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1998 Performance of Field Crop Varieties



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About the Cover

In the top photo, an agricultural engineer examines a sample of grain collected from the combine's grain flow sensor. The image was taken by photographer Bruce Fritz and is used by permission of the Agricultural Research Service, U.S. Department of Agriculture, Washington, D.C. The image of grain sorghum at bottom left is used by permission of the National Grain Sorghum Producers, headquartered in Abernathy, Texas. The TAES gratefully acknowledges the assistance of these two organizations.

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1998

PERFORMANCE OF FIELD CROP VARIETIES

DATA FOR 1998

WITH SUMMARIES OF RESULTS FROM PREVIOUS YEARS

CORN - GRAIN SORGHUM - RYE - OATS

BARLEY - WHEAT - SOYBEANS

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RECOMMENDED CROP VARIETIES

Listed Alphabetically

Corn Hybrids

See Table A.

Oats

Fall: Southern States 76-30.

Spring: Don, Larry, Ogle, and Otee.

Wheat

Clemens, FFR 525[1], FFR 555, Foster, Hickory[1], Northrup King Coker 9803[1], Northrup King Coker 9663, Northrup King Coker 9543, Madison, American Patriot, Pioneer brand 2552, Pioneer brand 2568, Pioneer brand 2684, Pioneer brand 2580[1], Jackson, Shiloh, Terral TV 8555[1], and Verne.

Barley

Starling.

Alfalfa

Aggressor, Alfagraze, Gem, Belmont, Cimarron VR, Legacy, and Pioneer 5454.

Red Clover

Cinnamon, Redland III, Reddy, and Redman.

Grain Sorghum

No recommendation made for 1999 due to lack of data.

Soybeans

See Table B.

Sorghum x Sudangrass crosses

DeKalb SX-17, DeKalb SX-15, FFR 202, Sordan 79.

Sudangrass

Trudan 8.

Pearlmillet

Millex 24 and Millex 32.

Summer Annual recommendations are based on production when allowed to grow 20-40 inches before cutting or grazing.

[1]Present plans indicate that this variety will not be recommended after 1999.
[2]These varieties were not submitted for testing in 1998.

Table A. The recommended corn hybrids for 1999 are as follows:
MAKE YIELD COMPARISONS ONLY WITHIN A GIVEN GROUP BECAUSE ALL MATURITY GROUPS ARE NOT EVALUATED AT THE SAME LOCATION.

Color-Yellow	Maturity---Early		3 Yr. Avg. Yield	Grain Moisture at Harvest
			[3]Bu/A	%
Pioneer	3335	A	162	14.1
FFR	726	B	152	14.3
HyPerformer	HY 9899 V	C B	150	16.5
FFR	656	C B	150	13.9
HyPerformer	HY 9646	C B	149	14.8
HyPerformer	HS 9843	C D	144	14.9
	Not included in 1998 trials			
Pioneer	3245	----------		
Beck	72X	----------		
Zimmerman	Z 41	----------		
Pioneer	3394	----------		
Northrup King	N 7590	----------		
Color--White	Maturity---Early			
Zimmerman	Z 62 W	B	153	15.0
Color--Yellow	Maturity---Medium season 500 group			
Pioneer	3223	A	163	17.1
Zimmerman	Z 37	B	155	18.4
Pioneer	3163	B	155	17.5
DeKalb	DK 687	C B	153	17.7
Gutwein	2696	C B	152	18.2
DeKalb	DK 626	C B	152	15.8
AgraTech	787	C B	152	17.6
HyPerformer	HY 9919 V	C B	151	18.2
	Not included in 1998 trials			
Pioneer	3223	----------		
Pioneer	3154	----------		
Pioneer	3156	----------		
Gutwein	2810	----------		
Color--White	Maturity--Medium-season (500 Group)[2]			
Pioneer	3203 W	C B	150	18.2
FFR	737 W	C	148	17.2
Color--Yellow	Maturity--Medium -season (Group 600)			
ICI Garst	8220	A	178	17.4
Funk	DG 5510 A	A	174	17.3
FFR	943	A	173	17.3
DeKalb	DK 683	C B	157[1]	15.6
Terra	TR 1167	C	156[1]	15.6
Funk	DG 5516	D	151[1]	15.1
	Not included in 1998 trials			
DeKalb	DK 714	----------		
Terra	TR 1185	----------		
Color--Yellow	Maturity--Full--season			
Crow's	702	A	158	16.9
DeKalb	DK 743	B A	153	17.3
Mycogen	8460	B C	148	16.7
	Not included in 1998 trials			
Northrup King	N 8811	----------		
Pioneer	3165	----------		
FFR	907 W	DC	142	16.4
Zimmerman	Z 64 W	D	141	16.3

[1]Present plans indicate that this hybrid will not be recommended after 1999.
[2]For the medium-season hybrids, 500 and 600 refer only to the entry numbers.
[3]Means followed by the same number within a maturity group are not significantly different as shown by the Duncan's Range Test at the .05 level.

Table B. Recommended Soybean Varieties for 1999

Brand	Variety	Yield Bu/A	Maturity Date
Early Maturity Group IV			
Not resistant to cyst nematode			
Deltapine	DP 3478	54	9-17
Pioneer	9482	53	9-17
Dixie	478	53	9-17
HyPerformer	AP 4880	53	9-17
DeKalb	CX 478	49	9-15
Resistant to race 3			
MD	Manokin	51	9-23
Not tested in 1998			
Gutwein	7474	--	----[1]
VA	Chesapeake	--	----[1]
Resistant to races 3 and 14			
Asgrow	A 4922	52	9-18
Delta King	4860	49	9-16
Terral	TV 4479	49	9-16
TN	TN 4-94	47	9-22
Hornbeck	HBK 4600	47	9-17
Late Maturity Group VI			
Resistant to race 3			
TN	TN 6-90	--	----
No late maturing varieties evaluated in 1998.			

Brand	Variety	Yield Bu/A	Maturity Date
Medium Maturity Group V			
Not resistant to cyst nematode			
Asgrow	A 5944	54	10-3
VA	Hutcheson	51	9-28
Pioneer	9594	50	10-2
NC	Clifford	48	9-26
NC	Holladay	48	9-23
HyPerformer	HY 574	47	9-30
Resistant to race 3			
Terral	TV 5797	50	10-1
Pioneer	9584	48	9-29
Deltapine	DP 3588	47	10-2
Resistant to races 3 and 14			
Asgrow	A 5848	53	10-2
Asgrow	A 5547	52	9-28
Deltapine	DP 3519 S	52	9-27
FFR	563	49	9-27
MO	Delsoy 5500	48	9-27
FFR	542	47	9-26
TN	TN 5-95	47	9-24
Not tested in 1998			
Asgrow	A 5843	--	---[1]

[1]Present plans indicate that this variety will not be recommended after 1999.

SOYBEANS

Maturity Group IV

Asgrow A 4922: Has white flowers, tawny pubescence, and seed with a black hila. Has resistance to races 3 and 14 soybean cyst nematode. Maturity Group IV.

Chesapeake: Has white flowers, gray pubescence, and tan podwall, seed coats are yellow with buff hila. Has no resistance to soybean cyst nematode. Maturity Group IV.

Deltapine DP 3478: Has purple flowers, tawny pubescence and seed with black hila. Has no resistance to soybean cyst nematode. Maturity Group IV.

DeKalb CX 478: Has white flowers, tawny pubescence, and seed with a black hila. Has no resistance to soybean cyst nematode. Maturity Group IV.

Delta King 4860: Has white flowers, tawny pubescence, and seed with a black hila. Resistant to races 3 and 14 soybean cyst nematode. Maturity Group IV.

Dixie 478: Has purple flowers, gray pubescence and seed with an imperfect black hila. Has no resistance to soybean cyst nematode. Maturity Group IV.

Gutwein 7474: Has purple flowers, light tawny pubescence and seed with a black hila. Has no resistance to cyst nematode. Maturity Group IV.

Hornbeck HBK 4600: Has white flowers, tawny pubescence, and seed with a black hila. Has resistance to soybean cyst nematode. Maturity Group IV.

HyPerformer AP 4880: Has purple flowers, tawny pubescence, and seed with a black hila. Has no resistance to soybean cyst nematode. Maturity Group IV.

TN 4-94: Has purple flowers and gray pubescence. Resistant to races 3 and 14 of soybean cyst nematode. Has moderate resistance to frogeye, SDS and stem canker. Maturity Group IV.

Manokin: Has white flowers, tawny pubescence and seed with a black hila. Resistant to race 3 soybean cyst nematode. Maturity Group IV.

Pioneer Brand 9482: Has white flowers, tawny pubescence and seed with a black hila. Has no resistance to soybean cyst nematode. Maturity group IV.

Terral TV 4479: Has white flowers, tawny pubescence and seed with a black hila. Resistant to races 3 and 4 soybean cyst nematode. Maturity Group IV.

Maturity Group V

Asgrow A 5547: Has white flowers, gray pubescence and seed with a buff hila. Has resistance to races 3 and 14 soybean cyst nematode. Maturity Group V.

Asgrow A 5843: Has white flowers, gray pubescence and seed with buff hila. Has resistance to races 3 and 14 soybean cyst nematode. Maturity Group V.

Asgrow A 5848: Has white flowers, gray pubescence and seed with buff hila. Has resistance to races 3 and 14 soybean cyst nematode. Maturity Group V.

Asgrow A 5944: Has white flowers, gray pubescence and seed with a buff hila. Has no resistance to soybean cyst nematode. Maturity Group V.

Clifford: Has purple flowers, tawny pubescence and seed with black hila. Not resistant to soybean cyst nematode. Maturity Group V.

Deltapine DP 3519 S: Has purple flowers, gray pubescence and seed with an imperfect black hila Sulfonylurea tolerant. Has resistance to races 3 and 14 soybean cyst nematode. Maturity Group V.

Delsoy 5500: Has white flowers, tawny pubescence and seed with a brown hila. Has resistance to races 3 and 14 of soybean cyst nematode. Maturity Group V.

FFR 542: Has purple flowers, gray pubescence and seed with an imperfect black hila. Has resistance to races 3 and 14 soybean cyst nematode. Maturity Group V.

Holladay: Has purple flowers, gray pubescence and seed with an imperfect black hila. Has no resistance to cyst nematode. Maturity Group V.

Hutcheson: Has white flowers, gray pubescence, and seed with a buff hila. Has high resistance to stem canker and moderate resistance to frogeye disease. Maturity Group V. Has no resistance to soybean cyst nematode.

Pioneer Brand 9584: Has white flowers, tawny pubescence and seed with a black hila. Resistant to race 3 soybean cyst nematode. Maturity Group V.

Pioneer brand 9594: Has white flowers, gray pubescence and seed with a buff hila. Has no resistance to soybean cyst nematode. Maturity Group V.

HyPerformer HY 574: Has purple flowers, tawny pubescence and seed with a black hila. Has no resistance to soybean cyst nematode. Maturity Group V.

TN 5-95: Has purple flowers and tawny pubescence. Has resistance to races 3 and 14 soybean cyst nematode. Has resistance to frogeye and stem canker. Maturity Group V.

Terral TV 5797: Has white flowers, gray pubescence and seed with a buff hila. Resistant to race 3 soybean cyst nematode. Maturity Group V.

Maturity Group VI

TN 6-90: Has white flowers, tawny pubescence, and seed with black hila. Has frogeye and soybean mosaic virus. Maturity Group VI.

OATS

Fall-Seeded

FFR Southern States 76-30: About two days earlier than Cumberland in maturity and a few inches taller in plant height. It has out-yielded Cumberland and Coker 716 in the State variety tests with standing ability similar to Coker 716.

BARLEY

Starling: A medium maturity variety with plant height similar to Nomini. Has medium test weight. Reported to have resistance to barley yellow dwarf, leaf rust, scald, and moderate resistance to powdery mildew. Has yielded well in the variety trials.

WHEAT

Clemens: A medium to late soft red winter wheat variety which is reported to have very good leaf rust resistance and good powdery mildew resistance.

FFR 525: An early maturity soft red winter wheat variety with fair test weight (bushel wt). It has been susceptible to leaf rust, mildew and glume blotch in trials.

FFR 555: A medium maturity soft red winter wheat variety with fair test weight. Has shown resistance to mildew and glume blotch.

Foster: A medium maturity soft red winter wheat with fair test weight. Reported to have good resistance to septoria leaf blotch and very good resistance to powdery mildew and leaf rust.

Hickory: An awnless early-medium maturity soft red winter wheat with above average test weight. Reported to have resistance to some races of Hessian fly.

Northrup King Coker 9803: An early maturity soft red winter variety with resistance to leaf rust and mildew with some tolerance to septoria leaf blotch and reported to be resistant to soil-borne mosaic. Has good test weight.

Madison: A medium-early maturing, apically-awnletted white-chaffed cultivar of medium height and straw strength. Moderate resistance to powdery mildew, resistant to spindle streak virus, and moderately tolerant to septoria.

Patriot: An early maturing soft red winter wheat variety with resistance to leaf rust and powdery mildew.

Pioneer brand 2552: An awned medium-maturing soft red winter wheat with fair to good test weight. Not resistant to Hessian fly.

Pioneer brand 2568: An awned medium-maturing soft red winter wheat with fair test weight. Not resistant to Hessian fly.

Pioneer brand 2580: An awned medium-maturing soft red winter wheat with average test weight. Not resistant to Hessian fly.

Pioneer brand 2684: An awned medium-maturing soft red winter wheat with above average test weight. Pioneer brand 2684 and Pioneer brand 2580 are similar in plant height and lodging resistance. Pioneer brand 2684 has shown tolerance to some races of Hessian fly.

Northrup King 9543: An early-medium maturing soft red winter wheat variety with fair test weight. Reported to be resistant to Hessian fly biotype E.

Northrup King 9663: A medium to late maturing soft red winter wheat variety with fair to good test weight.

Jackson: A medium-maturing soft red winter wheat with average test weight. It is reported to have moderate resistance to powdery mildew and septoria leaf blotch. Jackson has been susceptible to leaf rust in the variety trials. Hessian fly resistance is not known at this time.

Shiloh: An early-maturing variety which is reported to have excellent resistance to leaf rust and good resistance to powdery mildew.

Terral TV 8555: An early-maturing soft red winter wheat variety which is medium-tall. Reported to have resistance to leaf rust and moderate resistance to powdery mildew.

Verne: A soft red winter cultivar with medium early maturity. It has shown some tolerance to leaf rust, but has been susceptible to mildew and glume blotch.

ALFALFA

Aggressor: A winter-hardy variety with good recovery ability. It is reported to be highly resistant to bacterial wilt, fusarium wilt, anthracnose and phytophthora root rot. It also has resistance to verticillium wilt.

Alfagraze: A variety developed for grazing. It is reported to have moderate resistance to bacterial wilt and anthracnose. It also has resistance to fusarium wilt. It has persisted well under frequent clipping and grazing studies.

Belmont: Flower color is purple and blue. Belmont starts growth early in the spring and recovers rapidly afer cutting. It is reported to have high to moderate resistance to wilts, root rots, stem and leaf diseases that attack alfalfa. Belmont is reported to have high resistance to the pea and spotted alfalfa aphids.

Cimarron VR: A winter hardy variety with good recovery ability. It is reported to have high resistance to bacterial wilt, fusarium wilt and anthracnose. It also has resistance to phytophthora root rot and verticillium wilt.

Legacy: A winter-hardy variety. It is reported to have high resistance to bacterial wilt, fusarium wilt, phytophthora root rot, and spotted alfalfa aphid. It is also reported to have resistance to verticillium wilt and anthracnose.

Pioneer brand 5454: A winter-hardy variety with good recovery ability. Reported to have good resistance to bacterial wilt and fusarium wilt. Has resistance to verticillium wilt and moderate resistance to phytophthora.

PERFORMANCE OF CORN HYBRIDS FROM 1996 THROUGH 1998.

The early-season hybrid trials were conducted at three locations, medium-season hybrids were evaluated at seven locations and full-season at four.

At Jackson, full-season hybrids were evaluated with and without irrigation. Early hybrids at Ames Plantation were also evaluated for response to irrigation. All tests at Knoxville were irrigated once during silking and tasseling.

All corn hybrid trials were over-planted and thinned to a population from 19,000 to 28,000 plants per acre. Population varies with location but was the same for all hybrids at a given location. Variation in population among locations was due to different row spacings. Spacing within the row was the same at all locations. Most tests were conducted using thirty to thirty-six inch row spacing. The tests were fertilized with 150 pounds or more of nitrogen per acre. A portion of the nitrogen was applied prior to seeding and the remainder was applied as a side dressing. This practice was followed whenever possible. Phosphorus and potassium were applied at least in the amount recommended by soil test results. The plot size for mechanically-harvested plots was two rows 25 or 30 feet in length. Plots were replicated four times at each location. In 1998, the corn hybrid studies at Crossville, Ames Plantation, Jackson, Milan, Martin, and Knoxville were harvested with a combine-sheller. At Ames Plantation in 1998, and previous years the early-season non-irrigated trials were

hand-harvested. All corn trials at Milan were grown no-till.

