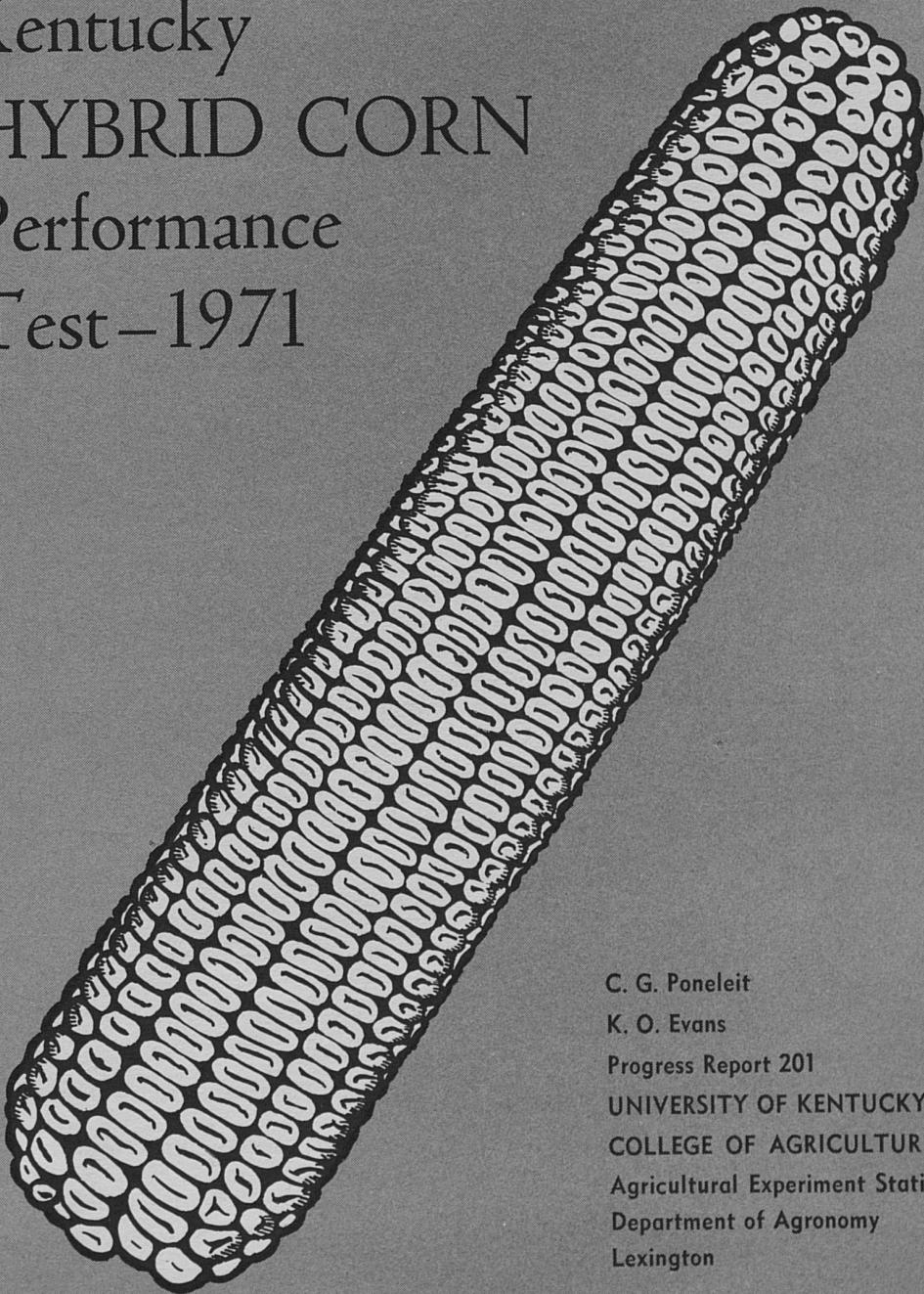
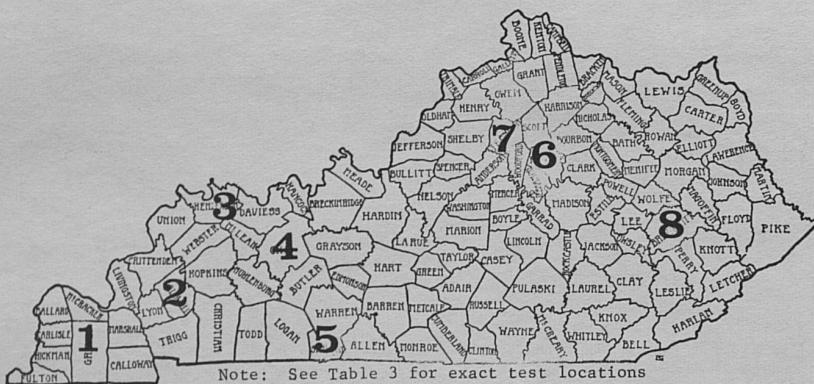


Kentucky
HYBRID CORN
Performance
Test—1971



C. G. Poneleit
K. O. Evans
Progress Report 201
UNIVERSITY OF KENTUCKY
COLLEGE OF AGRICULTURE
Agricultural Experiment Station
Department of Agronomy
Lexington

**TESTING LOCATIONS OF THE 1971
KENTUCKY HYBRID CORN PERFORMANCE TRIALS**



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Kentucky Hybrid Corn Performance Test-1971

By C. G. PONELEIT and K. O. EVANS

The objective of the Kentucky Corn Performance Test is to provide unbiased performance estimates of hybrid seed corn sold in Kentucky. This information, hopefully, will aid farmers as they select hybrids for use in the following season.

