.4	9-29	22	1.0
McCall	18.6	9-25	23	1.0
Wilkin	14.4	10-1	21	1.0
Maple Arrow	15.4	9-26	23	1.0
Portage	17.4	9-23	23	1.0

LSD (.05) = not calculated

**Estimated because frost occurred on 9/19*

Table 5. Bay County

Variety	1979 Yield (Bu/A)	1978-9 Avg. Yd. (Bu/A)	Maturity Date	Height (inches)	Lodging
Amsoy 71	36.2	37.0	10-5	50	2.2
Beeson	36.4	37.5	10-5	40	2.0
Coles	41.9	38.8	10-1	46	3.0
Corsoy	43.5	39.9	9-26	38	2.3
Hark	41.0	37.9	9-28	33	1.0
Harosoy 63	38.4	34.7	10-2	48	3.3
Hodgson 78	48.2	45.4	9-27	39	2.0
Steele	39.3	40.5	9-25	37	2.5
SRF 150P	40.3	42.5	9-30	42	2.2
Pride B186	40.5	—	9-24	37	1.8
Pride B216	41.0	40.5	10-4	38	2.3
Jacques J98	40.0	38.9	9-29	35	2.0
Jacques J102	37.7	—	10-2	43	2.5
Beam	33.4	37.0	10-1	38	2.0
Asgrow A2440	43.4	42.6	9-30	41	2.7
Agripro AP 10	43.3	41.1	9-25	38	2.3
Agripro 14	38.8	40.9	9-28	38	1.5
Agripro 18	41.8	41.2	10-1	41	2.5

LSD (.05) = 7.2

Table 6. Berrien County

Variety	1979 Yield (Bu/A)	Maturity Date	Height (inches)	Lodging
Amsoy 71	54.5	9-28	37	2.0
Beeson	49.1	9-29	32	1.9
Coles	42.2	9-25	34	1.7
Corsoy	50.5	9-27	32	2.2
Evans	41.6	9-17	25	1.3
Hark	48.4	9-23	30	1.3
Harosoy 63	44.0	9-27	36	2.4
Hodgson 78	45.5	9-23	31	1.7
Steele	38.3	9-18	25	1.4
SRF 150P	42.6	9-21	27	1.1
SRF 200	49.0	9-27	34	1.8
SRF 307P	46.3	10-2	39	3.3
Wells II	51.7	9-26	34	1.4
Peterson 3105	50.5	10-1	38	2.7
Harcor	53.2	9-28	35	2.8
Williams	45.1	10-3	41	2.9
Agripro 20	45.4	9-30	33	1.8
McKoy 1100	47.0	9-27	33	1.2
Asgrow A2440	48.1	9-29	33	2.3
Jacques J102	49.4	9-27	34	2.3

LSD (.05) = 7.9

Table 7. Calhoun County

Variety	1979 Yield (Bu/A)	1978-9 Avg. Yd. (Bu/A)	Maturity Date	Height (inches)	Lodging
Amsoy 71	36.7	34.3	9-30	37	1.3
Beeson	39.2	33.9	9-30	36	1.5
Coles	37.2	33.7	9-26	39	1.4
Corsoy	41.1	36.6	9-28	36	1.9
Evans	38.3	32.5	9-18	31	1.1
Hark	37.8	32.3	9-28	35	1.3
Harosoy 63	35.9	31.9	9-30	41	2.1
Hodgson 78	38.7	32.0	9-20	33	1.2
Steele	36.1	29.7	9-20	34	1.1
SRF 150P	40.8	34.3	9-25	35	1.0
SRF 200	39.5	34.3	9-28	40	1.6
Asgrow A2440	42.2	38.1	9-29	38	1.8
Asgrow A2656	43.6	38.8	9-29	39	2.0
Viking	40.1	32.1	9-28	39	2.1
Buccaneer	36.1	32.2	9-30	43	1.8
Agripro 20	38.0	33.1	9-28	38	1.3
NK S1492	38.7	33.6	9-29	34	1.4
NK S1474	42.0	36.1	9-29	38	3.4
Wells II	38.8	33.9	9-28	37	1.1
Jacques J98	43.9	—	9-29	38	2.2

LSD (.05) = not significant

Table 8. Delta County

Variety	1979 Yield (Bu/A)	Maturity Date	Height (inches)	Lodging
Maple Arrow	29.6	10-15	27	1.0
McCall	27.8	10-12	27	1.5
Altona	23.4	10-20	25	1.5
Wilkin	19.9	10-30*	24	1.2
Ada	16.7	11-5 *	25	1.0
Clay	14.2	11-5 *	20	1.0