Two medium-season corn hybrid trials were grown each year with one being referred to as the 500 group and the other referred to as the 600 group. The 500 and 600 refer to the hybrid entry number. The trials of this maturity group are conducted adjacent to each other wherever possible. Hybrids of mid-season maturity are evaluated in two groups because of the large number of hybrids submitted for testing. Any single corn test is limited to 40 entries.

No data are reported for Spring Hill in 1998 due to stand reduction from insect damage to the corn seedlings. No Full-season data are reported for Knoxville due to grain being lost during harvest due to a plate coming off the new combine .

Yield Results

Early-Season

The early-season data for 1998 are reported in Tables 1 through 6. Yields were not as high in 1998 as in 1997 or 1996. The yield at Knoxville ranged from 101 to 152 bu per acre. The C.V. (28.0) was highest at Ames Plantation (un-irrigated) and lowest (8.9) at Knoxville in 1998.

HyPerformer HY 9646, AgriPro AP 9707, FFR 656, Northrup King N63-G 7, Pioneer brand 3335 and FFR 748 were the six highest producing hybrids in 1998. The ear height of these early-season hybrids ranged from 32 to 43 inches (Table 2). Average grain

moisture at harvest ranged from a low of 13.0% to a high of 15.8 (Table 2).

Two years of data of early-season hybrids are shown in Tables 3 and 4. Pioneer brand 3335 produced a significantly higher yield than the average of 134 bu/a. Asgrow RX 770, Terral TV 2100 and AgraTech ATX 721 yields were significantly lower than the average (Table 3). HyPerformer HY 9899 V had an average grain moisture at harvest of 17.3%. This was 1.6% higher than the next hybrid in the test (Table 4).

Eight early-season hybrids have been evaluated for three or more years (Tables 5 and 6). The leading hybrid in yield over the three year period (1996-98) was Pioneer brand 3335 (Table 5).

Medium-season 500 Group

Results of the medium-season 500 group hybrids are reported in tables 7 through 12. The growing season was fair at most locations in 1998. The yields of individual hybrids ranged from a low of 46 bu/a at Springfield to a high of 205 bu/a at Crossville. The average yield was 106 bu/a at Martin, 106 at Milan, 122 at Springfield, 126 at Knoxville, 136 at Greeneville and 174 at Crossville. Pioneer brand 31B13 and Pioneer brand 3223 produced the highest average yield of 158 and 147 bu/a respectively (Table 7). Four hybrids produced higher yields than the mean of 131 bu/a (Table 7). The average ear height ranged from a low of 36 to a high of 51 inches. Lodged plants were low for all hybrids reported in Table 8.

The two year medium-season 500 group data are presented in Tables 9 and 10. Pioneer brand 3223 and Dekalb DK 679 produced higher average yields than the mean of 147 bu/a (Table 9). The grain moisture at harvest ranged from 15.6% to 20.3% (Table 10).

Three years of results are presented in Tables 11 and 12. Pioneer brand 3223, Zimmerman Z 37, Pioneer brand 3163 and DeKalb DK 687 were among the higher producing hybrids (Table 11).

Medium-Season 600 Group

The medium-season 600 data are reported in Tables 13 through 18. Funk DG 5510 A, ICI Garst 8220, Terra TR E 1188 and Mycogen 2888 were among the highest producing hybrids of medium-season (Group 600).

Two years' data are reported in Tables 15 and 16. ICI Garst 8220, Funk DG 5510 A, and ICI Garst N 5254 were among the higher yielding hybrids. ICI Garst 8220 was the only hybrid producing higher average yields than the mean. The grain moisture at harvest ranged from a low of 16.0% to a high of 18.1% (Table 16).

Three years' data for the medium-season (group 600) hybrids are shown in Tables 17 and 18. ICI/Garst 8220, Funk DG 5510 A, and FFR 943 were the three leading hybrids in average yield (Table 17). The average ear height ranged from 47.9 to 54.5 (Table 18). Grain moisture at harvest ranged from 15.3% to 17.4%.

Full-Season

Fourteen full-season hybrids were evaluated in 1997 and twenty in 1998. The yields were extremely low at Ames Plantation in 1998.

The C.V. was also very high. A response to irrigation was obtained at Jackson (Table 19). Asgrow RX 938, TN Exp. 98-4, and AgriGold A 6725 were among the higher yielding full season hybrids.

Two years' data are reported in Tables 21 and 22. Only five full-season hybrids have been evaluated from 1996 through 1998 (Tables 23 and 24).

The recommended corn hybrids for 1999 are presented in table A.

Table 1. Corn: Yield of early-season hybrids evaluated at four locations in 1998.

Color	Brand	Hybrid	Avg. Yield	Knox-ville	Cross-ville	Milan	-Ames Plantation Un-Irr.	Irrigated
			----------Bushels per acre----------					
Y	HyPerformer HY	9646	120	137	191	130	32	109
Y	AgriPro AP	9707	118	136	177	126	39	115
Y	FFR	656	118	130	182	127	43	108
Y	Northrup King N	63-G 7	117	142	181	125	40	99
Y	Pioneer	3335	116	130	200	103	36	109
Y	FFR	748	115	141	193	118	24	99
W	Beck	5912 W	114	142	194	102	25	107
Y	Pioneer	33A14 Bt	113	152	164	118	33	100
Y	Zimmerman Z	42	113	137	191	117	34	86
Y	Pioneer	32H39	111	139	155	133	30	99
Y	HyPerformer HS	9843	111	137	181	111	27	98
Y	Pioneer	31A12	110	135	180	102	29	103
Y	AgraTech	787	110	134	176	108	38	92
W	Zimmerman Z	62 W	109	126	187	113	26	95
Y	Pioneer	33Y18	109	143	177	98	34	91
Y	DeKalb DK	658	108	129	168	112	43	90
Y	Pioneer	33V08	108	150	163	110	29	89
Y	Pioneer	33G26	107	139	184	72	35	107
Y	FFR	726	107	117	184	112	36	87
Y	AgraTech ATX	657	106	134	163	107	33	95
Y	Pioneer	32K61	106	136	164	90	30	111
Y	HyPerformer HY	9899V	105	129	170	87	41	99
Y	Pioneer	33Y09 Bt	105	131	161	102	25	106
Y	DeKalb DK	626	105	130	159	118	26	90
Y	Asgrow RX	740	104	127	162	109	33	91
Y	Asgrow RX	770	104	137	163	106	27	89
Y	DeKalb DK	621	104	119	151	108	46	95
Y	DeKalb DK	618	103	123	162	118	34	80
Y	Terra TR	1088	102	135	163	92	35	86
Y	Asgrow RX	730	99	110	167	95	32	94
W	Zimmerman Z	75 W	99	120	167	104	18	87
Y	DeKalb DK	635	97	120	162	110	20	74
Y	Terral TV	2100	97	107	165	84	26	102
Y	Terra TR	1106	96	101	140	121	21	96
Y	Terral TVX	20770	95	126	163	94	14	77
Y	AgraTech ATX	721	92	121	145	88	19	87
L.S.D. (.05)			10.7	16.3	25.4	32.8	12.5	24.6
C.V.%			16.1	8.9	10.7	21.8	28.0	18.4
Avg.			107.2	130.6	171.0	107.5	30.9	95.8
R-Square			0.91	0.57	0.52	0.33	0.54	0.34

Table 2. Corn: Yield and other characteristics of early-season hybrids evaluated at four locations in 1998.

Color	Brand	Hybrid	Avg. Yield	Lodged Plants	Husk Cover	Ear Ht.	Grain Moisture At Harvest
			Bu/A	Avg. No.	Rating[1]	In.	%
Y	HyPerformer	HY 9646	120	0.6	4.4	43	14.1
Y	AgriPro	AP 9707	118	0.4	4.1	36	14.0
Y	FFR	656	118	1.0	4.2	40	13.6
Y	Northrup King	N 93-G 7	117	0.5	3.9	38	13.2
Y	Pioneer	3335	116	1.5	3.6	35	13.6
Y	FFR	748	115	2.2	4.1	38	14.2
W	Beck	5912 W	114	0.7	4.1	43	14.2
Y	Pioneer	33A14 Bt	113	0.2	4.2	38	13.8
Y	Zimmerman	Z 42	113	0.3	3.8	39	13.9
Y	Pioneer	32H39	111	0.2	4.1	36	14.3
Y	HyPerformer	HS 9843	111	0.2	4.1	41	14.1
Y	Pioneer	31A12	110	0.8	4.1	36	14.6
Y	AgraTech	787	110	0.6	3.9	38	13.8
W	Zimmerman	Z 62 W	109	1.0	4.1	40	14.1
Y	Pioneer	33Y18	109	0.7	4.3	37	13.4
Y	DeKalb	DK 658	108	0.3	4.3	34	13.5
Y	Pioneer	33V08	108	0.1	4.5	36	13.5
Y	Pioneer	33G26	107	0.5	4.2	38	13.8
Y	FFR	726	107	0.8	4.5	37	13.7
Y	AgraTech	ATX 657	106	0.7	4.3	37	13.5
Y	Pioneer	32K61	106	1.0	4.3	37	14.1
Y	HyPerformer	HY 9899 V	105	1.2	4.4	39	15.8
Y	Pioneer	33Y09 Bt	105	0.1	4.3	36	13.8
Y	DeKalb	DK 626	105	1.4	4.0	35	13.2
Y	Asgrow	RX 740	104	0.2	4.1	36	13.5
Y	Asgrow	RX 770	104	0.6	4.0	35	13.6
Y	DeKalb	DK 621	104	1.1	3.9	36	12.7
Y	DeKalb	DK 618	103	1.0	4.3	34	13.4
Y	Terra	TR 1088	102	2.2	4.2	35	13.0
Y	Asgrow	RX 730	99	0.9	4.2	35	13.2
W	Zimmerman	Z 75 W	99	0.3	4.3	39	13.9
Y	DeKalb	DK 635	97	0.9	4.3	32	13.3
Y	Terral	TV 2100	97	1.2	4.1	35	13.7
Y	Terra	TR 1106	96	0.5	4.2	35	13.6
Y	Terral	TVX 20770	95	1.1	4.2	36	13.2
Y	AgraTech	ATX 721	92	1.1	3.5	35	13.7

[1]Rating based on a scale of 1 through 9 with 1 being excellent and 9 poor.

Table 3. Corn: Yield of early-season hybrids evaluated at four locations from 1997 through 1998.

Color	Brand	Hybrid	Avg. Yield	Knox-ville	Cross-ville	Milan	-Ames Plantation Irrigated	Un-Irr.
			----------	Bushels per acre	----------			
Y	Pioneer	3335	147	148	200	156	149	110
Y	Pioneer	33Y18	141	162	177	150	136	98
Y	Pioneer	32K61	141	158	164	159	144	89
Y	FFR	656	139	133	182	161	134	106
Y	AgriPro	AP 9707	139	142	177	161	139	96
Y	FFR	748	138	149	193	153	134	88
Y	FFR	726	138	137	184	156	125	110
Y	HyPerformer	HY 9646	137	140	191	165	138	80
Y	HyPerformer	HY 9899 V	136	151	170	132	134	111
Y	Pioneer	32H39	135	146	155	158	134	90
W	Zimmerman	Z 62 W	134	133	187	150	138	88
Y	HyPerformer	HS 9843	133	148	181	147	122	89
Y	DeKalb	DK 618	133	139	162	146	122	108
Y	DeKalb	DK 658	131	142	168	149	134	78
Y	Terra	TR 1106	130	124	140	161	136	95
Y	Terral	TVX 20770	126	134	163	141	119	91
Y	Asgrow	RX 770	122	150	163	130	112	75
Y	Terral	TV 2100	121	123	165	137	127	75
Y	AgraTech	ATX 721	120	130	145	138	123	76
L.S.D. (.05)			8.4	12.4	26.6	18.9	18.1	18.8
C.V.%			13.5	8.9	10.9	12.7	13.8	19.8
Avg.			133.6	141.5	171.9	150.0	131.6	92.2
R-Square			0.89	0.74	0.53	0.88	0.84	0.94

Table 4. Corn: Yield and other characteristics of early-season hybrids evaluated at three locations for two years (1997-98)

Color	Brand	Hybrid	Avg. Yield	Lodged Plants	Husk Cover	Plant Ht.	Grain Moisture at Harvest
			Bu/A	Avg. No.	Rating[1]	In.	%
Y	Pioneer	3335	147	2.4	3.2	43	14.8
Y	Pioneer	33Y18	141	3.0	3.8	46	14.2
Y	Pioneer	32K61	141	1.1	4.0	43	15.1
Y	FFR	656	139	1.0	3.7	46	14.5
Y	AgriPro	AP 9707	139	1.4	3.6	41	15.3
Y	FFR	748	138	3.5	3.7	43	15.5
Y	FFR	726	138	1.6	4.0	42	14.9
Y	HyPerformer	HY 9646	137	2.7	3.8	50	15.4
Y	HyPerformer	HY 9899 V	136	2.2	3.9	46	17.3
Y	Pioneer	32H39	135	0.9	3.5	44	15.4
W	Zimmerman	Z 62 W	134	1.4	3.5	47	15.7
Y	HyPerformer	HS 9843	133	2.0	3.4	47	15.5
Y	DeKalb	DK 618	133	1.1	3.9	39	14.3
Y	DeKalb	DK 658	131	6.3	3.7	41	14.5
Y	Terra	TR 1106	130	1.7	3.7	41	14.9
Y	Terral	TVX 20770	126	1.4	3.7	42	14.2
Y	Asgrow	RX 770	122	1.4	3.5	39	14.8
Y	Terral	TV 2100	121	2.6	3.6	40	14.9
Y	AgraTech	ATX 721	120	1.5	3.0	40	14.8

[1]Rating based on a scale of 1 to 9 with 1 being excellent and 9 poor.

Table 5. Corn: Yield of early-season hybrids evaluated at four locations for three years from 1996 through 1998.

Color	Brand	Hybrid	Avg. Yield	Knox-ville	Milan	-Ames Plantation- Un-Irr.	Irrigated
			----------Bushels per acre----------				
Y	Pioneer	3335	162	183	171	120	163
W	Zimmerman	Z 62 W	153	174	160	115	150
Y	FFR	726	152	171	163	123	141
Y	HyPerformer	HY 9899 V	150	177	142	130	147
Y	FFR	656	150	166	164	118	142
Y	HyPerformer	HY 9646	149	168	166	102	147
Y	HyPerformer	HS 9843	144	173	149	104	137
Y	Asgrow	RX 770	138	178	141	98	126
L.S.D. (.05)			6.7	12.0	15.2	14.3	13.5
C.V.%			11.6	8.5	11.9	15.4	11.5
Avg.			149.8	173.7	156.9	113.6	144.0
R-Square			0.90	0.93	0.85	0.94	0.86

Table 6. Corn: Yield and other characteristics of early-season hybrids evaluated at four locations from 1996 through 1998.

Color	Brand	Hybrid	Avg. Yield	Lodged Plants	Ear Height	Grain Moisture at Harvest
			Bu/A	Avg. No.	In.	%
Y	Pioneer	3335	162	1.8	44.7	14.1
W	Zimmerman	Z 62 W	153	1.2	48.9	15.0
Y	FFR	726	152	1.3	44.0	14.3
Y	HyPerformer	HY 9899 V	150	1.5	48.7	16.5
Y	FFR	656	150	0.8	47.7	13.9
Y	HyPerformer	HY 9646	149	1.8	51.2	14.8
Y	HyPerformer	HS 9843	144	1.3	48.9	14.9
Y	Asgrow	RX 770	138	1.0	40.4	14.3

Table 7. Corn: Yield of medium-season (Group 500) hybrids evaluated at six locations in 1998.