Environmental conditions for corn growth in 1971 were nearly ideal over the entire state. The state's average corn yield, as estimated by the U.S.D.A. Statistical Reporting Service, was 77 bushels per acre—the second highest ever reported. Race T of southern corn leaf blight (*Helminthosporium maydis*) was not as great a problem as in 1970, primarily because most of the seed planted had resistant, normal cytoplasm. Susceptible T cytoplasm plants, however, were severely damaged by the fungus. Evidence of the damage can be seen in the following tables which include three hybrids (Ky 105, Ky 5921W, and Coop T308) that had 100% T cytoplasm.

All hybrids in the 1971 test, except those already noted, had 100% normal (N) cytoplasm and high levels of resistance to race T of *H. maydis*. Since the 1970 Performance Test results are biased by the fact that most hybrids were 100% T cytoplasm and were very susceptible to the southern leaf blight fungus, the 1970 data were not used to construct 2- and 3-year averages. Two-year and 3-year summaries for 1968, 1969, and 1971 are presented as the averages over all non-virus locations since SCLB damage was negligible in 1968 and 1969. The average over-all non-virus locations for 1971 and multiple-year averages should be used in addition to data from individual 1971 test locations when possible, since evaluations of performance over many environments and years provide the best evaluation of a hybrid's potential.

Comparisons between yields or other characters of any two or more hybrids should be made only with data from one table at a time. The testing procedures employed do not allow comparisons such as a hybrid grown at one location and population with another hybrid grown at a different location and population.

PURCHASE OF 1972 SEED CORN

Race T of southern corn leaf blight will be present in 1972; therefore, it will still be necessary to purchase seed corn that has the resistant normal cytoplasm. Reports from the seed corn industry indicate that good supplies of 100% normal cytoplasm seed will be available in 1972 for most popular older hybrids and some new hybrids.

All seed corn sold in Kentucky must be labeled according to the Temporary Labeling Requirements for Corn Seed which was issued by the University of Kentucky College of Agriculture, Division of Regulatory Services, Oct. 21, 1971. These requirements state that seed corn shall show the identity and percentage of the cytoplasm in the seed lot on the front of the analysis tag. The symbols N, T, and B will be used to indicate 100% normal cytoplasm, 100% male-sterile cytoplasm, and a mixture of normal and male-sterile cytoplasms, respectively.

TESTING PROCEDURE

SELECTION OF HYBRIDS

Ky 105 and Ky 5921W (Table 1) were again included as check varieties for comparing performance over years. Ky 105, Ky 5921W, and Coop T308 had 100% T cytoplasm and provide an estimate of the severity of the southern leaf blight infestation in 1971.

Seed of each commercial hybrid (Table 2) was provided by the sponsoring company. The companies were requested to send 100% normal cytoplasm seed so that the 1971 test results would represent the performance of the hybrid seed sold for 1972 planting.

Those hybrids grown in the maize dwarf mosaic virus test are indicated in column 2 of Table 2. For inclusion the hybrid corn companies were asked to nominate only those hybrids known to have virus resistance.

Second-generation seed (F_2) of four hybrids and three open-pollinated varieties were also included in each non-virus test. F_2 seed was obtained from the respective corn companies and open-pollinated seed from local growers. Since some farmers were forced to plant F_2 or open-pollinated varieties in the absence of normal cytoplasm hybrids in 1971, these varieties were included to provide evidence of their potential yielding ability relative to the regular hybrids available to Kentucky farmers.

LOCATION OF TESTS

The map on page 2 shows the location and Table 3 shows pertinent agronomic information for each test. The Lexington and Princeton locations had both normal and high population tests, while all other locations had only normal populations. The Frankfort test site was specifically chosen for the presence of maize dwarf mosaic virus.

CULTURAL PRACTICES

The seedbed at each location was prepared by conventional tillage methods. Fertilizer was applied as indicated by soil tests. The test areas were treated with herbicide and supplemented by post-emergence cultivation when necessary. Table 3 shows the specific treatments for each location.

EXPERIMENTAL DESIGN

Uncontrollable variability of soil types, fertility, and other factors was sampled by using a 9 X 10 rectangular lattice. A separate randomization was used for each location. Information presented in Tables 4 through 19 is adjusted for block and replication differences when shown applicable by statistical analyses.