LSD (.05) = not calculated

**estimated due to frost on 10/20*

Table 9. Macomb County

Variety	1979 Yield (Bu/A)	1978-9 Avg. Yd. (Bu/A)	Maturity Date	Height (inches)	Lodging
Amsoy 71	35.0	24.5	10-7	44	1.1
Beeson	32.2	26.5	10-7	39	1.1
Coles	30.6	24.0	10-2	40	1.4
Corsoy	36.0	25.5	10-3	38	1.4
Evans	35.0	24.8	9-21	37	1.0
Hark	34.0	23.6	10-5	36	1.2
Harosoy 63	28.4	21.2	10-5	40	1.1
Hodgson 78	35.6	27.4	9-25	38	1.1
Steele	25.7	20.4	9-27	35	1.1
SRF 150P	31.1	23.8	10-2	38	1.0
SRF 200	34.7	23.9	10-5	43	1.1
Jacques 98	38.0	26.4	9-30	42	1.8
Jacques 104	34.4	26.1	10-4	42	1.5
NK S1244	32.7	23.6	10-9	35	1.6
NK Multivar 52	34.7	—	10-8	39	1.4
Agripro 20	34.0	25.4	10-7	41	1.7
Agripro 18	36.3	27.5	10-1	39	1.7
Agripro 14	37.9	28.2	9-27	38	1.3
Viking	32.7	25.8	10-4	42	1.7
Wells II	40.1	27.4	10-4	40	1.2

LSD (.05) = 5.0

1P-1R-6M-12:79-UP, Price 30 cents

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Table 10. Monroe County, Shepherd Farm

Variety	1979 Yield (Bu/A)	Maturity Date	Height (inches)	Lodging	Plants/ Ft. of Row	BSR*
Amsoy 71	31.4	10-3	38	1.8	7	1.8
Beeson	33.2	10-4	34	1.2	7	0.3
Coles	30.7	9-30	32	1.3	5	0.7
Corsoy	33.7	10-1	34	2.3	8	4.0
Evans	30.7	9-19	37	1.2	8	—
Hark	32.0	9-30	36	1.3	7	2.3
Hodgson	37.8	9-23	36	1.4	7	4.0
Hodgson 78	31.2	9-24	34	1.5	8	3.8
Corsoy 79	34.1	10-3	39	2.4	7	2.0
Weber	34.4	9-29	34	1.9	8	3.7
SRF 200	34.7	10-4	40	1.5	7	1.5
SRF 150P	34.7	10-2	35	1.4	8	1.3
Nebsoy	37.6	10-1	32	1.8	8	3.0
Harcor	35.5	10-2	38	2.3	7	3.7
Wells II	34.8	10-1	37	1.3	9	1.5
Vickery	34.5	9-30	36	2.4	7	3.7
Century	35.0	10-6	37	1.4	8	1.3

LSD (.05) = Not significant

*Brown Stem Rot disease ratings:

0 = no disease
1 = less than 10% plants infected
2 = 10-25% plants infected
3 = 26-75% plants infected
4 = more than 75% plants infected

Table 11. Shiawassee County

	Majzel Farm				Shuman Farm
Variety	1979 Yield (Bu/A)	Maturity Date	Height (inches)	Lodging	PRR Rating*
Amsoy 71	33.1	9-29	29	1.0	0.0
Beeson	33.2	9-30	27	1.0	0.0
Coles	26.0	9-26	28	1.2	13.3
Corsoy	27.9	9-27	22	1.0	10.9
Evans	16.4	9-16	19	1.0	0.0
Hark	21.5	9-26	22	1.0	5.8
Hodgson	32.0	9-23	24	1.0	8.5
Hodgson 78	30.6	9-23	22	1.0	0.0
SRF 150P	20.2	9-26	21	1.0	0.1
SRF 200	33.4	9-28	27	1.0	0.0
Nebsoy	28.8	9-27	21	1.0	0.0
Harcor	28.0	9-27	22	1.0	0.0
Corsoy 79	35.4	9-27	28	1.0	0.0
Wells II	37.8	9-27	26	1.0	0.0
Century	35.9	10-1	28	1.0	0.0
Vickery	35.8	9-26	29	1.0	0.0
Weber	25.9	9-22	21	1.0	11.0
LSD (.05) =	8.9				

* % plants infected by *Phytophthora megasperma* Var. *sojae*. race 1.