Color	Brand	Hybrid	Avg. Yield	Knox-ville	Greene-ville	Cross-ville	Spring-field	Milan	Martin
			----------Bushels per acre----------						
Y	Pioneer	31B13	158	147	161	193	156	122	169
Y	Pioneer	3223	147	162	163	177	151	122	107
Y	DeKalb	DK 679	142	149	140	187	133	125	120
Y	Zimmerman	Z 37	142	136	141	205	132	127	109
Y	Terral	TV 2140	141	148	140	185	125	132	116
Y	Zimmerman	Z 39	140	132	136	184	139	122	128
Y	Asgrow	RX 938	139	121	141	188	145	116	125
Y	Terral	TVX 21570	138	135	133	180	122	132	127
Y	Gutwein	2696	138	137	129	182	128	131	122
Y	AgraTech	787	137	130	153	169	139	132	98
Y	Pioneer	3163	137	161	154	164	135	96	110
Y	Gutwein	Exp 780	135	130	130	186	111	147	108
Y	Pfister	3977	135	119	140	175	120	152	105
Y	ICI Garst	8222 IT	134	109	136	182	125	133	120
Y	HyPerformer	HY 9919 V	133	120	141	168	142	122	106
W	FFR	737 W	132	113	132	171	120	132	121
Y	AgriGold	6460	131	129	147	169	113	123	105
Y	DeKalb	DK 626	129	123	137	165	114	134	104
W	Pioneer	3203 W	129	135	126	179	130	104	99
Y	DeKalb	DK 687	128	117	142	183	131	98	97
Y	AgriGold	A 6490	125	126	144	151	116	115	98
W	Zimmerman	Z 74 W	124	88	126	190	128	121	93
Y	Asgrow	RX 826	124	129	115	182	98	125	95
Y	FFR	897	124	125	137	155	131	107	87
Y	Terral	TVX 21370	121	119	127	143	107	131	101
W	Pioneer	32Y65 W	121	128	145	180	111	86	77
W	FFR	797 IT	117	113	128	166	88	109	94
Y	AgriGold	A 6590	113	96	120	127	144	103	89
Y	Asgrow	RX 810	108	114	116	151	46	113	105
W	DeKalb	DK 665 W	104	94	118	167	93	93	56
L.S.D. (.05)			10.6	16.4	22.7	27.8	23.9	N.S.	18.8
C.V.%			14.3	9.3	11.9	11.4	13.9	24.3	12.5
Avg.			130.9	126.2	136.5	173.5	122.4	106.4	106.4
R-Square			0.74	0.75	0.44	0.48	0.70	0.28	0.74

Table 8. Corn: Yield and other characteristics of medium-season (Group 500) hybrids evaluated at six locations in 1998.

Color	Brand	Hybrid	Avg. Yield	Lodged Plants	Husk Cover	Ear Ht.	Grain Moisture at Harvest
			Bu/A	Avg. No.	Rating[1]	In.	%
Y	Pioneer	31 B 13	158	0.8	4.8	51	17.2
Y	Pioneer	3223	147	6.0	4.7	50	16.0
Y	DeKalb	DK 679	142	4.7	5.3	49	16.6
Y	Zimmerman	Z 37	142	2.5	5.5	46	17.7
Y	Terral	TVX 2140	141	1.5	5.3	47	16.3
Y	Zimmerman	Z 39	140	1.8	5.0	49	16.3
Y	Asgrow	RX 938	139	4.3	4.7	49	17.3
Y	Terral	TVX 21570	138	1.2	5.7	46	17.4
Y	Gutwein	2396	138	3.3	4.7	49	17.0
Y	AgraTech	787	137	2.3	4.8	46	16.7
Y	Pioneer	3163	137	4.0	5.8	43	16.9
Y	Gutwein	Exp 780	135	2.0	5.2	46	16.0
Y	Pfister	3977	135	3.8	5.8	40	16.2
Y	ICI Garst	8222 IT	134	2.0	5.2	41	17.2
Y	HyPerformer	HY 9919 V	133	1.8	5.2	40	17.5
W	FFR	737 W	132	1.2	5.0	47	16.1
Y	AgriGold	6460	131	3.5	4.8	40	15.3
Y	DeKalb	DK 626	129	2.5	4.2	42	14.7
W	Pioneer	3203 W	129	4.0	5.3	45	17.0
Y	DeKalb	DK 687	128	1.5	3.8	43	16.7
Y	AgriGold	A 6490	125	4.3	4.8	40	15.3
W	Zimmerman	Z 74 W	124	3.2	5.0	49	16.6
Y	Asgrow	RX 826	124	3.5	4.0	40	15.8
Y	FFR	897	124	1.7	5.0	40	17.3
Y	Terral	TVX 21370	121	2.8	4.7	46	16.6
W	Pioneer	32 Y 65 W	121	4.5	5.3	44	16.8
W	FFR	797 IT	117	4.3	6.0	41	16.5
Y	AgriGold	A 6590	113	3.8	5.3	41	15.6
Y	Asgrow	RX 810	108	3.7	6.2	36	16.2
W	DeKalb	DK 665 W	104	1.5	4.8	41	17.4

[1]Rating based on a scale of 1 to 9 with 1 being excellent and 9 poor.

Table 9. Corn: Yield of medium-season (Group 500) hybrids evaluated in 11 environments from 1997 through 1998.

Color	Brand	Hybrid	Avg. Yield	Knox-ville	Greene-ville	Cross-ville	Spring Hill	Spring-field	Milan	Martin
			----------Bushels per acre----------							
Y	Pioneer	3223	158	172	163	177	100	163	154	161
Y	DeKalb DK	679	157	159	140	187	100	165	160	168
Y	Gutwein	2696	153	154	129	182	110	154	160	165
Y	Terral TV	2140	153	149	140	185	104	157	160	158
Y	Terral TVX	21570	152	154	133	180	100	141	166	170
Y	Zimmerman Z	39	151	143	136	184	99	156	161	163
Y	Zimmerman Z	37	149	146	141	205	87	155	152	151
Y	Pioneer	3163	149	166	154	164	99	139	146	160
Y	Hyperformer	HY 9919V	148	143	141	168	96	150	155	166
W	Pioneer	3203 W	148	151	126	179	112	143	145	167
Y	DeKalb DK	626	148	146	137	165	106	142	167	154
Y	Pfister	3977	146	148	140	175	104	120	171	157
Y	AgraTech	787	144	143	153	169	93	153	152	137
Y	DeKalb	687	144	137	142	183	97	152	141	148
W	FFR	737 W	142	137	132	171	85	135	149	164
Y	Terral TVX	21370	141	142	127	143	95	140	160	149
Y	FFR	897	138	139	137	155	97	135	143	148
Y	FFR	797 IT	132	139	128	166	83	115	140	142
L.S.D. (.05)			8.0	13.5	23.0	22.0	16.8	23.2	24.3	15.0
C.V.%			13.0	9.3	11.7	8.8	12.1	16.1	15.9	9.7
Avg.			147.4	148.2	138.8	174.4	98.1	145.3	154.4	157.1
R-Square			0.80	0.75	0.38	0.53	0.43	0.60	0.74	0.94

Table 10. Corn: Yield and other characteristics of medium-season (Group 500) hybrids evaluated in 11 environments from 1997 through 1998.

Color	Brand	Hybrid	Avg. Yield	Lodged Plants	Husk Cover	Ear Ht.	Grain Moisture at Harvest
			Bu/A	Avg. No.	Rating[1]	In.	%
Y	Pioneer	3223	158	3.4	5.6	52	16.7
Y	DeKalb	DK 679	157	2.6	5.9	52	17.6
Y	Gutwein	2696	153	2.5	5.8	51	17.5
Y	Terral	TV 2140	153	1.6	6.5	50	17.2
Y	Terral	TVX 21570	152	1.9	6.1	50	18.2
Y	Zimmerman	Z 39	151	1.5	6.0	52	17.1
Y	Zimmerman	Z 37	149	1.9	5.9	49	18.4
Y	Pioneer	3163	149	2.4	5.6	46	17.5
Y	HyPerformer	HY 9919 V	148	1.6	6.5	44	17.9
W	Pioneer	3203 W	148	2.4	5.6	48	17.9
Y	DeKalb	DK 626	148	2.6	5.4	46	15.6
Y	Pfister	3977	146	2.2	6.3	42	17.3
Y	AgraTech	787	144	2.5	5.7	48	17.7
Y	DeKalb	687	144	2.3	5.6	47	17.4
W	FFR	737 W	142	2.0	5.6	50	16.9
Y	Terral	TVX 21370	141	2.3	6.1	49	17.3
Y	FFR	897	139	1.7	6.5	50	20.3
Y	FFR	797 IT	132	3.1	6.3	44	17.3

[1]Rating based on a scale of 1 through 9 with 1 being excellent and 9 poor.

Table 11.Corn: Yield of Medium-season (Group 500) hybrids evaluated in 18 environments from 1996 through 1998.

Color	Brand	Hybrid	Avg. Yield	Knox-ville	Greene-ville	Cross-ville	Spring Hill	Spring-field	Milan	Martin
			Number of environments (Years)							
			18	3	2	2	2	3	3	3
			Bushels per acre							
Y	Pioneer	3223	163	187	164	178	112	152	170	167
Y	Zimmerman	Z 37	155	168	162	182	108	141	158	163
Y	Pioneer	3163	155	182	165	163	113	135	118	162
Y	DeKalb	DK 687	152	159	140	174	118	142	157	168
Y	Gutwein	2696	152	169	145	151	113	140	160	171
Y	DeKalb	DK 626	152	162	133	158	120	137	173	168
Y	AgraTech	787	152	162	152	163	110	144	166	155
Y	HyPerformer	HY 9919V	151	163	141	158	109	139	158	172
W	Pioneer	3203 W	150	164	136	166	118	131	156	170
W	FFR	737 W	148	155	149	157	103	131	160	168
L.S.D. (.05)			6.5	11.2	17.6	17.2	16.0	18.7	N.S.	13.7
C.V.%			12.9	8.3	11.8	10.4	14.2	16.5	15.5	10.2
Avg.			153.1	167.3	148.7	165.0	112.3	139.3	161.5	166.5
R-Square			0.76	0.87	0.54	0.65	0.62	.55	0.70	0.90

Table 12. Yield of medium-season (Group 500) hybrids evaluated in 18 environments from 1996 through 1998.

Color	Brand	Hybrid	Avg. Yield	Lodged Plants	Ear Ht.	Grain Moisture at Harvest
			Bu/A	Avg. No.	In.	%
Y	Pioneer	3223	163	2.2	53.1	17.1
Y	Zimmerman	Z 37	155	1.4	50.2	18.4
Y	Pioneer	3163	155	1.9	48.1	17.5
Y	DeKalb	DK 687	153	1.8	48.7	17.7
Y	Gutwein	2696	152	1.9	51.7	18.2
Y	DeKalb	DK 626	152	2.1	46.4	15.8
Y	AgraTech	787	152	2.0	48.7	17.6
Y	HyPerformer	HY 9919 V	151	1.7	45.8	18.2
W	Pioneer	3203 W	150	2.1	48.9	18.2
W	FFR	737 W	148	1.6	50.3	17.2

Table 13.Corn: Yield of medium-season (Group 600) hybrids evaluated at seven locations in 1998.

Color	Brand	Hybrid	Avg. Yield	Knox-ville	Greene-ville	Cross-ville	Spring-field[1]	Milan	Martin
			Bushels per acre						
Y	Funk	DG 5510 A	153	157	172	180	134	124	107
Y	ICI Garst	8220	152	151	160	202	145	104	118
Y	Terra	TR E 1188	146	142	143	196	112	139	114
Y	Mycogen	2888	146	144	135	204	114	135	--[2]
Y	ICI Garst	N 5254	145	146	139	194	117	128	133
Y	FFR	943	145	138	151	194	125	115	107
Y	Terra	TR 1154	142	158	144	204	114	91	134
Y	DeKalb	DK 683	142	133	134	194	121	129	110
Y	Terra	TR 1157	142	136	138	199	132	105	124
Y	Funk	G 4581	139	144	130	185	125	113	112
Y	HyPerformer	HY 9899 V	139	127	158	206	114	91	--
Y	Funk	DG 5516	138	141	150	178	119	102	118
Y	Terra	TR 1167	136	134	149	175	118	106	114
Y	Terra	TR 1185	131	133	159	194	119	47	91
L.S.D (.05)			10.0	14.6	21.4	17.6	20.0	32.0	16.5
C.V.%			11.2	7.2	10.1	6.4	11.5	21.1	10.0
Avg.			142.7	141.8	147.2	193.1	122.0	109.2	115.0
R-Square			0.84	0.60	0.49	0.51	0.47	0.59	0.78

[1]Data not include in state average.
[2]Test was replanted and two entries were omitted due to the lack of seed.

Table 14. Corn: Yield and other characteristics of medium-season (Group 600) hybrids evaluated at seven locations in 1998.

Color	Brand	Hybrid	Avg. Yield	Lodged Plants	Husk[1] Cover	Ear Ht.	Grain moisture at Harvest
			Bu/A	Avg. No.	Rating	In.	%
Y	Funk	DG 5510 A	153	0.2	5.0	47	17.2
Y	ICI Garst	8220	152	0.7	5.3	45	17.6
Y	Terra TR	E 1188	146	0.5	4.5	48	15.5
Y	Mycogen	2888	146	0.0	5.3	50	15.9
Y	ICI Garst	N 5254	145	0.2	5.5	49	15.9
Y	FFR	943	145	0.2	5.2	45	17.1
Y	Terra	TR 1154	142	0.2	4.7	50	15.0
Y	DeKalb	DK 683	142	0.5	4.0	48	15.5
Y	Terra	TR 1157	142	0.0	5.0	50	15.2
Y	Funk	G 4581	139	0.7	4.5	47	15.0
Y	HyPerformer	Hy 9899 V	139	0.7	4.7	48	16.2
Y	Funk	DG 5516	138	0.0	4.7	48	15.1
Y	Terra	TR 1167	136	0.2	4.3	49	15.4
Y	Terra	TR 1185	131	0.2	5.2	46	17.0

[1]Rating based on a scale of 1 through 9 with 1 being excellent and 9 poor.

Table 15. Corn: Yield of medium-season (Group 600) hybrids evaluated in 17 environments from 1997 through 1998.

Color	Brand	Hybrid	Avg. Yield	Knox-ville	Greene-ville	Cross-ville	Spring Hill	Spring-field	Milan	Martin
			Number of environments (Years)							
			10	2	1	1	1	2	1	1
			Bushels per acre							
Y	ICI Garst	8220	173	166	160	202	123	164	177	225
Y	Funk	DG 5510 A	168	165	172	180	110	156	173	233
Y	ICI Garst	N 5254	166	161	139	194	92	178	178	198
Y	FFR	943	163	155	151	194	110	142	177	226
Y	Terra	TR 1154	163	165	144	204	98	163	164	199
Y	Terra	TR 1157	161	152	138	199	95	174	166	197
Y	Terra	TR 1185	160	161	159	194	107	162	143	210
Y	DeKalb	DK 683	158	148	134	194	99	154	165	221
Y	Funk G	DG 5516	152	152	150	178	83	152	156	187
Y	Terra	TR 1167	151	149	149	175	112	142	153	186
L.S.D.(.05)			9.1	12.8	22.2	17.0	21.6	23.1	24.9	26.4
C.V. %			12.8	8.1	10.2	6.1	14.5	14.5	15.0	8.7
Avg.			161.4	157.5	149.6	191.4	102.8	158.6	165.1	208.2
R-Square			0.84	0.72	0.45	0.55	0.50	0.80	0.90	0.56

Table 16. Corn: Yield and other characteristics of medium-season (Group 600) hybrids evaluated in 10 environments from 1997 through 1998.

Color	Brand	Hybrid	Avg. Yield	Lodged Plants	Husk[1] Cover	Ear Ht.	Grain Moisture At Harvest
			Bu/A	Avg. No.	Rating	In.	%
Y	ICI Garst	8220	173	4.9	6.2	49	18.1
Y	Funk	DG 5510 A	168	4.4	6.4	50	18.0
Y	ICI Garst	N 5254	166	4.1	6.4	53	17.2
Y	FFR	943	163	3.7	6.4	48	18.1
Y	Terra	TR 1154	163	6.4	6.0	54	16.0
Y	Terra	TR 1157	161	3.0	6.1	52	16.5
Y	Terra	TR 1185	160	7.1	6.2	49	17.7
Y	DeKalb	DK 683	158	3.6	5.7	50	16.5
Y	Funk	DG 5516	152	5.3	5.8	50	16.6
Y	Terra	TR 1167	151	4.3	5.9	51	16.6

[1]Rating based on a scale of 1 through 9 with 1 being excellent and 9 poor.

Table 17. Corn: Yield of medium-season (Group 600) hybrids evaluated in 17 environments from 1996 through 1998.

Color	Brand	Hybrid	Avg. Yield	Knox-ville	Greene-ville	Cross-ville	Spring Hill	Spring-field	Milan	Martin
			Number of environments (Years)							
			17	3	2	2	2	3	3	2
			Bushels per acre							
Y	ICI Garst	8220	178	198	165	190	128	150	194	221
Y	Funk	DG 5510 A	174	198	170	184	110	140	187	228
Y	FFR	943	173	188	158	195	121	136	190	227
Y	Terra	TR 1154	163	189	147	184	105	151	166	195
Y	Terra	TR 1184	163	185	147	189	96	147	161	213
Y	Terra	TR 1157	162	173	133	193	100	158	173	195
Y	DeKalb	DK 683	157	177	126	183	94	137	173	204
Y	Terra	TR 1167	156	176	149	178	113	134	159	186
Y	Funk	DG 5516	151	171	137	178	98	140	157	169
L.S.D. (.05)			6.5	13.6	14.1	16.3	16.1	17.2	18.2	16.1
C.V. %			11.8	9.1	9.5	8.7	15.0	14.7	13.0	7.8
Avg.			164.3	183.9	148.0	185.9	107.2	143.6	173.3	204.3
R-Square			0.86	0.89	0.66	0.42	0.54	0.76	0.89	0.70

Table 18. Corn: Yield and other characteristics of medium-season (Group 600) hybrids evaluated in 17 environments from 1996 through 1998.