PLANTING

All plots were planted with a conventional four-row corn planter modified for small plot work. The planter boxes were replaced by special planting heads to permit clean-out after planting each plot row. Each plot consisted of two side-by-side rows 38 inches apart. Population was varied by altering combinations of row length and number of kernels per row. A normal population test had 20,000 kernels planted per acre, while the high population test had 26,000 kernels planted per acre.

HARVESTING

All plots were harvested with a tractor-mounted one-row picker-sheller. Both plot rows were picked, shelled, and the grain collected in a metal container. The grain weight and moisture content of each plot were then measured with a portable scale and moisture meter. Later, acre yields were calculated and adjusted to No. 2 corn at 15.5% moisture. Only the amount of grain picked up by the harvesting equipment appears in the yield column of the following tables. Dropped or missed ears were not gleaned from the plots. The number of plants remaining in each plot at harvest and the number of root and stalk lodged plants were recorded immediately prior to harvest.

MAIZE DWARF MOSAIC VIRUS

Sixteen hybrids were tested in the maize dwarf mosaic virus test (Table 19). Virus ratings were not made in the 1971 test, but yield of the hybrids should be indicative of virus resistance. Johnsongrass was allowed to grow in the plots early in the season to provide a source of inoculum. Wet weather caused a delay in the removal of the Johnsongrass and consequently the yields of the tested hybrids were somewhat depressed owing to competition from the Johnsongrass.

SOUTHERN CORN LEAF BLIGHT

All hybrids at the Henderson and Hartford test locations were rated for symptoms of Southern Corn Leaf Blight (*Helminthosporium maydis*), Northern Corn Leaf Blight (*Helminthosporium turcicum*), Bacterial Wilt or Stewart's Disease (*Xanthomonas stewartii*), and Rust (*Puccinia sorghi*) by Dr. A. S. Williams of the Plant Pathology Department. A summary of these ratings is presented beginning on page 23.

Table 1.— Pedigrees of Experiment Station Hybrids Tested in 1971.

Hybrid	Color	Cross	Pedigree
Ky 105	Yellow	4X	(T8 x C121E) (38-11 x Oh 7B)
Ky 5921W	White	4X	(CI64 x 33-16) (Ky 201 x CI65)

Table 2. - Hybrids Tested in 1971.

Hybrid	Test *	Color	Cross **	Source of Hybrid
Asgrow RX99 RX100	A A	Yellow "	2X 2X	Asgrow Seed Co. P. O. Box 2010 Des Moines, Ia. 50310
Conlee Tex. 28A	A	Yellow	4X	Conlee Seed Co., Inc. P. O. Box 7247 Waco, Texas 76710
Dekalb XL64 XL66 XL81 XL85A Exp. 68 F880	A A A A A A	Yellow " " " " "	2X 2X 2X 2X 2X 4X	Dekalb Agricultural Association Dekalb, Ill. 60115
Coop. T308 ^{1/}	A	Yellow	3X	Farmland Industries Inc. P. O. Box 7305 Kansas City, Mo. 64116
Funk's G4455 G4550 G4646 G4761 G4808 G5757 G508W G4895W Exp. 23981W	A A A A,B B A A A	Yellow " " " " " White " "	3X (Mod.) 2X (Mod.) 2X (Mod.) 3X 2X 4X 4X 3X 4X	Funk Bros. Seed Co. 1300 W. Washington St. Bloomington, Ill. 61701
K.A.E.S. Ky 105 ^{1/} Ky 5921W ^{1/}	A,B A	Yellow White	4X 4X	University of Kentucky Agri. Exp. Station Lexington, Ky. 40506
Lewis Ex828	A	Yellow	4X	Lewis Seed Co., Inc. 130 N. Spring St. Louisville, Ky. 40206
McNair X210F 2210 3838	A A A	Yellow " "	2X 2X 2X	McNair Seed Co. P. O. Box 706 Laurinburg, N. C. 28352
Migro M-46SX M-0601A M-0702 M-0711	A A A A	Yellow " " "	2X 2X 2X 2X	Migro Hybrids P. O. Box 7 Mitchell, Ind. 47446

(continued)

Table 2.- (continued)

Hybrid	Test*	Color	Cross**	Source of Hybrid
Northrup-King	PX611	A	Yellow	3X
	PX616	A	"	3X
	PX678	A	"	3X
	X-155	A	"	2X
P.A.G.	SX39	A	Yellow	2X
	SX83	A	"	2X
	SX91	A	"	2X
	SX98	A	"	2X
	438	A	"	4X
	644W	A,B	White	3X
	17525W	A	"	3X
	Syn. 1	A	"	Syn.
	Syn. 2	A	Yellow	Syn.
	Syn. 3	A	"	Syn.
	21130	B	"	2X
Pioneer	3147	B	Yellow	2X (Mod.)
	3179	B	"	2X (Mod.)
	3308	A	"	3X
	3329	A	"	3X (Mod.)
	3334	A	"	2X
	3368	A	"	2X (Mod.)
	3369A	A	"	2X
	3516	A	"	2X
	3518	A	"	2X (Mod.)
	3571	A	"	2X (Mod.)
	511A	A,B	White	4X
	X7571	A	Yellow	Spec. Cross
Princeton	SX650	A	Yellow	2X
	SX823	A	"	2X
	SX836	A	"	2X
	SX850	A	"	2X
Schenk	SS-101N	A,B	White	2X
	SX-110N	A	Yellow	2X
	SS-303N	A	White	3X
	SX-440N	A	Yellow	2X
	SX-X04N	A	White	2X
So. States	SS860	A	Yellow	4X
	SS865	A	"	4X
	SS866	A,B	"	4X
	SS909E	A	"	4X