Table 12. Tuscola County

Variety	1979 Yield (Bu/A)	1978-79 Avg. Yd. (Bu/A)	Maturity Date	Height (inches)	Lodging
Amsoy 71	40.2	36.3	10-1	49	2.0
Beeson	37.5	34.4	10-4	45	2.3
Coles	43.2	35.5	9-27	46	2.8
Corsoy	43.3	37.8	9-26	42	2.5
Evans	47.4	35.9	9-16	39	1.3
Hark	39.0	33.6	9-28	41	1.7
Harosoy 63	40.0	32.2	9-27	45	2.7
Hodgson 78	43.0	38.4	9-20	40	1.8
Steele	40.0	32.7	9-22	41	2.2
SRF 150P	42.0	35.1	9-25	42	1.2
SRF 200	40.7	34.9	10-1	46	1.8
Asgrow A2440	47.3	38.1	9-25	43	2.7
Asgrow A2656	39.4	36.9	9-29	43	2.5
FFR 111	36.9	30.1	9-29	47	2.7
Agripro AP 10	42.4	36.6	9-21	38	2.0
Jacques J98	41.8	37.7	9-28	46	2.3
Jacques J104	45.9	40.2	9-28	46	2.7
NK S1474	38.9	35.4	10-6	42	2.5
Viking	40.9	34.3	10-3	47	2.8
LSD (.05) =	6.3				

Table 13. Seed Sources

Source	Brand	Entry
Public Releases		Hark, Harosoy 63, Corsoy, Corsoy 79, Beeson, Amsoy 71, Hodgson, Hodgson 78, Evans, Steele, Coles, Wayne, Wells II, Weber, Nebsoy, Harcor, Century, Vickery, Maple Arrow, McCall, Altona, Ada, Clay, Wilkin, Portage
ACCO Seed Company Belmond, IA	ACCO	101, 201
AG-GRO Seeds Inc. Blissfield, MI	AG-GRO	GP-104, GP-134, GP-224, GP-244, GP-266, GP-288
The Andersons Maumee, OH	Anderson	APS 150, APS 200, APS 300
Asgrow Seed Company Des Moines, IA	Asgrow	A1564, A2440, A2575, A2656, XP2858
Callahan Seeds Westfield, IN	Callahan	8220, 9160, 9250, 50140EX
Dairyland Research Kewaskum, WI	Dairyland	DSR 141, DSR 171, DSR 207, DSR 232
Farmers Forage Research Cooperative (FFR Coop) W. Lafayette, IN	FFR	0005, 111, 223, 224, 2743, 2762
Ferry-Morse Seed Company Genesco, IL	McKoy	1100
Gries Seed Farm Freemont, OH	Gries	G285, G290
Jacques Seed Company Prescott, WI	Jacques	J84A, J98, J102, J104
North American Plant Breeders Ames, IA	Agripro	AP10, 14, 18, 20, 200, 225C
Northrup King Company Washington, IA	NK	Multivar 31, Multivar 42, Multivar 52, S0512, S1244, S1346, S1474, S1492, S2596
Peterson Seed Division Grand Rapids, OH	Peterson	3100 Brand, 105-P Brand, 1677, 1980, 2180, 2477, 2480, 2877, 3105
Pfizer Genetics Beaman, IA	Pfizer	CX155, EC185, CX275, CX276, CX290, CB200, CB244
Pride Co., Inc. Carson City, MI	Pride	B070, B186, B216, B220
Kenneth Rehklau Riga, MI		Bethesda
Rupp Seed Farm Wauseon, OH	Rupp Seeds	RS2300
Smith-Douglas Fertilizer Co. Riga, MI	Smith-Douglas	S-D619, S-D724, S-D83ONR, S-D834 Improved
Soybean Research Foundation Mason City, IL	SRF	150P, 200, 250, 307P, 74-5897 (Exp.)
W. G. Thompson & Sons, Ltd. Blenheim, Ontario, Canada		Hyland 7806, Hyland 7901, Falcon
Voris Seeds, Inc. Glenhaven, WI	Voris	B100, 135, B200, 207, 245, 247, 285
V. R. Seeds, Inc. Flora, IN	V.R. Seeds	Erik, Beam, Buccaneer, Viking, Duke, Burr, Classic I, Bishop