Color	Brand	Hybrid	Avg. Yield	Lodged Plants	Ear Ht.	Grain Moisture at harvest
			Bu/A	Avg. No.	In.	%
Y	ICI Garst	8220	178	3.1	49.2	17.4
Y	Funk	DG 5510 A	174	2.7	49.0	17.3
Y	FFR	943	173	2.5	47.9	17.3
Y	Terra	TR 1154	163	4.3	54.5	15.3
Y	Terra	TR 1184	163	4.7	49.9	16.8
Y	Terra	TR 1157	162	2.0	53.2	15.5
Y	DeKalb	DK 683	157	2.5	49.0	15.6
Y	Terra	TR 1167	156	2.7	51.4	15.6
Y	Funk	DG 5516	151	3.5	50.4	15.7

Table 19. Corn: Yield of full-season hybrids evaluated at three locations in 1998.

Color	Brand	Hybrid	Avg. Yield	Ames Plantation	Jackson Un-Irr	Jackson Irrigated
			Bushels per acre			
Y	Asgrow	RX 938	106	60	93	165
Y	TN Exp.	TN 98-4	104	51	108	154
Y	AgriGold	A 6725	103	62	92	155
Y	DeKalb	DK 743	95	39	86	159
Y	Asgrow	RX 913	94	43	89	149
Y	Zimmerman	Z 37	94	35	79	166
Y	AgriGold	XA 2606	92	28	95	154
Y	Mycogen	8460	92	45	84	146
Y	Northrup King	N 83-N 5	91	41	78	155
Y	Crow's	702	90	40	74	155
Y	FFR	828	88	40	68	155
Y	Agri Gold	XA 3620	86	45	82	132
Y	Crow's	691	86	31	81	145
Y	FFR	827	85	34	69	151
Y	FFR	897	80	27	65	147
W	TN Exp.	TN 98-2	78	26	69	140
Y	Terra	TR 1126	77	37	56	139
W	TN Exp.	TN 98-3	77	29	71	130
W	FFR	907 W	77	23	61	146
W	Zimmerman	Z 64 W	74	17	60	143
L.S.D.(.05)			12.2	22.0	16.0	16.1
C.V.%			17.2	41.3	15.2	7.6
Avg.			88.3	37.6	78.0	149.4
R-Square			0.93	0.56	0.63	0.64

Table 20. Corn: Yield and other characteristics of full-season hybrids evaluated at three locations in 1998.

Color	Brand	Hybrid	Avg. Yield	Lodged Plants	Husk[1] Cover	Ear Ht.	Grain Moisture at harvest
			Bu/A	Avg. No.	Rating	In.	%
Y	Asgrow	RX 938	106	0.8	5.0	37	17.0
Y	TN Exp.	TN 98-4	104	1.9	4.9	32	17.4
Y	AgriGold	A 6725	103	1.8	5.3	37	16.9
Y	DeKalb	DK 743	95	1.8	5.0	34	17.3
Y	Asgrow	RX 913	94	0.8	5.4	36	17.1
Y	Zimmerman	Z 37	94	0.9	5.5	33	16.7
Y	AgriGold	XA 2606	92	1.1	5.6	34	16.4
Y	Mycogen	8460	92	1.1	4.8	34	16.9
Y	Northrup king	N 83-N 5	91	3.5	5.0	35	17.2
Y	Crow's	702	90	1.8	4.8	34	16.8
Y	FFR	828	88	1.0	5.4	32	15.6
Y	AgriGold	XA 3620	86	1.5	5.0	36	14.6
Y	Crow's	691	86	1.1	5.3	35	16.2
Y	FFR	827	85	1.0	4.8	33	16.5
Y	FFR	897	80	1.8	5.4	30	15.8
W	TN Exp.	TN 98-2	78	1.6	4.6	35	16.2
Y	Terra	TR 1126	77	0.9	4.6	35	17.0
W	TN Exp.	TN 98-3	77	1.8	4.3	36	17.7
W	FFR	907 W	77	1.0	4.9	34	15.2
W	Zimmerman	Z 64 W	74	1.0	4.8	34	15.8

[1]Rating based on a scale of 1 through 9 with 1 being excellent and 9 poor.

Table 21. Corn: Yield of full-season hybrids evaluated in eight environments for 1997 through 1998.

Color	Brand	Hybrid	Avg. Yield	Knox-ville	Spring Hill	Ames Plantation	Jackson Un-Irr	Jackson Irrigated
			Bushels pear acre					
Y	Crow's	702	139	175	110	101	135	177
Y	DeKalb	DK 743	135	147	107	99	141	174
Y	Mycogen	8460	133	161	98	109	136	158
W	FFR	907 W	127	139	109	104	118	161
W	Zimmerman	Z 64 W	124	150	98	95	120	157
L.S.D. (.05)			7.4	24.5	N.S.	N.S.	15.4	9.7
C.V.%			11.3	10.3	12.7	18.2	11.6	5.7
Avg.			131.7	154.4	104.5	101.6	130.2	165.5
R-Square			0.94	0.64	0.24	0.95	0.96	0.84

Table 22. Corn: Yield of full-season hybrids evaluated in eight environments for 1997 through 1998.

Color	Brand	Hybrid	Avg. Yield	Lodged Plants	Husk Cover	Ear Ht.	Moisture of Grain at Harvest
			Bu/A	Avg. No.	Rating[1]	In.	%
Y	Crow's	702	139	6.8	5.5	49	17.3
Y	DeKalb	DK 743	135	6.4	4.6	54	17.9
Y	Mycogen	8460	133	10.8	4.9	52	17.4
W	FFR	907 W	127	9.7	4.2	54	16.8
W	Zimmerman	Z 64 W	124	6.1	4.2	55	16.9

[1]Rating based on a scale of 1 through 9 with being excellent and 9 poor.

Table 23. Corn: Yield of full-season hybrids evaluated in 13 environments from 1996 through 1998.

Color	Brand	Hybrid	Avg. Yield	Knox-ville	Spring Hill	Ames Plantation	----Jackson---- Un-Irr	Irrigation
			----------Bushels per acre----------					
Y	Crow's	702	158	227	116	122	144	190
Y	DeKalb	DK 743	153	198	113	117	148	192
Y	Mycogen	8460	148	201	103	123	141	174
W	Zimmerman	Z 64 W	142	204	95	116	125	175
W	FFR	907 W	141	180	119	118	122	173
L.S.D. (.05)			6.2	20.0	N.S.	13.0	12.6	9.4
C.V.%			10.8	9.7	17.5	13.3	11.3	6.3
Avg.			148.5	201.9	109.2	119.3	136.1	180.7
R-Square			0.94	0.91	0.33	0.95	0.94	0.89

Table 24. Corn: Yield of full-season hybrids evaluated in 13 environments from 1996 through 1998.

Color	Brand	Hybrid	Avg. Yield	Lodged Plants	Ear Ht.	Grain Moisture at Harvest
			Bu/A	Avg. No.	In.	%
Y	Crow's	702	158	3.9	45.5	16.9
Y	DeKalb	DK 743	153	3.8	48.0	17.3
Y	Mycogen	8460	148	5.7	47.5	16.7
W	FFR	907 W	142	3.9	48.8	16.4
W	Zimmerman	Z 64 W	141	5.3	48.4	16.3

Performance of Wheat, Barley and Fall-seeded Oats for 1998.

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----------WHEAT----------

Fifty-three soft red winter wheat varieties were evaluated at Knoxville, Greeneville, Crossville, Spring Hill, Springfield, Milan, Martin, and Jackson in 1998.

The 1998 spring was wet and it was feared at first that disease would be severe under these conditions, however disease was light at most locations. Take-All was severe in some plots at Knoxville. No data are reported for Milan due to high stand variability. This was not due to winter injury.

The 1998 wheat data are reported in tables 25 and 26. Pioneer brand 2540, 25R26, 2568, 2552, and 25R57 were among the top producing varieties in 1998 (Table 25). Dozier and Fleming were among the lowest producing varieties.

The two-year wheat data are presented in Tables 27 and 28. The leading varieties for yield using a two-year average across eight locations were Pioneer brand 2540, FFR 555, N.K. Coker 9663, FFR 522, Pioneer brand 25R26, Pioneer brand 2552 and Jackson (Table 27). Jaypee, Ernie, Pocahontas, and Dozier produced significantly lower yields than the two-year average mean of 46.7 bu/acre (Table 27).

The three-year wheat data are shown in Tables 29 and 30. The leading varieties in yield were Pioneer 2552, FFR 555, Pioneer

brand 2568, N.K. Coker 9663, and Shiloh (Table 29).

The recommended wheat varieties for 1998-99 are Clemens, FFR 525[1], FFR 555, Foster, Hickory[1], Northrup King Coker 9803[1], Madison, American Patriot, Pioneer brand 2552, Pioneer brand 2580[1], Pioneer brand 2568, Northrup King Coker 9663, Pioneer brand 2684, Northrup King Coker 9543, Jackson, Shiloh, Terral TV 8555[1], Verne.

----------BARLEY----------

Three winter barley varieties were evaluated in 1998 (Tables 31 and 32). Starling produced the highest average yield (Table 31).

----------FALL-SEEDED OATS----------

Three fall-seeded oats were evaluated at four locations in 1998. Little winter injury was noted for all winter oat varieties. The yield data are shown in tables 33 and 34. Secretariat was the highest producing variety at four locations. Five varieties were evaluated at Crossville and Knoxville but no data are presented for these locations due to severe lodging for all varieties.

----------RYE AND TRITICALE----------

Three rye and three triticale varieties were evaluated at Knoxville (Table 35).

[1]Present plans indicate that this variety will not be recommended after 1999.

Table 25. Wheat: Yield of soft red winter wheat varieties evaluated in 1998.

Brand	Variety	Avg.	Knox-ville	Greene-ville	Cross-ville	Spring-field	Spring Hill	Jackson[1] No. Sp.	Jackson[1] Sp.	Martin
						Bu/A				
Pioneer	2540	53	58	33	33	60	76	57	56	48
Pioneer	25R26	51	56	33	22	53	74	57	59	44
Pioneer	2568	50	59	30	17	47	74	58	60	50
Pioneer	2552	50	65	32	34	58	72	47	49	41
Pioneer	25R57	50	60	30	29	47	61	57	59	45
AgriPro	Elkhart	48	59	26	22	46	69	60	59	35
N.K.*Coker	9663	48	62	34	40	53	56	48	49	41
Shiloh with(Gaucho)		48	68	24	42	49	61	49	49	39
AR Exp	494 B 2-2	48	68	25	30	49	73	43	46	51
VA	Roane[2]	48	62	30	41	47	66	46	48	42
FFR	555	47	55	29	26	51	73	50	50	46
FFR	522	47	65	26	38	48	60	48	50	38
VA	Jackson	47	53	30	22	47	67	52	55	41
KY	Verne	46	60	28	32	46	63	48	49	41
AgriPro	Patton	46	56	32	19	44	67	48	47	52
AgriPro	Shiloh	46	59	29	31	51	46	53	53	38
AgriPro	Foster	46	47	32	23	48	67	50	52	40
Willcross	795	45	40	27	29	48	77	48	51	38
N.K.*Coker	9474	45	51	36	30	39	69	49	49	38
AR Exp	584 A-3-1	45	49	29	28	46	63	50	49	40
Terral	TV 8767	44	55	25	21	48	60	49	49	45
American	Patriot	44	55	23	21	44	60	54	53	38
Americus	Justice	44	56	18	35	48	65	45	47	39
Pioneer	2684	44	51	29	22	43	54	54	54	36
Delta King	1551W	44	46	31	23	46	61	51	50	37
VA	Madison	44	59	28	26	41	54	49	48	39
Delta King	DK9027	44	55	23	18	45	65	51	52	32
Terral	TV 8557	44	54	34	21	42	60	47	46	42
AR.	Jaypee	43	47	35	19	37	52	55	54	40
TAG Exp	5329	43	53	33	19	44	64	43	46	40
AgriPro	Clemens	43	55	24	25	47	57	47	48	36
Willcross	723	43	47	23	16	43	58	55	56	32
N.K.	Coker 9543	43	47	28	16	44	56	52	53	35
E-K**	X 78912	43	53	32	19	36	58	48	47	46
N.K.*Coker	9704	43	55	30	20	41	58	45	47	40
MO	Ernie	42	50	30	21	37	47	51	51	41
Terral	TV 8555	42	54	25	15	48	63	44	46	38
E-K**	102	42	44	23	18	44	61	50	51	36
IN	Patterson	41	56	28	16	49	52	46	45	36
Pioneer	XW 663	41	59	26	13	43	69	40	42	38
TN Exp.	X 97-1	41	46	25	33	44	55	40	42	43
VA Exp	94-54-479	41	46	29	13	37	54	47	49	41
FFR	518 W[3]	40	57	27	13	39	60	38	43	41
VA	Pocahontas	40	50	31	22	37	48	43	45	39
E-K**	111	40	47	28	18	44	50	44	46	35

Table 25. Continued

Brand	Variety	Avg.	Knox-ville	Greene-ville	Cross-ville	Spring-field	Spring Hill	Jackson[1] No. Sp.	Jackson[1] Sp.	Martin Sp.
Featherstone 520		40	47	27	15	37	49	50	48	38
N.K. Coker 9803		40	48	25	17	38	44	50	50	35
D. K. DK 9051		40	49	21	18	38	62	45	45	33
Pioneer XW 662		39	58	23	25	42	57	37	39	31
Roberts[4]		39	46	28	16	28	47	50	51	33
TN Exp X98-1		38	47	26	22	42	49	36	37	46
GA	Dozier	35	46	29	13	38	38	38	39	39
GA	Fleming	33	40	24	12	28	52	34	35	35
L.S.D. (.05)		2.8	9.2	7.6	7.3	7.4	15.0	7.3	4.4	6.0
C.V.%		14.0	12.4	19.5	22.5	12.0	17.9	10.9	11.4	10.8
Avg.		43.8	53.4	28.0	23.2	44.1	59.8	40.0	48.6	39.7
R-Square		0.86	0.59	0.39	0.76	0.65	0.48	0.62	0.50	0.72

[1]The wheat varieties at Jackson were evaluated with and without a fungicide in 1998.
[2]Exp. number was VA 93-54-429.
[3]Exp. number was GA 87467.
[4]Exp. number was GA 871339.
*N.K. = Northrup King
**E-K = Erwin Keith

Table 26. Wheat: Yield and characteristics of soft red winter wheat varieties evaluated in 1998.

Brand	Variety	Yield	Date Headed	Date Mature	Plant Ht	Bushel Weight
		Bu/A			In.	Lb/Bu.
Pioneer	2540	53	5-5	6-5	36	53.6
Pioneer	25R26	51	5-4	6-3	33	50.5
Pioneer	2568	50	4-30	6-3	34	51.0
Pioneer	2552	50	5-4	6-4	35	54.2
Pioneer	25R57	50	5-1	6-3	36	51.5
AgriPro	Elkhart	48	5-2	6-3	37	53.1
N.K. Coker	9663	48	5-3	6-5	38	53.3
AgriPro	Shiloh with(Gaucho)	48	5-3	6-3	34	53.0
AR	Exp 494 B 2-2	48	5-5	6-4	38	54.2
VA	Roane	48	5-5	6-4	33	54.0
FFR	555	47	5-4	6-5	36	50.7
FFR	522	47	5-3	6-4	34	53.9
VA	Jackson	47	5-4	6-3	35	51.5
KY	Verne	46	5-5	6-3	39	51.6
AgriPro	Patton	46	5-2	6-3	36	49.2
AgriPro	Shiloh	46	5-3	6-3	34	53.2
AgriPro	Foster	46	5-4	6-5	34	51.4
Willcross	795	45	5-6	6-5	38	49.4
N.K. Coker	9474	45	5-2	6-3	35	54.2
AR	Exp 584 A-3-1	45	5-1	6-3	37	53.0
Terral	TV 8767	44	5-5	6-3	37	53.8
American	Patriot	44	5-4	6-4	36	50.4
Americus	Justice	44	5-6	6-4	36	50.9
Pioneer	2684	44	4-30	6-3	34	52.9
Delta King	1551 W	44	5-3	6-3	34	50.4
VA	Madison	44	5-1	6-3	35	50.9
Delta King	DK 902744	44	5-4	6-3	35	50.1
Terral	TV 8557	44	5-1	6-1	37	51.3
AR	Jaypee	43	4-30	6-3	32	52.3
TAG	Exp 5329	43	5-5	6-4	34	49.8
AgriPro	Clemens	43	5-6	6-5	38	51.8
Willcross	723	43	5-4	6-3	35	52.0
N. K. Coker	9543	43	5-1	6-1	32	51.6
Erwin Keith	E-K X 78912	43	5-3	6-3	35	50.6
N.K. Coker	9704	43	5-0	6-2	32	54.2
MO	Ernie	42	5-1	6-2	32	51.9
Terral	TV 8555	42	5-3	6-2	34	52.5
Erwin Keith	E-K 102	42	5-4	6-3	36	48.0
IN	Patterson	41	5-2	6-1	37	52.4
Pioneer	XW 663	41	5-2	6-5	36	54.9
TN Exp	X 97-1	41	5-4	6-4	37	51.9
VA Exp	94-54-479	41	5-2	6-3	31	50.6
FFR	518 W	40	5-3	6-3	32	49.7
VA	Pocahontas	40	5-2	6-2	33	50.4
Erwin Keith	111	40	5-5	6-4	37	47.9

Table 26. continued

Brand	Variety	Yield	Date Headed	Date Mature	Plant Ht	Bushel Weight
Featherstone	520	40	5-2	6-4	32	51.0
N.K. Coker	9803	40	4-30	6-2	33	54.6
Delta King	DK 9051	40	4-4	6-3	34	52.9
Pioneer	XW 662	39	4-2	6-3	35	52.2
Roberts		39	4-30	6-2	32	49.8
TN Exp	X 98-1	38	5-3	6-2	40	54.4
GA	Dozier	35	5-3	6-3	33	49.2
GA	Fleming	33	5-3	6-3	33	50.3

Table 27. Wheat: Yield of soft red winter wheat varieties evaluated in 16 environments from 1997 through 1998.