(continued)

Table 2.—(continued)

Hybrid	Test*	Color	Cross**	Source of Hybrid
Stew. Card. SX58	A	Yellow	2X	
SX71	A	"	2X	Stewart Hybrids, Inc. Route 1 Princeville, Ill. 61559
Stull's 555W	A	White	4X	
560WSP	A, B	"	3X	Stull Bros. Inc. Sebree, Ky. 42455
807ASX	A	Yellow	2X	
809SX	A	"	2X	
809ASP	A	"	3X	
850WSX	A	White	2X	
877SX	A	Yellow	2X	
Exp. 911SX	B	"	2X	
Taylor-				
Evans Cashmaker	A	Yellow	2X	Taylor-Evans Seed Co.
Mastermaker	A	"	2X	Golden Acre Hybrids Tulia, Texas 79088
Trojan TXS112	A	Yellow	2X	
TXS113	A	"	2X	Trojan Seed Co. Eastern Division
TX115	A	"	3X	Windfall, Ind. 46076
TXS118	A	"	2X	
TX119	A	"	3X	
TXS119	A	"	2X	
TXS122	A	"	2X	
X6711	B	"	2X	
X6712	B	"	2X	
X6718	B	"	2X	
Boone County White	A	White	O.P.	
Reid's Yellow Dent	A	Yellow	O.P.	
Hickory King	A	White	O.P.	
F ₂ of 3334	A	Yellow	2X	
F ₂ of SX39	A	"	2X	
F ₂ of 644W	A	White	3X	
F ₂ of 511A	A	"	4X	

* Test - A = Performance Test
B = Maize Dwarf Mosaic Virus Test

** 2X = Single Cross, 3X = Three-way Cross, 4X = Double Cross, MX or SP = Multiple or Special Cross, OP = Open Pollinate

1/ Tcms Entries all others "Normal"

Note: The name Pioneer, Dekalb, Funk, P.A.G., & etc. refer to the company and the number is the hybrid designation.

TABLE 3--AGRONOMIC INFORMATION PERTAINING TO 1971 TEST LOCATIONS

Location and Cooperator	Soil Type	Fertilizer Applied	Herbicide Treatment	Planting Date	Harvest Date	Comments
(1) Lowes, Ky. James Samples	Collins Silt Loam	N-200 P- 50 K-100 lbs/A	AAtrex and Sutan Preplant	April 22	Sept. 23 " 24	
(2) Princeton, Ky. Western Ky. Substation	Huntington & Lindsdie Silt Loam	N-150 P-None K- 50 lbs/A	AAtrex Broadcast	April 27 " 28	Sept. 28 thru Oct. 1	
(3) Henderson, Ky. James McConathy	Wakefield Silt Loam	N-200 P- 75 K-100 lbs/A 1lb/A	AAtrex and Sutan Preplant	June 18	Nov. 10 " 11	
(4) Hartford, Ky. Walter and Earl Campbell	Stendal Silt Loam	N-200 P-None K-None lbs/A	AAtrex and Sutan Preplant	May 25	Oct. 7 " 8	
(5) Franklin, Ky. Robert Wade	Pembroke Silt Loam	N-150 P- 85 K- 20 lbs/A	AAtrex Broadcast	April 20	Sept. 21 " 22	
(6) Lexington, Ky. Ky. A.E.S. Spindletop Farm	Lanton Silt Loam	N-150 P-None K- 50 lbs/A	AAtrex and Sutan Preplant	May 21 " 24	Oct. 13 thru Oct. 22	
(7) Frankfort, Ky. Mason and Ralph Bates	Armour Silt Loam	N-150 P-None K- 50 lbs/A	AAtrex Broadcast	June 10	Nov. 16	MDD and Johnsongrass Competition
(8) Quicksand, Ky. Robinson Substation	Philo Silt Loam	N-150 P- 40 K- 50 lbs/A	AAtrex and Sutan Preplant	May 20	Oct. 27 " 28	MDD

TABLE 4--ANNUAL SUMMARY, NORMAL POPULATION, LOWES, KY.