Brand	Variety	Avg.	Knox-ville	Greene-ville	Cross-ville	Spring-field	Spring Hill	Jackson No-S	Jackson Sp	Martin
		Bu/A								
Pioneer	2540	54	68	39	45	64	65	55	55	44
FFR	555	52	67	40	39	59	67	49	52	44
N.K. Coker	9663	51	69	45	46	60	54	49	50	39
FFR	522	51	72	33	42	61	59	49	49	42
Pioneer	25R26	50	64	41	32	58	56	55	54	41
Pioneer	2552	50	75	34	38	57	65	49	47	39
VA	Jackson	50	65	39	31	53	58	52	55	41
Pioneer	25R57	49	71	33	34	49	55	55	55	40
Pioneer	2568	49	62	32	29	48	55	56	59	48
AgriPro	Elkhart	49	64	34	31	50	60	54	55	39
AgriPro	Shiloh	49	72	34	41	50	52	50	51	39
AgriPro	Foster	48	58	40	32	50	56	48	52	43
N.K. Coker	9543	47	63	34	29	48	49	55	56	40
American	Patriot	47	61	32	30	49	60	53	54	35
Delta King	1551 W	46	55	40	32	48	54	52	51	37
TN Exp X	97-1	46	59	33	45	44	46	46	46	48
KY	Verne	46	64	34	41	45	51	44	47	38
AgriPro	Clemens	45	56	35	34	53	54	46	48	37
VA	Madison	45	64	33	37	39	43	51	51	39
N.K. Coker	9474	45	52	39	36	42	61	43	47	38
Terral TV	8555	45	62	29	29	47	50	48	50	39
Pioneer	2684	44	58	34	28	48	42	51	52	35
N.K. Coker	9803	44	57	35	26	47	45	48	50	38
Erwin Keith	E-K 102	44	56	30	27	45	51	50	49	39
Featherstone	520	44	57	34	25	43	46	52	51	38
IN	Patterson	44	61	27	30	47	52	47	47	36
AR	Jaypee	43	54	41	26	40	37	53	53	38
MO	Ernie	42	56	37	31	38	44	47	49	36
VA	Pocahontas	42	58	34	28	42	46	44	45	41
GA	Dozier	40	52	31	27	41	41	43	43	40
L.S.D. (.05)		2.7	8.6	7.7	5.9	6.6	10.3	5.5	5.4	8.4
C.V.%		17.1	14.2	22.3	18.0	13.7	20.1	11.3	13.3	21.4
Avg.		46.7	61.6	35.2	33.3	48.8	52.4	49.7	50.7	39.6
R-Square		0.72	0.67	0.59	0.85	0.67	0.63	0.52	0.41	0.32

Table 28. Wheat: Yield and other characteristics of soft red winter wheat varieties evaluated in 16 environments from 1997 through 1998.

Brand	Variety	Yield	Date Headed	Date Mature	Plant Ht
		Bu/A			In
Pioneer	2540	54	5-3	6-7	34
FFR	555	52	5-1	6-6	35
N.K. Coker	9663	51	4-30	8-9	37
FFR	522	51	4-30	6-4	32
Pioneer	25R26	50	5-2	6-6	32
Pioneer	2552	50	5-1	6-5	34
VA	Jackson	50	5-1	6-4	35
Pioneer	25R57	49	4-30	6-3	37
Pioneer	2568	49	4-29	6-3	36
AgriPro	Elkhart	49	4-30	6-4	39
AgriPro	Shiloh	49	5-1	6-4	33
AgriPro	Foster	48	5-1	6-6	34
N.K. Coker	9543	47	4-28	6-5	33
American	Patriot	47	5-1	6-5	33
Delta King	1551 W	46	5-1	6-5	36
TN Exp	X 97-1	46	5-1	6-5	39
KY	Verne	46	5-2	6-5	42
AgriPro	Clemens	45	5-3	6-8	38
VA	Madison	45	4-28	6-6	36
N.K. Coker	9474	45	4-30	6-3	36
Terral	8555	45	5-1	6-5	35
Pioneer	2684	44	4-27	6-6	36
N.K. Coker	9803	44	4-28	6-5	35
Erwin Keith E-K	102	44	5-1	6-4	38
Featherstone	520	44	4-29	6-6	33
IN	Patterson	44	4-29	6-3	40
AR	Jaypee	43	4-28	6-7	34
MO	Ernie	42	4-28	6-5	33
VA	Pocahontas	42	4-29	6-5	36
GA	Dozier	40	5-1	6-5	32

Table 29. Wheat: Yield of soft red winter wheat varieties evaluated in 23 environments from 1996 through 1998.

Brand	Variety	Avg.	Knox-ville	Greene-ville	Cross-ville	Spring-field	Spring Hill	Jackson[1] No-S	Jackson[1] SP	Milan	Martin
		Number of environments (Years)									
		23	3	3	3	3	3	2	2	1	3
		Bu/a									
Pioneer	2552	54	67	44	37	62	66	49	47	78	52
FFR	555	53	61	48	33	60	65	49	52	72	53
Pioneer	2568	53	58	45	29	55	55	56	59	75	59
N.K. Coker	9663	52	59	54	38	63	56	49	50	48	47
AgriPro	Shiloh	52	64	46	37	55	54	50	51	67	50
AgriPro	Foster	50	54	47	30	54	56	48	52	74	52
VA	Jackson	50	58	45	25	58	56	52	55	59	47
KY	Verne	49	60	44	36	53	55	44	47	72	45
American	Patriot	49	56	41	26	55	59	53	54	69	45
N.K. Coker	9543	49	58	42	26	53	49	55	56	56	50
AgriPro	Clemens	48	51	45	30	58	57	46	48	64	47
VA	Madison	48	60	40	31	48	48	51	51	68	47
Pioneer	2684	48	55	43	26	54	45	51	52	71	47
Terral TV	8555	47	55	38	25	56	50	48	50	72	47
N.K. Coker	9474	47	49	46	28	49	63	43	47	64	46
N.K. Coker	9803	46	53	43	24	55	46	48	50	66	41
Featherstone	520	46	53	44	25	46	47	52	51	66	42
GA	Dozier	42	48	41	22	46	42	43	43	57	45
AR	Jaypee	42	50	42	22	39	36	53	53	49	38
L.S.D. (.05)		2.2	6.2	6.2	4.9	6.9	7.1	5.4	5.1	9.8	7.7
C.V.%		16.4	13.8	17.6	21.0	15.9	16.8	11.1	12.6	10.5	20.2
Avg.		48.6	56.3	44.0	29.0	53.7	52.8	49.5	50.8	65.6	47.3
R-Square		0.77	0.75	0.82	0.83	0.69	0.68	0.50	0.43	0.70	0.72

[1]The wheat varieties at Jackson were evaluated with and without a fungicide in 1997 and 1998.

Table 30. Wheat: Yield and other characteristics of soft red winter wheat varieties evaluated from 1996 through 1998.

Brand	Variety	Date Yield	Date Headed	Plant Mature	Test Ht.	Weight
		Bu/A			In.	Lb/Bu
Pioneer	2552	54	5-4	6-7	33	51.1
FFR	555	53	5-4	6-9	34	48.6
Pioneer	2568	53	5-2	6-6	34	48.4
N.K. Coker	9663	52	5-3	6-11	36	50.1
AgriPro	Shiloh	52	5-3	6-7	33	49.3
AgriPro	Foster	50	5-4	6-8	33	49.2
VA	Jackson	50	5-4	6-7	33	48.4
KY	Verne	49	5-4	6-7	40	49.4
American	Patriot	49	5-4	6-7	33	48.2
N.K. Coker	9543	49	5-1	6-7	32	49.7
AgriPro	Clemens	48	5-6	6-10	37	48.8
VA	Madison	48	5-1	6-8	35	48.3
Pioneer	2684	48	5-1	6-8	34	50.3
Terral	TV 8555	47	5-4	6-7	33	48.5
N.K. Coker	9474	47	5-3	6-6	35	50.9
N.K. Coker	9803	46	5-1	6-7	33	50.7
Featherstone	520	46	5-3	6-8	32	49.3
GA	Dozier	42	5-4	6-7	31	48.3
AR	Jaypee	42	5-1	6-9	32	49.6

Table 31. Barley: Yields of varieties evaluated at six locations in 1998.

Brand	Variety	Avg.	Knox-ville	Greene-ville	Cross-ville	Spring-field	Spring Hill	Jackson
					Bu/A			
VA	Starling	76	86	49	86	94	79	61
VA	Callao	68	89	45	82	75	67	49
VA	Nomini	66	77	43	47	72	83	72
L.S.D. (.05)		5.4	11.5	N.S.	20.6	6.7	N.S.	6.9
C.V.%		13.1	7.9	17.6	16.6	4.8	16.4	6.6
Avg.		69.8	84.0	45.6	71.8	80.6	76.5	60.5
R-square		0.90	0.62	0.68	0.85	0.93	0.48	0.93

Table 32. Barley: Yield and other characteristics of varieties evaluated in 1998 at six locations.

Brand	Variety	Yield	Date Headed	Date Mature	Plant Height	Lodged	Test Weight
		Bu/A			In	%	Lb/Bu
Starling		76	4-21	5-30	36	40	40.1
Callao		68	4-19	5-27	29	80	42.4
Nomini		66	4-17	5-30	36	30	41.4

Table 33. Fall-seeded oats: Yield of varieties evaluated at four locations in 1998.

Brand	Variety	Avg.	Greeneville	Springfield	Spring Hill	Jackson
		Bu/A				
	Secretariat	99	87	125	92	91
SC	Simpson	80	75	110	43	91
SS	76-30	75	70	93	56	79
L.S.D. (.05)		7.7	20.3	25.0	13.4	9.7
C.V.%		12.3	15.1	13.3	12.1	6.4
Avg.		84.5	77.5	109.5	63.9	87.2
R-Square		0.92	0.60	0.63	0.956	0.72

Table 34. Fall-seeded oats: Yield and other characteristics of varieties evaluated at four locations in 1998.

Brand	Variety	Yield	Date Headed	Date Mature	Plant Ht.
		Bu/A			In
	Secretariat	99	5-2	6-5	40
SC	Simpson	80	5-1	6-5	40
SS	76-30	75	4-29	6-5	41

Table 35. Rye: Yield and other characteristics of varieties evaluated at Knoxville in 1998.

Brand	Variety	Yield	Date Headed	Date Mature	Lodged	Test Weight
		Bu/A			%	
Co-op	Winter Magic	46	4-17	6-5	90	50.3
TFC	97-110	42	4-18	6-5	100	51.1
RB	20-20	40	4-18	6-5	100	50.4
Triticale	2700	33	5-10	5-26	100	40.4
Triticale	498	32	4-28	5-10	50	36.8
Triticale	102	21	5-15	6-3	100	36.8
L.S.D.(.05)		5.2				
C.V.%		9.7				
Avg.		35.6				
R-Square		0.90				

Early Maturing Soybean Varieties (Maturity Group IV)

In 1998 twenty-nine early-maturing varieties were evaluated at the following five locations: Knoxville, Crossville, Springfield, Milan and Ames Plantation. Commercial strains of maturity group IV were grown at Jackson only. The maturity of varieties in the early test ranged from late maturity IV to the earlier maturity group III. These early maturing groups results are presented in Tables 36 through 44. DeKalb CX 450C, Dixie 478, Hornbeck HBK 4890, and Deltapine DP 3478 produced higher yields than the mean of 45.3 Bu/A (Table 36). Manokin is a late maturing group IV or early V (Table 37).

The two-year average yields and other characteristics are presented in Tables 38 and 39. Deltapine DP 3478 produced higher yields than the mean of 46.8 Bu/A (Table 38). The highest average location yields were obtained at Milan (73.2 Bu/A) and Knoxville (53.8 Bu/A). The remaining three locations average yields ranged from 33.6 to 39.2 Bu/A (Table 38).

Three years data are shown in Tables 40 and 41. Deltapine DP 3478 was among the leading varieties in yield (Table 40). Manokin and TN 4-94 were the latest maturing varieties evaluated in the group IV trials.

Roundup Ready Varieties of Maturity Group IV

In 1997 two check varieties were used in the Roundup Ready trials. Weed control in these check varieties was obtained using standard conventional herbicides. The remaining Roundup Ready

varieties were treated with two sprayings of Roundup Herbicide only. In 1998 no check varieties were used in the Roundup Ready trials. In 1998 all Roundup Ready varieties received two applications of Roundup at the appropriate time. Excellent weed control was obtained in the Roundup variety trials. In most cases the Roundup Ready varieties were evaluated close to, but separate from, the regular state variety trials.

Twenty-two early maturing Roundup Ready varieties were evaluated in 1998 at five locations. High yields were obtained at Milan and Knoxville. The regular early maturing soybean varieties at Milan yielded an average yield of 66.7 Bu/A and the Roundup Ready varieties averaged 66.3 Bu/A (Tables 36 and 42). At Knoxville the average yield for the regular (non-Roundup Ready) varieties was 55.4 Bu/A and the average of 61.9 Bu/A for the Roundup Ready varieties. The Roundup Ready early maturing varieties ranged in average yield from 39 Bu/A to 51 Bu/A (Table 42). In the regular trials, using conventional herbicides for weed control, the average yield ranged from 39 Bu/A to 52 Bu/A (Table 36).

The two year results for early Roundup Ready varieties are presented in Tables 44 and 45.

Regular Maturity Group V Varieties

(Non-Roundup Ready)

Fifty medium maturing regular varieties and thirty-seven Roundup Ready were evaluated in 1998. The regular variety trial results for maturity group V are shown in tables 46 and 47. The

1998 Roundup Ready maturity group V results are presented in Tables 52 and 53. The Martin data for maturity group V are presented in Tables 56 and 57.

The regular variety yields were high at Milan, Ames Plantation and Knoxville. Springfield yields were extremely low due to the hot dry summer of 1998 (Table 46). Yield and other characteristics are presented in Table 47.

The two year regular maturity group V data are shown in Tables 48 and 49. Martin yields are for one year and all others are for two years. The 1998 Martin yields were received too late to be included with the other locations. Asgrow A 5944 and Asgrow A 5848 produced higher yields than the mean of 43.8 Bu/A (Table 48).

The three years data are presented in Tables 50 and 51. Five varieties produced higher yields than the mean of 48.4 Bu/A (Table 50).

Roundup Ready Maturity Group V Results

The average yield for five locations ranged from 34 Bu/A to 45 Bu/A (Table 52). Most varieties for all trials in 1998 matured earlier than normal due to the hot dry weather. The moisture of seed at harvest was lower than normal at most locations in 1998.

The two year results for the Roundup Ready maturity group V varieties are presented in Tables 54 and 55.

Since we only have two years data for Roundup Ready varieties, none of these varieties were placed on the recommended list. From these data for Roundup Ready varieties it seems that the range of

varieties yield as well as the non-Roundup Ready varieties. If there was a yield drag on these Roundup Ready varieties it was not shown by these trials. The range in yield was similar for non-Roundup and Roundup Ready varieties. There will be no problem placing some of the Roundup Ready varieties on the recommended list after three years data has been obtained.

The 1998 Martin results for maturity group V are presented in Tables 56 and 57.

The early commercial strains test data for Jackson are presented in Table 58.