HYBRID	YIELD BU/AC	AVG % MOIST	% LODGED	% STALK LODGED	% STALK STAND	AVERAGE	YIELD BU/AC	AVG % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE
						HYBRID	YIELD BU/AC	AVG % MOIST	% LODGED	% STALK LODGED	% STAND
YELLOW	86.5	16.4	0.0	2.9	90.1	YELLOW	168.8	22.3	0.0	0.0	87.5
NORTHRUP-KING X155	97.7	16.8	0.7	3.5	80.5	STULL'S 809SX	157.7	22.5	0.0	0.6	77.1
KENTUCKY 105	176.8	17.0	0.0	0.0	90.6	MIGRO M-0601A	124.7	22.6	0.0	0.0	88.5
SCHENK SX-LION	126.0	19.2	0.7	0.7	87.0	P.A.G. SX91	100.1	22.6	0.0	1.1	91.7
STEWART CARDINAL SX58	145.3	19.2	0.0	0.0	85.9	F2 OF SX39	93.9	22.7	10.8	5.8	83.3
NORTHRUP-KING PX678	165.2	19.6	0.0	0.0	78.6	REID'S YELLOW DENT	127.9	22.7	0.0	1.8	84.4
TROJAN TXS112	131.4	19.6	0.0	0.0	80.7	PIONEER 351B	170.4	23.2	1.1	0.7	89.1
PIONEER 3571	158.4	19.7	0.0	0.0	88.5	FUNK'S G5757	143.4	23.3	0.0	0.6	87.5
TAYLOR-EVANS CASHMAKER	179.1	19.7	0.0	0.0	87.0	DEKALB XL64	154.7	23.4	0.0	0.7	79.2
SCHENK SX-440N	182.8	19.8	0.0	0.0	91.1	STULL'S 809ASP	117.2	23.6	0.0	0.7	78.6
PRINCETON SX850	152.5	19.8	0.0	0.6	85.4	ASGROW RX100	167.7	23.6	0.0	0.0	90.6
TROJAN TX115	195.3	19.8	0.0	0.0	92.7	FUNK'S G4646	180.8	23.7	0.0	0.5	96.4
PIONEER 3369A	188.9	20.0	0.6	0.0	92.2	MCNAIR 2210	161.3	23.8	2.2	2.2	79.2
DEKALB XL85A	160.4	20.1	0.0	0.6	90.1	TROJAN TX119	174.3	23.9	0.0	0.0	82.8
MIGRO M-0702	166.3	20.2	0.0	1.0	94.3	PRINCETON SX836	158.3	24.3	0.6	1.2	88.5
NORTHRUP-KING PX611	162.8	20.3	0.0	0.0	80.2	STULL'S 877SX	108.4	24.7	2.1	2.1	95.8
PIONEER 3334	180.4	20.4	0.0	0.0	88.0	DEKALB F880	158.7	24.7	0.0	0.0	87.5
STULL'S 807ASX	165.4	20.5	0.0	0.6	84.9	ASGROW RX99	160.8	24.7	0.5	0.0	93.2
PIONEER 3308	121.3	20.5	0.0	0.8	81.3	TROJAN TXS113	146.9	25.4	0.0	0.0	89.1
FUNK'S G4455	178.0	20.5	0.0	0.0	95.8	FUNK'S G4550	158.4	25.5	0.0	0.0	77.1
P.A.G. SX83	145.0	20.6	0.0	0.0	88.0	FUNK'S G4761	167.3	27.1	12.4	1.9	84.9
DEKALB XL81	155.1	20.7	0.0	1.7	91.1	LEWIS SEED CO.	160.4	29.3	7.2	2.6	81.8
P.A.G. 438	186.0	20.7	0.0	0.0	92.2	CONLEE TEX.28A					
P.A.G. SX39	162.1	20.8	0.0	0.0	93.8	YELLOW AVERAGE	154.3	21.7	0.6	0.8	87.1
PIONEER 3516	184.4	20.8	0.0	0.0	89.6	WHITE					
PIONEER 3329	181.4	20.9	0.5	0.5	94.3	KENTUCKY 5921W	135.0	18.8	1.3	2.7	87.2
SO STATES 909E	166.7	20.9	1.2	0.0	88.5	BOONE COUNTY WHITE	130.5	23.4	11.9	6.3	89.6
PRINCETON SX650	112.4	20.9	0.0	0.0	67.2	P.A.G. SYN 1	148.4	23.5	0.5	2.5	85.4
MIGRO M-46SX	190.2	20.9	0.0	0.0	94.3	FUNK'S G508W	165.6	23.5	1.9	1.3	81.8
PIONEER 3368	108.0	21.0	0.0	2.1	78.6	STULL'S 560WSP	161.4	23.6	0.0	0.0	94.8
F2 OF 3334	174.1	21.4	0.0	0.0	87.0	HICKORY KING	156.7	23.7	18.1	3.1	89.5
MIGRO M-0711	171.0	21.7	0.0	0.6	85.4	FUNK'S EXP 23981W	169.5	24.0	2.2	0.0	93.2
TROJAN TXS119	170.8	21.7	0.0	0.0	92.2	STULL'S 555W	154.2	24.5	0.6	0.0	90.6
TROJAN TXS122	151.1	21.7	0.0	0.0	84.9	SCHENK SX-X04N	154.1	24.7	0.0	0.0	75.5
DEKALB EXP 68	144.3	21.7	0.0	0.0	91.7	P.A.G. 17525W	165.0	25.1	0.0	0.0	88.0
DEKALB XL66	179.1	21.7	0.0	0.0	89.1	F2 OF 511A	161.0	25.5	2.1	0.5	96.4
PIONEER X7571	175.9	21.8	0.0	2.4	85.4	STULL'S 850WSX	175.2	26.1	0.0	0.0	89.6
TAYLOR-EVANS MASTERMAKER	139.0	21.8	0.0	0.0	85.9	SCHENK SS-303N	84.2	26.2	0.0	3.0	52.6
SO STATES 860	160.1	21.8	0.0	0.5	97.4	F2 OF 644W	117.3	26.6	0.0	0.0	85.9
SO STATES 866	116.8	21.8	0.0	8.2	84.4	PIONEER 511A	192.8	26.7	1.1	0.6	93.2
COOP. T308	172.3	21.8	0.0	0.0	97.9	P.A.G. 644W	149.5	26.7	0.0	0.0	90.1
SO STATES 865	146.0	21.9	0.6	0.0	88.0	F2 OF 511A	197.0	26.8	0.0	0.0	92.2
PRINCETON SX823	185.1	22.0	0.0	0.0	82.8	SCHENK SS-101N	123.9	28.5	7.3	0.0	77.6
MCNAIR X210F	146.0	22.0	0.0	1.1	94.3	FUNK'S G4895W					
P.A.G. SYN 2	166.4	22.1	0.0	0.0	83.3	WHITE AVERAGE	146.1	24.6	2.5	1.2	84.2
STEWART CARDINAL SX71	131.0	22.1	0.0	0.6	77.6						
TROJAN TXS118	174.6	22.1	0.0	0.0	84.9	GRAND AVERAGE	152.6	22.3	1.0	0.9	86.5
P.A.G. SX98	180.4	22.3	0.0	0.6	93.2						
MCNAIR 3838											