Table 36. Soybeans: Yield of varieties (Maturity Group IV) evaluated at five locations in 1998.

Brand	Variety	Avg. Yield	Ames Plantation	Knox-ville	Spring-field	Milan	Cross-ville
		Bushels per acre					
DeKalb	CX 450 C	52	30	61	35	85	47
Dixie	478	50	39	55	34	73	49
Hornbeck	HBK 4890	50	34	65	36	74	40
Deltapine	DP 3478	50	40	64	32	68	44
Hornbeck	HBK X9749	49	42	55	34	70	44
Terral	TV 4664	49	39	58	36	70	40
Hornbeck	HBK 4755	49	36	59	38	70	41
Delta King	X 9849 RR	48	27	65	39	75	34
Pioneer	9492	48	32	59	34	68	45
Asgrow	A 4604	47	41	56	30	69	41
Asgrow	A 4602	47	37	59	38	63	39
Asgrow	A 4922	47	34	62	36	64	39
Delta King	4860	46	28	58	40	64	40
Pioneer	9482	46	33	56	32	68	41
HyPerformer	AP 4880	45	29	58	29	70	40
Delta King	4762 RR	45	36	58	35	60	35
DeKalb	CX 478	44	30	51	30	67	41
Terral	TV 4479	44	30	52	38	60	40
Hornbeck	HBK 4600	44	28	54	36	62	39
KY. Exp.	91-1214	44	30	55	24	70	39
TN Exp.	TN 93-87	44	36	44	26	71	41
MD	Manokin	44	29	57	27	62	43
Delta Grow	4710	42	37	55	29	54	35
TN	TN 4-94	42	33	61	32	53	31
Riverside	RVS 490	42	36	47	22	70	31
Deltapine	DP 4969 RR	40	37	42	26	66	32
USG	S 92-6633	40	26	54	35	64	23
Terral	TV 4466 RR	39	32	44	33	61	28
Terral	TV 4975	39	32	44	20	61	40
L.S.D.(.05)		4.2	10.4	8.3	10.1	9.2	6.9
C.V.%		15.1	22.1	10.6	22.2	9.8	12.8
Avg.		45.3	33.6	55.4	32.4	66.7	38.7
R-Square		0.86	0.46	0.61	0.49	0.59	0.68

Table 37. Soybeans: Yield and other characteristics of varieties (Maturity Group IV) evaluated at five locations in 1998.

Brand	Variety	Avg. Yield	Full Bloom	Matured	Plant Ht.	Lodged	Flower[1]	Pubescence[2]
		Bu/A	Date	Date	In.	%	Color	Color
DeKalb	CX 450 C	52	7-7	9-15	34	21	P	T
Dixie	478	50	7-9	9-14	40	30	P	G
Hornbeck	HBK 4890	50	7-10	9-17	39	09	P	G
Deltapine	DP 3478	50	7-4	9-16	38	28	P	T
Hornbeck	HBK X9749	49	7-3	9-16	39	17	W	T
Terral	TV 4664	49	7-4	9-3	34	05	W	T
Hornbeck	HBK 4755	49	7-3	9-7	36	09	W	B
Delta King	X 9849 RR	48	7-3	9-17	35	22	W	T
Pioneer	9492	48	7-4	9-15	36	18	W	T
Asgrow	A 4604	47	7-4	9-15	37	20	P	T
Asgrow	A 4602	47	7-4	9-14	38	27	P	T
Asgrow	A 4922	47	7-3	9-17	40	17	W	T
Delta King	4860	46	7-4	9-14	35	06	W	T
Pioneer	9482	46	7-3	9-14	36	15	W	T
HyPerformer	AP 4880	45	7-3	9-15	37	20	P	T
Delta King	4762 RR	45	7-3	9-16	40	06	W	T
DeKalb	CX 478	44	7-3	9-13	38	17	W	T
Terral	TV 4479	44	7-4	9-14	35	03	W	T
Hornbeck	HBK 4600	44	7-4	9-14	35	05	W	T
KY Exp.	91-1214	44	7-4	9-19	38	14	P	T
TN Exp.	TN 93-87	44	7-16	9-18	31	20	P	G
MD	Manokin	44	7-16	9-20	28	06	W	T
Delta Grow	4710	42	7-3	9-24	38	22	P	T
TN	TN 4-94	42	7-5	9-18	43	26	P	G
Riverside	RVS 490	42	7-15	9-19	44	22	P	G
Deltapine	DP 4969 RR	40	7-16	9-19	45	40	W	G
USG	S 92-6633	40	7-4	9-12	34	15	P	T
Terral	TV 4466 RR	39	7-8	9-15	40	26	W	G
Terral	TV 4975	39	7-4	9-19	44	54	P	T

[1]Flower color: W=White and P=Purple.
[2]Pubescence color: G=Gray, T=Tawny and B=Brown.

Table 38. Soybeans: Yield of varieties (Maturity Group IV) evaluated at five locations for two years (1997-98).

Brand	Variety	Avg. Yield	Knox-ville	Cross-ville	Spring-field	Ames Plantation	Milan
		----------	----------	----------	Bushels per acre	----------	----------
Deltapine	DP 3478	51	58	43	34	40	82
Dixie	478	50	55	46	36	35	78
Hornbeck	HBK 4755	49	58	40	36	35	78
DeKalb	CX 450 C	49	55	43	31	32	86
Asgrow	A 4922	49	58	41	37	36	74
Terral	TV 4664	49	54	39	35	38	77
Pioneer	9482	48	53	40	34	37	76
HyPerformer	AP 4880	48	55	41	31	35	77
Pioneer	9492	47	53	42	33	33	73
Delta King	4860	46	53	37	36	33	72
Delta King	4762 RR	45	55	37	34	36	65
Terral	TV 4479	45	51	36	35	34	70
TN Exp.	TN 93-87	45	48	38	29	33	78
DeKalb	CX 478	45	51	39	31	30	74
MD	Manokin	45	55	37	32	32	69
Delta Grow	4710	44	52	35	31	38	62
Hornbeck	HBK 4600	43	49	38	33	30	66
TN	TN 4-94	43	55	31	35	34	61
L.S.D.(.05)		3.4	6.8	5.7	6.2	6.4	6.9
C.V.%		16.4	12.8	14.7	18.6	18.4	9.5
Avg.		46.8	53.8	39.2	33.6	34.5	73.2
R-Square		0.83	0.41	0.45	0.34	0.42	0.74

Table 39. Soybeans: Yield and other characteristics of varieties (Maturity Group IV) evaluated at five locations for two years (1997-98).

Brand	Variety	Avg. Yield	Full Bloom	Matured	Plant Ht.	Lodged	Flower[1]	Pubescence[2]
		Bu/A	Date	Date	In.	%	Color	Color
Deltapine	DP 3478	51	7-7	9-18	35	29	P	Lt. T
Dixie	478	50	7-11	9-16	37	37	P	G
Hornbeck	HBK 4755	49	7-8	9-13	35	09	W	T
DeKalb	CX 450 C	49	7-10	9-14	33	28	P	T
Asgrow	A 4922	49	7-8	9-19	37	13	W	T
Terral	TV 4664	49	7-8	9-15	34	05	W	T
Pioneer	9482	48	7-8	9-17	33	22	W	T
HyPerformer	AP 4880	48	7-7	9-17	35	29	P	T
Pioneer	9492	47	7-8	9-16	32	14	W	T
Delta King	4860	46	7-8	9-17	33	07	W	T
Delta King	4762 RR	45	7-8	9-18	38	09	W	T
Terral	TV 4479	45	7-8	9-16	33	03	W	T
TN Exp.	TN 93-87	45	7-17	9-22	31	17	P	G
DeKalb	CX 478	45	7-8	9-15	35	22	W	T
MD	Manokin	45	7-17	9-23	29	18	W	T
Delta Grow	4710	44	7-8	9-23	36	24	P	T
Hornbeck	HBK 4600	43	7-8	9-17	32	03	W	T
TN	TN 4-94	43	7-10	9-21	39	24	P	G

[1]Flower color: W=White and P=Purple.
[2]Pubescence color: G=Gray, T=Tawny and B=Brown.

Table 40. Soybeans: Yield of varieties (Maturity Group IV) Evaluated at five locations for three years (1996-98).

Brand	Variety	Avg. Yield	Knox-ville	Cross-ville	Spring-field	Ames Plantation	Milan
		----------	----------	Bushels per acre	----------	----------	----------
Deltapine	DP 3478	54	57	45	42	45	82
Pioneer	9482	53	53	46	43	42	80
Dixie	478	53	55	47	44	38	80
HyPerformer	AP 4880	53	58	47	38	43	78
Asgrow	A 4922	52	55	47	42	41	76
MD	Manokin	51	57	42	40	41	74
Delta King	4860	49	52	42	39	39	75
TN Exp.	TN 93-87	49	48	44	36	40	78
Terral	TV 4479	49	51	42	41	40	72
DeKalb	CX 478	49	49	47	36	35	77
TN	TN 4-94	47	53	38	41	42	62
Hornbeck	HBK 4600	47	49	41	40	36	71
L.S.D.(.05)		2.7	6.7	4.4	5.4	5.1	7.3
C.V.%		15.1	15.6	12.5	16.5	15.8	11.9
Avg.		50.6	53.3	44.0	40.2	40.1	75.4
R-Square		0.83	0.34	0.76	0.77	0.78	0.60

Table 41. Soybeans: Yield and other characteristics of varieties (Maturity Group IV)evaluated at five locations for three years (1996-98).

Brand	Variety	Avg. Yield	Full Bloom	Matured	Plant Ht.	Lodged	Flower[1]	Pubes-cence[2]
		Bu/A	Date	Date	In.	%	Color	Color
Deltapine	DP 3478	54	7-6	9-17	35	28	P	Lt. T
Pioneer	9482	53	7-6	9-17	34	19	W	T
Dixie	478	53	7-10	9-17	37	31	P	G
HyPerformer	AP 4880	53	7-6	9-17	35	27	P	T
Asgrow	A 4922	52	7-7	9-18	38	15	W	T
MD	Manokin	51	7-16	9-23	31	30	W	T
Delta King	4860	49	7-7	9-16	33	07	W	T
TN Exp.	TN 93-87	49	7-17	9-22	32	31	P	G
Terral	TV 4479	49	7-7	9-16	33	04	W	T
DeKalb	CX 478	49	7-7	9-15	35	19	W	T
TN	TN 4-94	47	7-8	9-22	40	25	P	G
Hornbeck	HBK 4600	47	7-7	9-17	33	03	W	T

[1]Flower color: W=White and P=Purple.
[2]Pubescence color: G=Gray , T=tawny and B=brown.

Table 42. Soybeans: Yield of Maturity Group IV Roundup Ready soybean varieties evaluated at five locations in 1998.

Brand	Variety	Avg. Yield	Ames Plantation	Knox-ville	Spring-field	Spring Hill	Milan
		----------	----------	Bushels per acre	----------	----------	----------
Asgrow	AG 4301	51	32	66	34	42	81
Delta King	X 9849 RR	47	27	72	29	34	74
Asgrow	AG 4702	47	29	70	31	37	70
Asgrow	AG 4601 RR	46	26	63	31	40	72
Deltapine	DP 4750 RR	45	39	64	24	34	64
Delta King	4762 RR	45	28	64	26	39	66
Asgrow	AG 4401	44	29	63	27	36	68
Pioneer	9492	44	29	61	25	38	68
Asgrow	AG 4901	44	32	66	23	40	61
Dyna Gro	3463 RR	44	33	60	28	35	64
Terra	TS 466 RR	44	27	60	28	37	66
Pioneer	94B81	44	29	64	24	35	67
DeKalb	CX 460 RR	42	23	64	22	34	67
Asgrow	AG 4501	42	22	57	24	37	68
Asgrow	AG 4701	42	25	58	27	37	62
Sure Grow	SG 468 RR	41	33	61	21	31	62
Delta Grow	4650 RR	41	29	59	26	29	62
FFR	RT 467	41	33	57	22	31	63
Sure Grow	SG 498 RR	40	25	57	18	33	68
Hartz	H 4994 RR	40	29	59	16	23	71
Terral	TV 4666 RR	39	25	60	26	29	58
Hornbeck	HBK 4515 RR	39	27	57	27	27	56
L.S.D.(.05)		3.5	9.3	4.3	3.8	7.8	9.4
C.V.%		12.9	22.9	4.9	10.5	16.1	10.1
Avg.		43.4	28.7	61.9	25.5	34.5	66.3
R-Square		0.93	0.42	0.75	0.80	0.56	0.54

Table 43. Soybeans: Yield and other characteristics of Maturity Group IV Roundup Ready soybean varieties evaluated at five locations in 1998.

Brand	Variety	Avg. Yield	Full Bloom	Matured	Plant Ht.	Lodged	Flower	Pubescence
		Bu/A	Date	Date	In.	%	Color[1]	Color[2]
Asgrow	AG 4301	51	7-4	9-10	35	08	P	T
Delta King	X 9849 RR	47	7-4	9-11	35	04	W	T
Asgrow	AG 4702	47	7-4	9-9	36	06	W	T
Asgrow	AG 4601	47	7-4	9-8	36	10	W	T
Deltapine	DP 4750 RR	45	7-4	9-14	42	43	P	T
Delta King	4762 RR	45	7-4	9-10	41	07	W	T
Asgrow	AG 4401	44	7-4	9-9	38	08	M	T
Pioneer	9492	44	7-5	9-10	36	05	W	T
Asgrow	AG 4901	44	7-4	9-10	38	08	W	T
Dyna Gro	3463 RR	44	7-5	9-8	39	06	W	T
Terra	TS 466 RR	44	7-4	9-9	41	15	W	T
Pioneer	94B81	44	7-5	9-7	40	23	W	T
DeKalb	CX 460 RR	42	7-4	9-8	40	18	W	T
Asgrow	AG 4501	42	7-4	9-9	39	18	P	T
Asgrow	AG 4701	42	7-5	9-10	41	13	M	T
Sure Grow	SG 468 RR	41	7-5	9-11	42	38	P	T
Delta Grow	4650 RR	41	7-4	9-7	37	18	W	T
FFR	RT 467	41	7-5	9-9	39	10	W	G
Sure Grow	SG 498 RR	40	7-5	9-14	36	06	W	T
Hartz	H 4994 RR	40	7-13	9-15	34	41	W	T
Terral	TV 4666 RR	39	7-4	9-6	38	08	W	G
Hornbeck	HBK 4515 RR	39	7-4	9-7	39	13	W	G

[1]Flower color: W=White, P=Purple and M=Mixture.
[2]Pubescence color: G=Gray , T=Tawny and B=Brown.

Table 44. Soybeans: Yield of Maturity Group IV Roundup Ready soybean varieties evaluated at four locations for two years (1997-98).

Brand	Variety	Avg Yield	Knox-ville	Spring-field	Ames Plantation	Milan
				Bushels per acre		
Asgrow	AG 4702	47	61	38	26	61
Asgrow	AG 4406	45	59	34	28	57
Asgrow	AG 4601	44	56	37	27	59
Terral	TV 466 RR	40	53	32	23	50
Asgrow	AG 4701	40	53	29	24	52
L.S.D. (.05)		4.4	4.9	7.6	6.3	5.6
C.V.%		20.9	8.5	21.9	23.9	9.7
Avg.		42.9	56.5	34.0	25.5	55.8
R-Square		0.75	0.79	0.55	0.49	0.86

Table 45. Soybeans: Yield and other characteristics of Maturity Group IV Roundup Ready soybean varieties evaluated at four locations for two years (1997-98).

Brand	Variety	Avg. Yield	Full Bloom	Matured	Plant Ht.	Lodged	Flower	Pubes-cence
		Bu/A	Date	Date	In.	%	Color[1]	Color[2]
Asgrow	AG 4702	47	7-5	9-15	34	09	W	T
Asgrow	AG 4406	45	7-5	9-15	35	11	M	T
Asgrow	AG 4601	44	7-6	9-15	33	11	W	T
Terral	TV 466 RR	40	7-5	9-12	35	10	W	G
Asgrow	AG 4701	40	7-6	9-16	38	13	M	T

[1]Flower color: W=White, P=Purple and M=mixed.
[2]Pubescence color: G=Gray and T=Tawny.

Table 46. Soybeans: Yield of Maturity Group V varieties evaluated at five locations in 1998.