TABLE 5--ANNUAL SUMMARY, NORMAL POPULATION, PRINCETON, KY.

HYBRID	YIELD BU/AC	Avg % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND	HYBRID	YIELD BU/AC	Avg % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND
YELLOW						YELLOW					
NORTHRUP-KING X155	78.1	16.0	0.0	9.4	83.9	MCNAIR 2210	160.3	20.7	0.0	5.8	96.4
KENTUCKY 105	66.3	16.9	2.3	30.6	73.4	FUNK'S G4646	147.1	20.9	1.1	1.1	92.7
SCHENK SX-110N	160.9	17.0	0.6	2.9	91.7	PRINCETON SX836	132.3	21.0	0.0	2.8	93.2
FUNK'S G4455	119.7	17.3	0.0	1.7	91.1	STULL'S 809SX	155.2	21.1	0.0	4.1	88.5
PIONEER 3516	134.5	17.7	0.0	11.4	91.7	DEKALB F880	97.0	21.2	1.8	3.7	86.5
NORTHRUP-KING PX611	136.9	17.7	0.0	1.6	99.0	DEKALB XL85A	151.1	21.2	0.6	2.4	88.5
STEWART CARDINAL SX71	158.9	17.9	0.0	2.2	82.8	P.A.G. SX91	119.2	21.5	0.0	1.1	89.1
STEWART CARDINAL SX58	115.0	18.0	0.0	12.0	88.0	F2 OF SX39	80.5	21.5	0.6	3.6	85.4
TROJAN TX115	123.2	18.0	0.0	0.0	91.1	SO. STATES 865	140.4	21.7	1.1	2.8	93.8
PIONEER 3369A	159.8	18.1	0.0	3.3	94.8	MIGRO M-0601A	114.3	21.8	0.0	3.2	78.1
NORTHRUP-KING PX678	134.3	18.4	0.0	0.6	91.1	SO. STATES 866	146.9	21.9	2.2	2.3	93.8
SCHENK SX-440N	143.0	18.4	0.0	1.3	84.4	ASGROW RX99	142.2	22.3	0.0	1.8	80.2
TROJAN TXS112	129.8	18.5	0.0	7.8	83.9	TROJAN TX119	122.4	22.6	0.0	2.6	77.6
DEKALB XL81	145.2	18.6	0.0	2.2	94.3	MIGRO M-0711	161.7	23.1	0.0	0.0	87.5
PRINCETON SX850	160.9	18.6	0.0	4.9	94.3	MCNAIR 3838	159.8	23.1	1.6	4.4	95.3
P.A.G. SX83	168.4	18.8	0.0	3.9	92.7	CONLE TEX 28A	115.8	23.1	5.7	7.5	82.3
PIONEER 3518	132.7	18.8	0.6	2.4	86.5	STULL'S 809ASP	131.3	23.2	0.0	5.0	84.4
FUNK'S G4550	105.6	19.0	0.0	17.8	89.1	P.A.G. SX39	149.2	23.4	0.0	1.7	94.3
TAYLOR-EVANS CASHMAKER	123.1	19.2	0.0	2.0	87.0	TROJAN TX119	139.4	23.5	0.0	0.6	86.5
TROJAN TXS118	130.1	19.2	0.0	3.6	85.4	LEWIS SEED CO.	121.9	24.3	2.4	8.5	85.4
P.A.G. SX98	115.6	19.3	0.0	6.4	82.3	FUNK'S G4761	134.1	24.7	0.0	0.0	78.6
SO. STATES 860	116.6	19.3	4.8	3.5	75.5	REID'S YELLOW DENT	81.8	26.6	5.2	11.7	78.6
PRINCETON SX823	111.5	19.4	0.0	1.2	91.1	YELLOW AVERAGE	130.7	20.1	0.6	4.8	87.8
MIGRO M-46SX	126.0	19.4	0.0	4.7	76.6						
ASGROW RX100	121.0	19.4	0.0	0.0	81.3						
MIGRO M-0702	122.1	19.4	0.0	4.3	87.0						
TROJAN TXS113	140.4	19.4	1.2	2.8	93.2	WHITE					
P.A.G. SYN 2	118.3	19.4	0.0	5.7	87.5	KENTUCKY 5921W	84.3	17.6	0.8	23.6	91.4
STULL'S 807ASK	156.6	19.4	1.1	1.7	94.3	BOONE COUNTY WHITE	115.9	19.8	2.9	2.7	83.3
FUNK'S G5757	145.3	19.6	0.0	3.8	95.3	FUNK'S G508W	147.1	21.3	1.9	3.1	82.8
TAYLOR-EVANS MASTERMAKER	160.2	19.6	0.0	1.3	84.4	STULL'S 555W	142.4	21.5	2.3	4.5	91.7
MCNAIR X210F	156.1	19.6	0.0	2.4	82.3	F2 OF 511A	134.9	21.6	1.1	4.8	96.9
PIONEER 3571	124.1	19.7	0.0	3.5	88.0	HICKORY KING	63.3	21.7	5.7	12.5	45.8
PIONEER X7571	138.4	19.8	0.0	4.1	89.6	FUNK'S EXP 23981W	131.7	21.8	0.0	4.3	97.9
PIONEER 33308	133.4	20.1	0.0	1.2	88.0	STULL'S 560WSP	146.4	22.0	1.1	2.9	91.7
P.A.G. 438	88.3	20.1	0.0	19.1	90.6	F2 OF 644W	115.7	22.0	0.0	1.2	85.4
DEKALB XL64	119.9	20.1	0.6	2.9	88.5	STULL'S 850WSP	169.1	22.4	5.8	3.4	89.1
DEKALB XL66	106.6	20.2	0.0	3.9	93.8	PIONEEF 511A	155.8	22.5	0.0	2.4	89.6
PIONEER 3329	156.9	20.2	0.0	3.3	94.3	SCHENK SS-303N	84.9	22.7	0.0	4.9	51.6
PIONEER 3368	153.7	20.3	0.0	0.6	92.2	P.A.G. SYN 1	112.2	22.8	0.7	4.4	83.3
F2 OF 3334	87.4	20.3	0.0	2.0	85.4	SCHENK SX-X04N	138.8	23.0	0.0	4.2	73.4
TROJAN TXS122	158.7	20.3	0.0	7.0	92.2	P.A.G. 17525W	154.9	23.0	0.7	3.1	83.9
STULL'S 8775X	148.5	20.6	0.0	1.2	82.3	SCHENK SS-101N	164.0	23.8	0.6	5.6	93.8
						FUNK'S G4895W	110.8	25.6	3.8	3.9	80.7
						P.A.G. 644W	162.0	26.1	0.0	2.3	89.6
						WHITE AVERAGE	127.3	22.1	1.5	6.2	83.9
						GRAND AVERAGE	130.0	20.5	0.8	5.1	87.0

TABLE 6--ANNUAL SUMMARY, NORMAL POPULATION, HENDERSON, KY.