Brand	Variety	Avg. Yield	Knox-ville	Spring Hill	Spring-field	Ames Plantation	Milan
		----------	----------	Bushels per acre	----------	----------	----------
NC	Clifford	48	50	44	23	54	71
Asgrow	A 5959	48	52	43	13	49	80
Asgrow	A 5944	47	63	41	13	55	65
Pioneer	95B33	47	48	52	19	40	75
Asgrow	A 5848	46	48	44	16	50	71
Hornbeck	HBK 5990	45	52	39	12	53	71
Asgrow	A 5547	45	46	45	15	49	70
Delta King	5995	45	50	31	13	48	82
NC	Holladay	44	52	39	19	50	61
Terral	TV 5797	44	47	41	14	54	63
VA	V 89-805	43	47	39	12	53	66
Hornbeck HBK	5770	43	49	43	11	43	70
Hornbeck HBK	X 571-98	43	52	40	19	43	63
TN Exp.	TN 94-213	43	46	33	18	47	70
Deltapine	DP 3519 S	43	45	40	15	52	63
MO	S 94-1956	42	52	39	14	44	63
Pioneer	9594	42	44	35	10	51	72
TN Exp.	TN 93-9142-16	42	53	26	9	54	69
VA	V 91-3036	42	54	36	14	49	58
Deltapine	DPX 8 S 56	42	39	40	9	54	69
Delsoy	MO 5500	42	48	40	11	53	57
Hornbeck	HBK 5149	42	52	36	12	47	61
VA	V 90-1012	42	50	43	12	43	61
Terral	TV 5926	41	52	37	8	45	65
VA	Essex	41	55	32	12	41	64
Deltapine	DPX 8 S 59	41	45	34	6	51	67
Delta King	5850	40	47	42	8	41	64
VA	Hutcheson	40	39	38	12	54	60
TN Exp.	TN 93-99	40	44	30	11	48	69
Riverside	Rubin 5	40	40	39	11	44	47
Riverside	RVS 549	40	43	31	8	52	64
Deltapine	DP 3588	40	47	35	9	45	62
Delta King	5475	40	46	32	11	42	67
FFR	563	39	42	40	13	43	60
HyPerformer	HY 574	39	45	35	8	46	63
FFR	542	39	42	40	14	44	57
Pioneer	95G41	39	39	41	12	38	65
KAS Cherokee	516	39	48	38	8	45	54
USDA	J 94-7	39	50	27	11	43	62
TN	TN 5-95	38	46	35	11	45	55
Riverside	RVS 77	38	37	34	8	47	64
Delta King	5961 RR	37	49	32	5	46	53
Delta King	5664 RR	37	42	32	14	37	59
Deltapine	DP 5354	37	32	36	10	41	65
Pioneer	9584	37	40	24	13	40	65

Table 46. Continued

Brand	Variety	Avg. Yield	Knox-ville	Spring Hill	Spring-field	Ames Plantation	Milan
		----------	----------	----------	Bushels per acre	----------	----------
MO	Delsoy 5710	36	43	34	7	40	55
HyPerformer	AP 572 STS	36	43	29	6	42	59
Riverside	520	36	36	35	10	37	61
VA	Essex RSV 1	36	47	24	10	36	62
Delta King	5263 RR	34	45	29	8	38	50
L.S.D. (.05)		4.3	7.6	9.2	3.4	8.7	7.9
C.V.%		16.9	11.6	18.1	20.6	13.8	8.8
Avg.		41.0	46.5	36.4	11.8	46.1	64.2
R-Square		0.90	0.60	0.75	0.76	0.54	0.64

Table 47. Soybeans: Yield and other characteristics of Maturity Group V varieties evaluated at five locations in 1998.

Brand	Variety	Avg. Yield	Full Bloom	Matured	Plant Ht.	Lodged	Flower	Pubescence
		Bu/A	Date	Date	In.	%	Color[1]	Color[2]
NC	Clifford	48	7-16	9-15	32	13	P	T
Asgrow	A 5959	48	7-18	9-22	31	27	W	G
Asgrow	A 5944	47	7-20	9-26	34	07	W	G
Pioneer	95B33	47	7-15	9-15	33	11	P	G
Asgrow	A 5848	46	7-19	9-25	32	08	W	G
Hornbeck	HBK 5990	45	7-18	9-25	33	07	P	T
Asgrow	A 5547	45	7-17	9-21	31	21	W	G
Delta King	5995	45	7-17	9-23	31	30	W	G
NC	Holladay	44	7-15	9-16	28	12	P	G
Terral	TV 5797	44	7-18	9-23	36	09	W	G
VA	V 89-805	43	7-18	9-15	32	22	P	G
Hornbeck	HBK 5770	43	7-20	9-23	35	29	W	T
Hornbeck	HBK X 571-98	43	7-17	9-20	33	16	W	G
TN Exp.	TN 94-213	43	7-16	9-17	31	05	W	G
Deltapine	DP 3519 S	43	7-16	9-17	33	13	P	G
MO	S 94-1956	42	7-16	9-20	29	08	P	T
Pioneer	9594	42	7-20	9-23	32	16	W	G
TN Exp.	TN 93-142-16	42	7-24	9-27	33	07	W	G
VA	V 91-3036	42	7-20	9-22	32	20	P	G
Deltapine	DPX 8 S 56	42	7-19	9-21	39	53	P	T
MO	Delsoy 5500	42	7-18	9-20	33	06	W	T
Hornbeck	HBK 5149	42	7-15	9-15	31	06	P	G
VA	V 90-1012	42	7-17	9-20	31	10	P	G
Terral	TV 5926	41	7-22	9-25	36	12	P	T
VA	Essex	41	7-14	9-16	28	08	P	G
Deltapine	DPX 8 S 59	41	7-20	9-25	42	35	W	T
Delta King	5850	40	7-18	9-20	32	40	W	T
VA	Hutcheson	40	7-19	9-21	32	21	W	G
TN Exp.	TN 93-99	40	7-20	9-21	31	15	W	G
Riverside	Rubin 5	40	7-22	9-24	30	03	W	G
Riverside	RVS 549	40	7-18	9-21	33	11	P	T
Deltapine	DP 3588	40	7-19	9-23	41	25	P	T
Delta King	5475	40	7-16	9-15	31	21	W	T
FFR	563	39	7-18	9-22	32	06	P	G
HyPerformer	HY 574	39	7-20	9-23	35	35	P	T
FFR	542	39	7-16	9-15	32	08	P	G
Pioneer	95G41	39	7-17	9-17	33	08	W	T
KAS	Cherokee 516	39	7-14	9-14	29	13	W	T
USDA	J 94-7	39	7-16	9-18	32	13	W	T
TN	TN 5-95	38	7-16	9-17	32	13	P	T
Riverside	RVS 77	38	7-18	9-26	35	28	W	T
Delta King	5961 RR	37	7-23	9-27	35	15	W	G
Delta King	5664 RR	37	7-17	9-22	34	08	W	G
Deltapine	DP 5354	37	7-16	9-20	35	56	P	G
Pioneer	9584	37	7-16	9-22	34	22	W	T

Table 47. Continued

Brand	Variety	Avg. Yield	Full Bloom	Matured	Plant Ht.	Lodged	Flower	Pubes-cence
		Bu/A	Date	Date	In.	%	Color	Color
MO	Delsoy 5710	36	7-19	9-24	35	27	W	T
HYPerformer	AP 572 STS	36	7-20	9-23	31	11	W	G
Riverside	520	36	7-16	9-17	46	18	W	T
VA	Essex RSV 1	36	7-14	9-15	27	15	P	G
Delta King	5263 RR	34	7-14	9-15	30	08	P	T

[1]Flower color: W=White and P=Purple.
[2]Pubescence color: G=Gray, T=Tawny and B=Brown.

Table 48. Soybeans: Yield of Maturity Group V varieties evaluated in 11 environments for two years (1997-98).

Brand	Variety	Avg. Yield	Knox-ville	Spring Hill	Spring-field	Ames Plantation	Milan	Martin
		----------	----------	----------	Bushels per acre	----------	----------	----------
Asgrow	A 5944	50	59	43	30	51	68	46
Asgrow	A 5848	50	52	43	31	46	70	59
Asgrow	A 5547	47	47	42	29	45	69	50
Hornbeck	HBK 5770	46	49	41	26	44	65	61
MO	Delsoy 5500	46	52	44	27	46	60	49
Deltapine	DP 3519 S	46	48	41	28	46	59	58
VA	Hutcheson	46	41	39	27	45	71	55
Terral	TV 5797	46	47	41	28	44	65	52
NC	Holladay	46	50	42	30	41	63	50
NC	Clifford	45	49	42	33	43	71	22
TN Exp.	TN 94-213	45	49	39	31	37	68	44
Hornbeck	HBK 5149	45	50	39	27	45	59	52
FFR	563	45	49	44	28	42	58	49
Pioneer	9594	45	45	37	29	45	67	43
Riverside	RVS 549	44	48	35	25	46	65	53
FFR	542	44	48	43	28	42	56	48
Deltapine	DP 3588	44	49	36	24	39	61	63
USDA	J 94-7	44	52	32	26	41	59	60
Delta King	5664 RR	43	44	36	28	36	61	59
HyPerformer	AP 572 STS	43	46	34	22	40	61	60
Pioneer	9584	42	44	32	26	37	64	51
HyPerformer	HY 574	41	47	35	22	44	58	43
TN	TN 5-95	41	47	37	26	39	56	44
Riverside	Rubin 5	41	44	40	25	40	67	24
Delta King	5961 RR	41	48	33	23	43	51	52
Riverside	RVS 77	40	38	34	21	40	60	54
TN Exp.	TN 93-99	38	40	34	22	33	63	40
Delta King	5263 RR	37	44	33	24	35	51	38
L.S.D. (.05)		4.0	5.8	6.0	3.2	5.4	6.8	10.0
C.V.%		21.5	12.5	15.9	12.2	13.0	11.1	14.4
Avg.		43.8	47.3	38.3	26.6	41.9	62.4	49.2
R-Square		0.69	0.51	0.72	0.97	0.73	0.57	0.72

Table 49. Soybeans: Yield and other characteristics of Maturity Group V varieties evaluated in 11 environments for two years (1997-98)

Brand	Variety	Avg. Yield	Full Bloom	Matured	Plant Ht.	Lodged	Flower	Pubescence
		Bu/A	Date	Date	In.	%	Color	Color
Asgrow	A 5944	50	7-20	9-30	35	30	W	G
Asgrow	A 5848	50	7-20	9-28	32	03	W	G
Asgrow	A 5547	47	7-18	9-25	32	41	W	G
Hornbeck	HBK 5770	46	7-21	9-28	39	37	W	T
MO	Delsoy 5500	46	7-19	9-24	32	04	W	T
Deltapine	DP 3519 S	46	7-18	9-22	35	17	P	G
VA	Hutcheson	46	7-20	9-25	32	22	W	G
Terral	TV 5797	46	7-19	9-27	37	12	W	G
NC	Holladay	46	7-16	9-21	29	25	P	G
NC	Clifford	45	7-17	9-23	32	29	P	T
TN Exp.	TN 94-213	45	7-17	9-22	32	05	W	G
Hornbeck	HBK 5149	45	7-17	9-20	34	18	P	G
FFR	563	45	7-19	9-26	35	15	P	G
Pioneer	9594	45	7-21	9-28	34	37	W	G
Riverside	RVS 549	44	7-18	9-26	34	31	P	T
FFR	542	44	7-18	9-23	34	14	P	G
Deltapine	DP 3588	44	7-21	9-28	42	32	P	T
USDA	J 94-7	44	7-17	9-22	33	21	W	T
Delta King	5664 RR	43	7-18	9-26	35	13	W	G
HyPerformer	AP 572 STS	43	7-21	9-29	32	13	W	G
Pioneer	9584	42	7-18	9-26	35	30	W	T
HyPerformer	HY 574	41	7-21	9-28	36	54	P	T
TN	TN 5-95	41	7-17	9-21	33	24	P	T
Riverside	Rubin 5	41	7-22	9-28	30	15	W	G
Delta King	5961 RR	41	7-24	9-30	36	24	W	G
Riverside	RVS 77	40	7-20	9-30	35	67	W	T
TN Exp.	93-99	38	7-21	9-25	30	11	W	G
Delta King	5263 RR	37	7-16	9-20	31	18	P	T

[1]Flower color: W=White and P=Purple.
[2]Pubescence color. G=Gray and T=Tawny.

Table 50. Soybeans: Yield of Maturity Group V evaluated in 17 environments at six locations for three years (1996-98).

Brand	Variety	Avg. Yield	Knox-ville	Spring-Hill	Spring-field	Ames Plantation	Milan	Martin
		Bushels per acre						
Asgrow	A 5944	54	60	49	34	56	69	56
Asgrow	A 5848	53	53	50	37	52	67	64
Asgrow	A 5547	52	51	48	35	52	68	58
Deltapine	DP 3519 S	52	54	47	35	51	61	67
VA	Hutcheson	51	47	46	33	53	71	58
Terral	TV 5797	50	47	46	37	50	64	55
Pioneer	9594	50	53	45	33	49	66	52
FFR	563	49	50	50	36	47	58	55
NC	Clifford	48	52	47	38	50	69	29
Pioneer	9584	48	51	42	33	46	64	57
NC	Holladay	48	51	45	35	44	64	48
MO	Delsoy 5500	48	48	49	30	48	57	56
Deltapine	DP 3588	47	49	42	33	45	63	55
FFR	542	47	46	49	35	46	55	52
TN	TN 5-95	47	50	43	33	46	56	55
HyPerformer	HY 574	47	51	43	31	49	58	50
Riverside	RVS 549	46	46	41	30	48	64	47
Riverside	Rubin 5	44	48	46	30	45	64	27
Riverside	RVS 77	43	39	39	27	45	60	55
TN Exp.	TN 93-99	43	43	43	27	41	62	44
L.S.D.(.05)		2.4	5.0	5.2	3.5	4.6	5.7	7.6
C.V.%		14.8	12.6	14.3	13.1	11.7	11.2	14.8
Avg.		48.4	49.4	45.5	33.2	48.2	0.51	51.9
R-Square		0.80	0.65	0.80	0.94	0.84	0.63	0.76

Table 51. Soybeans: Yield of Maturity Group V soybean varieties evaluated in 17 environments for three years (1996-98).

Brand	Variety	Avg. Yield	Full Bloom	Matured	Plant Ht.	Lodged	Flower	Pubescence
		Bu/A	Date	Date	In.	%	Color[1]	Color[2]
Asgrow	A 5944	54	7-21	10-3	36	25	W	G
Asgrow	A 5848	53	7-21	10-2	34	06	W	G
Asgrow	A 5547	52	7-20	9-28	33	37	W	G
Deltapine	DP 3519 S	52	7-19	9-27	37	22	P	G
VA	Hutcheson	51	7-21	9-28	33	23	W	G
Terral	TV 5797	50	7-21	10-1	36	15	W	G
Pioneer	9594	50	7-22	10-2	35	33	W	G
FFR	563	49	7-20	9-29	35	15	P	G
NC	Clifford	48	7-19	9-26	32	29	P	T
Pioneer	9584	48	7-19	9-29	35	25	W	T
NC	Holladay	48	7-18	9-23	28	22	P	G
MO Delsoy	5500	48	7-21	9-27	33	13	W	T
Deltapine	DP 3588	47	7-23	10-2	42	36	P	T
FFR	542	47	7-19	9-26	34	14	P	G
TN	TN 5-95	47	7-19	9-24	34	19	P	T
HyPerformer	HY 574	47	7-22	9-30	36	50	P	T
Riverside	RVS 549	46	7-20	9-28	34	36	P	T
Riverside	Rubin 5	44	7-23	10-1	31	19	W	G
Riverside	RVS 77	43	7-21	10-3	35	54	W	T
TN Exp.	TN 93-99	43	7-23	9-27	31	16	W	G

[1]Flower color: W=White and P=Purple.
[2]Pubescence color: G=Gray and T=Tawny.

Table 52. Soybeans: Yield of Maturity Group V Roundup Ready Soybean varieties evaluated at five locations in 1998.

Brand	Variety	Avg. Yield	Ames Plantation	Knox-ville	Spring Hill	Spring-field	Milan
		Bushels per acre					
Asgrow	AG 5602	45	26	58	42	30	68
FFR	RT 557 RR	45	29	58	41	29	67
Deltapine	DP 5960 RR	44	29	53	39	27	73
Deltapine	DP 5806 RR	44	29	58	31	27	77
Deltapine	DP 5644 RR	44	23	57	42	28	71
FFR	RT 517 RR	44	20	51	38	41	68
HyPerformer	AP 543 RR	43	23	55	41	30	67
Sure Grow	SG 567 RR	43	32	50	37	25	69
FFR	RT 587 RR	42	28	52	36	31	64
HYPerformer	AP 588 RR	42	32	57	32	25	66
FFR	RT 556 RR	42	26	56	35	28	66
Hornbeck	HBK R 5588	42	26	50	37	28	68
USG[1] Exp.	9754 G 02 RR	42	26	46	43	27	67
Asgrow	AG 5401 RR	42	24	46	42	31	66
DeKalb	CX 550 RR	41	23	49	38	32	65
Hornbeck	HBK R 5404	41	19	53	41	29	65
Sure Grow	SG 597 RR	41	23	54	36	27	67
FFR	RT 546 RR	41	23	53	40	30	61
Hartz	H 5000 RR	41	22	52	36	26	71
Pioneer	95B41	41	20	54	42	30	60
Asgrow	AG 5901 RR	41	29	54	29	29	64
FFR	RT 536 RR	41	25	48	37	31	64
USG Exp.	9755 J 01 RR	41	22	52	35	24	70
Pioneer	95B71	41	28	50	34	21	70
Asgrow	AG 5601	40	29	46	35	24	64
Terra	TS 556 RR	39	26	49	31	27	63
Delta King	5664 RR	39	22	53	33	25	63
Hartz	H 5181 RR	39	27	49	30	22	67
Asgrow	AG 5801	39	19	50	32	28	65
USG Exp.	9757 H 16 RR	38	23	45	37	24	59
Delta King	5263 RR	37	18	57	31	22	59
Delta Grow	5858 RR	37	17	49	33	25	63
Terral	TV 5466 RR	37	20	52	32	25	58
Delta King	5961 RR	37	24	48	29	26	58
Terral	TVX 5866 RR	36	16	46	30	21	68
Terral	TV 5666 RR	35	16	48	27	23	59
UAP	X 0038 RR	34	26	42	22	16	63
L.S.D. (.05)		4.9	8.0	8.8	7.9	4.7	11.4
C.V.%		19.4	23.9	12.2	16.1	12.4	12.5
Avg.		40.6	24.0	51.3	35.2	26.9	65.5
R-Square		0.85	0.70	0.50	0.75	0.70	0.29

[1]UniSouth Genetics, Inc.

Table 53. Soybeans: Yield of Maturity Group V Roundup Ready Soybean varieties evaluated at five locations in 1998.

Brand	Variety	Avg. Yield	Full Bloom	Matured	Plant Ht.	Lodged	Flower	Pubes-cence
		Bu/A	Date	Date	In.	%	Color[1]	Color[2]
Asgrow	AG 5602	45	7-16	9-21	33	13	W	G
FFR	RT 557 RR	45	7-17	9-20	34	35	P	G
Deltapine	DP 5960 RR	44	7-20	9-24	34	23	W	G
Deltapine	DP 5806 RR	44	7-18	9-24	34	26	W	G
Deltapine	DP 5644 RR	44	7-17	9-21	32	18	W	T
FFR	RT 517 RR	44	7-14	9-16	30	14	P	G
HyPerformer	AP 543 RR	43	7-17	9-20	32	10	W	G
Sure Grow	SG 567 RR	43	7-19	9-22	36	13	P	G
FFR	RT 587 RR	42	7-16	9-23	34	13	P	G
HyPerformer	AP 588 RR	42	7-18	9-23	33	14	W	G
FFR	RT 556 RR	42	7-17	9-19	33	32	P	G
Hornbeck	HBK R 5588	42	7-18	9-20	32	26	P	G
USG Exp.	9754 G 02 RR	42	7-17	9-20	32	13	P	G
Asgrow	AG 5401	42	7-15	9-21	32	11	M	G
DeKalb	CX 550 RR	41	7-16	9-20	31	17	P	G
Hornbeck	HBK R 5404	41	7-18	9-21	32	23	P	G
Sure Grow	SG 597 RR	41	7-20	9-24	37	13	W	T
FFR	RT 546 RR	41	7-16	9-15	32	11	P	G
Hartz	H 5000 RR	41	7-21	9-20	33	12	P	T
Pioneer	95B41	41	7-18	9-17	32	13	W	T
Asgrow	AG 5901	41	7-21	9-27	33	14	W	T
FFR	RT 536 RR	41	7-16	9-15	31	17	P	G
USG Exp.	9755 J 01 RR	41	7-18	9-22	33	28	P	G
Pioneer	95B71	41	7-17	9-21	30	33	W	T
Asgrow	AG 5601	40	7-17	9-22	34	33	W	G
Terra	TS 556 RR	39	7-17	9-19	31	12	P	G
Delta King	5664 RR	39	7-17	9-21	34	11	W	G
Hartz	H 5181 RR	39	7-25	9-16	34	33	W	G
Asgrow	AG 5801	39	7-19	9-24	33	13	P	G
USG Exp.	9757 H 16 RR	38	7-10	9-23	32	22	P	G
Delta King	5263 RR	37	7-14	9-15	30	05	P	T
Delta Grow	5858 RR	37	7-20	9-22	32	17	P	G
Terral	TV 5466 RR	37	7-17	9-20	31	09	P	G
Delta King	5961 RR	37	7-21	9-15	34	12	W	G
Terral	TVX 5866 RR	36	7-18	9-23	32	30	P	G
Terral	TV 5666 RR	35	7-19	9-22	29	13	P	G
UAP	X 0038 RR	34	7-17	9-21	33	37	P	G

[1]Flower color: W=White, P=Purple and M=Mixture of white and purple.
[2]Pubescence color: G=Gray and T= Tawny.

Table 54. Soybeans: Yield of maturity Group V Roundup Ready soybean varieties evaluated at five locations for two years (1997-98).

Brand	Variety	Avg. Yield	Knox-ville	Spring Hill	Spring-field	Ames Plantation	Milan
		----------	----------	----------	Bushels per acre	----------	----------
Asgrow	AG 5602	41	48	39	29	22	65
FFR	RT 546	41	46	42	34	22	59
Hornbeck SB	HBK 5404	40	50	42	35	18	56
Sure Grow	SG 567 RR	40	44	36	30	26	64
Sure Grow	SG 597 RR	40	47	38	30	21	64
FFR	RT 536 RR	39	44	39	32	23	59
Asgrow	AG 5901	39	45	32	32	26	60
Hartz	H 5181 RR	39	44	31	25	29	65
Hartz	H 5000 RR	39	45	36	29	19	65
Asgrow	AG 5801	38	48	34	31	17	59
Asgrow	AG 5601	38	40	38	28	21	62
Terral	TV 5666 RR	36	44	34	29	19	55
Terral	TVX 5866 RR	35	41	30	26	19	57
L.S.D. (.05)		3.6	N.S.	5.9	3.6	5.7	6.4
C.V. %		20.9	17.8	16.2	12.0	26.5	10.6
Avg.		38.8	45.2	36.3	30.1	21.7	60.7
R-Square.		0.78	0.51	0.73	0.71	0.58	0.59

Table 55. Yield and other characteristics of Maturity Group V Roundup Ready Varieties evaluated at five locations for two years (1997-98).

Brand	Variety	Avg. Yield	Full Bloom	Matured	Plant Ht.	Lodged	Flower	Pubes-cence	Moist
		BU/A	Date	Date	In.	%	Color[1]	Color[2]	
Asgrow	AG 5602	41	7-18	9-26	32	1.7	W	G	12.6
FFR	RT 546	41	7-17	9-24	32	1.7	P	G	13.3
Hornbeck SB	HBK 5404	40	7-18	9-25	32	2.3	P	G	13.1
Sure Grow	SG 567 RR	40	7-20	9-27	40	0.9	P	G	13.3
Sure Grow	SG 597 RR	40	7-21	9-30	36	1.5	W	T	13.0
FFR	RT 536 RR	39	7-16	9-24	32	2.3	P	G	12.8
Asgrow	Ag 5901	39	7-22	10-1	33	1.4	W	G	13.5
Hartz	H 5181 RR	39	7-24	10-2	37	4.5	W	G	14.2
Hartz	H 5000 RR	39	7-22	9-25	36	1.5	P	T	13.1
Asgrow	AG 5801	38	7-20	9-28	35	1.5	P	G	12.9
Asgrow	AG 5601	38	7-18	9-26	33	3.3	W	G	12.8
Terral	TV 5666 RR	36	7-20	9-26	34	2.0	P	G	13.0
Terral	TVX 5866 RR	35	7-19	9-28	34	3.7	P	G	12.8

[1]Flower color: W=White and P=Purple.
[2]Pubescence color: G=Gray and T= Tawny.

Table 56. Yield and other characteristics of Maturity Group V soybean varieties evaluated at Martin in 1998.

Brand	Variety	Avg. Yield	Full Bloom	Matured	Plant Ht.	Lodged	Flower	Pubescence
		Bu/A	Date	Date	In.	%	Color [1]	Color[2]
Deltapine DPX 8 S	59	72	8-5	10-20	44	25	W	T
Hornbeck HBK	5990	67	8-5	10-18	35	8	P	T
Delta King	5995	64	8-5	10-17	35	20	W	G
Deltapine DPX 8 S	56	64	8-4	10-14	40	30	P	T
Asgrow A	5848	62	8-5	10-19	37	0	W	G
TN Exp. TN	93-142-16	62	8-11	10-20	36	9	W	G
MO Exp. S	94-1956	61	8-5	10-14	33	1	P	T
Asgrow A	5547	60	8-3	10-15	34	6	W	G
Terral TV	5926	60	8-7	10-17	40	6	W	T
Asgrow A	5944	59	8-7	10-18	38	8	W	G
Pioneer	9594	59	8-5	10-16	35	9	W	G
N.C.	Clifford	58	8-1	10-8	34	6	P	T
Riverside RVS	549	57	8-5	10-13	35	11	P	T
TN Exp. TN	93-99	57	8-5	10-15	34	14	W	G
Deltapine DP	3588	57	8-5	10-17	41	10	P	T
Hornbeck HBK	X571-98	56	8-4	10-15	34	8	W	G
Riverside	Rubin 5	56	8-9	10-15	35	6	W	G
HyPerformer AP	572 STS	56	8-6	10-20	35	6	W	G
Deltapine	5475	55	8-4	10-15	34	14	W	T
Pioneer	95B33	54	8-2	10-11	35	6	P	G
Deltapine DP	5354	54	8-2	10-12	38	28	P	G
Riverside RVS	77	54	8-4	10-18	38	19	W	T
Delta King	5850	54	8-4	10-16	35	23	W	T
FFR	563	54	8-4	10-13	37	4	P	G
Terral TV	5797	53	8-3	10-15	37	11	W	G
VA	Hutcheson	53	8-6	10-11	34	11	W	G
VA V	89-805	53	8-5	10-10	36	10	P	G
Delta King	5961 RR	52	8-10	10-20	38	1	W	G
Pioneer	95B41	52	8-2	10-9	39	1	W	T
Asgrow A	5959	52	8-4	10-19	32	10	W	G
VA V	91-3036	51	8-5	10-13	35	6	P	G
Deltapine DP	3519 S	50	8-1	10-7	35	9	P	G
MO Delsoy	5500	50	8-4	10-11	36	5	W	G
Hornbeck HBK	X9665 7 A	50	8-4	10-18	38	19	W	T
Pioneer	9584	49	8-4	10-11	36	21	W	T
FFR	542	48	8-2	10-12	35	16	P	G
NC	Holladay	48	8-2	10-6	31	15	P	G
USDA	J- 94-7	47	8-3	10-14	36	21	W	T
Delta King	5664 RR	47	8-5	10-18	37	0	W	G
Hornbeck HBK	5149	47	7-31	10-59	32	13	P	G
MO Delsoy	5710	47	8-4	10-18	35	18	W	T
TN Exp.	94-213	46	8-1	9-30	34	8	W	G
HyPerformer HY	574	46	8-6	10-16	40	13	P	T
TN TN	5-96	45	8-2	10-9	37	21	P	T
VA V	90-1012	44	8-4	10-12	34	6	P	G

Table 56. Continued

Brand	Variety	Avg. Yield	Full Bloom	Matured	Plant Ht.	Lodged	Flower	Pubes-cence
		Bu/A	Date	Date	In.	%	Color [1]	Color[2]
Riverside	520	44	8-3	10-7	46	11	W	T
Delta King	5263 RR	44	7-31	10-9	34	3	P	T
VA	Essex	42	7-30	10-9	31	1	P	G
KAS Cherokee	516	39	7-31	10-6	31	4	W	T
VA	Essex RSV 1	32	7-30	10-6	27	6	p	G
L.S.D. (.05)		10.1						
C.V.%		13.7						
Avg.		53.0						
R-Square		0.66						

[1]Flower color: W=white and P=Purple.
[2]Pubescence color: G=Gray and T=Tawny.

Table 57. Soybeans: Yield and other characteristics of Maturity Group V Roundup Ready varieties evaluated at Martin in 1998.

Brand	Variety	Avg. Yield	Full Bloom	Matured	Plant Ht.	Lodged	Flower	Pubescence	Moisture at Harvest
			Date	Date	In.	%	Color[1]	Color[2]	%
FFR	RT 587 RR	48	8-4	10-13	42	7	P	G	10.1
Hartz	H 5181 RR	47	8-9	10-20	40	7	W	G	9.6
Deltapine	DP 5960 RR	44	8-4	10-17	38	2	W	G	10.3
Deltapine	DP 5806 RR	42	8-4	10-19	41	2	W	G	9.5
Sure Grow	SG 567 RR	40	8-4	10-10	41	0	P	G	10.0
HyPerformer	AP 588 RR	40	8-5	10-16	37	0	W	G	9.5
Sure Grow	SG 597 RR	40	8-4	10-15	44	0	W	T	9.2
Asgrow	AG 5901	40	8-8	10-20	41	2	W	G	9.5
Hartz	H 5000 RR	39	8-5	10-7	40	0	P	T	10.4
FFR	Rt 557 RR	39	8-4	10-7	40	15	P	G	10.1
Deltapine	DP 5644 RR	39	8-4	10-12	36	0	W	T	10.4
Pioneer	95B41 RR	38	8-2	10-5	37	2	W	T	9.3
Asgrow	AG 5601	36	7-31	10-15	35	0	W	G	9.3
Delta King	5961 RR	36	8-10	10-20	37	0	W	G	10.0
FFR	RT 546 RR	36	7-31	10-2	35	12	P	G	10.6
Asgrow	AG 5801	36	8-5	10-15	39	0	P	G	9.3
USG Exp.	9755 J 01 RR	35	8-5	10-9	39	7	P	G	9.6
USG Exp.	9757 H 16 RR	35	8-4	10-11	40	5	P	G	9.3
FFR	RT 563 RR	35	8-2	10-4	34	5	P	G	9.9
Hornbeck	HBK R 5588	34	8-5	10-5	37	5	P	G	9.6
Terral	TV 5466 RR	34	8-4	10-6	36	10	P	G	9.9
Pioneer	95B71	34	8-4	10-12	37	3	W	T	9.6
USG Exp.	9754 G 02 RR	34	8-2	10-3	32	2	P	G	10.2
Delta Grow	5858 RR	34	8-6	10-11	37	0	P	G	10.0
FFR	RT 517 RR	34	7-30	10-3	34	5	P	G	10.0
Terra	TS 556 RR	34	8-4	10-3	38	2	P	G	9.9
HyPerformer	AP 543 RR	33	8-5	10-6	38	3	P	G	10.3
Hornbeck	SB HBK 5404	33	8-4	10-6	37	12	P	G	9.8
FFR	RT 556 RR	33	8-3	10-3	36	3	P	G	10.8
DeKalb	CX 550 RR	33	8-2	10-5	37	5	P	G	9.9
Asgrow	AG 5602	32	8-3	10-12	36	0	W	G	10.2
Terral	TVX 5866 RR	32	8-5	10-15	36	12	P	G	9.0
Terral	TV 5666 RR	31	8-5	10-15	34	5	P	G	9.2
Asgrow	AG 5401	30	8-2	10-12	37	2	W	G	9.5
UAPX	0038 RR	29	8-4	10-15	36	8	P	G	9.8
Delta King	5664 RR	29	8-3	10-15	37	2	W	G	10.2
Delta King	5263	25	7-30	10-2	34	0	P	T	9.5

L.S.D. (.05)	8.1
C.V. %	14.0
Avg.	35.7
R-Square	0.71

[1]Flower color: W=white and P=Purple.
[2]Pubescence color: G=Gray and T=Tawny.

Table 58. Soybeans: Yield and other characteristics of early maturing Group IV commercial strains evaluated at Jackson in 1998.[1] [2]

Brand	Variety	Avg. Yield	Full Bloom	Matur- ed	Plant Ht.	Lodg- ed	Flower	Pubes- cence	Seed Moisture at Harvest
		Bu/A	Date	Date	In.	%	Color	Color	%
AgriPro	APX 4510 RR	67	7-1	9-16	41	13	P	T	11.3
AgriPro	APX 4403 STS	67	7-1	9-16	38	05	P	T	11.0
AgriPro	AP 3902 RR	66	7-1	9-16	39	10	P	T	11.5
AgriPro	AP 4602 RR	63	7-1	9-16	44	28	W	T	11.7
Asgrow	AG 4601 RR	59	7-1	9-16	41	10	W	T	11.5
L.S.D. (.05)		5.5							
C.V.%		5.5							
Avg.		64.3							
R-Square		0.60							

[1]Conventional herbicides were used to control weeds. Squadron applied on May 22 at 3 Pt/A. and 1.5 Pt/A of Storm plus 1 pt of Basagran/A was applied on June 26.

[2]Test was irrigated 5 times at 0.7 in./A on July 3, 8, 14, 20, and Aug 31.

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