HYBRID	YIELD BU/A	Avg % MOIST	% ROOT LODGED	% STALK AVGAGE LODGED % STAND	HYBRID	YIELD BU/A	Avg % MOIST	% ROOT LODGED	% STALK AVGAGE LODGED % STAND
YELLOW	62.8	17.3	4.2	30.3	90.1	128.6	24.0	1.9	17.3
NORTHRUP-KING X155	108.3	17.3	2.5	12.1	89.1	146.7	24.1	5.5	15.5
PIONEER 3518	114.1	18.5	2.5	12.7	84.4	130.8	24.1	0.0	9.9
PIONEER 3571	123.9	19.3	1.3	14.1	81.8	121.7	24.2	2.3	13.5
PIONEER 3334	83.8	19.5	1.1	15.1	76.0	131.8	24.2	2.6	15.8
FUNK'S G4455	121.4	19.6	33.0	16.3	89.6	112.3	24.3	16.0	89.1
SCHENK SX-111ON	101.6	20.4	2.6	17.3	83.9	101.4	24.4	0.0	12.5
TROJAN TX15	71.1	20.6	17.7	36.3	90.1	99.5	24.5	24.0	12.0
STEWART CARDINAL SX58	124.5	20.6	47.0	13.2	87.0	81.0	24.6	60.5	22.3
TROJAN TXS12	122.3	20.7	3.9	13.0	80.2	101.3	24.6	0.7	7.3
PIONEER 3516	98.9	21.0	6.1	11.2	65.1	126.7	25.0	41.4	22.1
MIGRO M-46SX	91.2	21.2	0.0	11.2	80.2	101.6	25.1	3.0	6.0
DEKALB EXP 68	119.2	21.1	23.7	12.4	90.1	131.5	25.2	0.0	5.1
NORTHRUP-KING PX678	127.3	21.1	11.0	20.6	91.1	126.8	25.3	12.1	7.7
STULL'S 807ASX	126.7	21.2	6.2	11.5	86.5	83.8	25.4	73.9	10.8
DEKALB XL64	130.4	21.3	3.0	19.1	84.9	113.8	25.7	33.3	12.5
PIONEER 3329	136.5	21.3	51.5	11.7	92.7	145.1	25.8	1.6	15.9
SO. STATES 865	95.4	21.4	3.1	35.1	85.4	135.5	26.4	21.3	14.9
TROJAN TXS18	111.5	21.6	6.5	13.8	91.1	66.7	26.6	49.8	34.7
MIGRO M-0702	131.4	21.7	11.6	10.7	88.5	98.9	27.2	14.5	20.2
PRINCETON SX650	122.1	21.8	4.7	25.0	89.6	99.0	29.3	44.0	20.4
NORTHRUP-KING PX616	95.6	21.8	2.6	22.3	78.1	51.6	30.4	67.8	20.8
TAYLOR-EVANS CASHMAKER	127.9	21.8	8.3	14.6	88.0	92.1	32.3	34.4	38.5
SCHENK SX-440N	138.7	21.9	8.4	16.8	90.1				84.9
PRINCETON SX850	83.1	22.0	35.0	16.1	73.4				
DEKALB XL66	130.2	22.1	22.1	1.7	92.2	110.8	23.1	15.1	17.3
TROJAN TXS122	147.0	22.1	0.0	17.1	93.2				85.4
PIONEER 3369A	132.7	22.1	0.0	9.6	93.8	106.0	25.2	31.3	19.6
P.A.G. SX98	29.0	22.2	71.6	24.1	58.3	97.9	25.3	44.2	13.9
KENTUCKY 105	100.8	22.2	46.7	23.3	89.6	103.4	25.5	61.7	14.9
NORTHRUP-KING PX611	114.4	22.4	1.3	9.5	83.9	110.5	26.0	35.3	90.6
PRINCETON SX836	109.0	22.6	3.4	14.4	72.9	82.3	26.1	21.3	5.3
PIONEER 3308	119.4	22.7	14.0	21.1	89.1	120.8	26.2	46.9	17.2
TROJAN TXS113	111.9	22.8	27.5	19.8	94.8	85.2	26.3	21.7	5.7
P.A.G. SX83	85.4	22.8	8.8	33.8	89.1	94.8	26.3	45.0	14.9
F2 OF SX39	143.6	22.9	2.8	19.2	91.7	45.6	26.4	58.4	13.7
STEWART CARDINAL SX71	100.9	22.9	10.1	35.5	87.5	44.4	26.5	69.3	53.6
P.A.G. 438	124.7	22.9	1.7	21.9	87.5	115.5	27.8	11.2	14.2
STULL'S 809ASP	107.5	23.3	4.0	7.2	79.2	134.7	27.8	38.1	8.6
MIGRO M-0601A	120.4	23.4	9.9	19.8	91.7	57.9	28.0	73.0	90.1
DEKALB XL81	75.8	23.5	1.7	34.2	89.6	140.2	28.4	13.1	19.7
COOP. T308	108.6	23.5	0.0	6.5	84.9	119.9	28.9	10.0	78.1
PRINCETON SX823	91.7	23.6	9.2	16.1	83.9	115.3	29.1	4.0	12.3
P.A.G. SYN 2	129.7	23.6	1.9	26.9	85.9	73.0	29.2	61.8	81.3
STULL'S 877SX	122.2	23.7	37.4	11.1	89.6	77.3	32.6	17.9	13.3
SO. STATES 866	149.1	23.7	1.1	6.1	91.7				70.8
PIONEER 3368	136.4	23.8	3.5	16.9	88.5				
P.A.G. SX39	140.1	23.9	14.2	11.7	96.9	95.8	27.3	36.7	14.0
FUNK'S G4466	52.1	24.0	8.3	9.1	53.6	107.8	23.9	19.4	16.6
F2 OF 3334									84.0
GRAND AVERAGE									

TABLE 7--ANNUAL SUMMARY, NORMAL POPULATION, HARTFORD, KY.

HYBRID	YIELD BU/AC	Avg % MOIST	% ROOT LODGED	% STALK LODGED	% STALK % STAND	HYBRID ID	YIELD BU/AC	Avg % MOIST	% ROOT LODGED	% STALK LODGED	% STALK % STAND	
YELLOW NORTHRUP-KING X155	105.1	15.1	0.5	2.9	91.7	YELLOW P.A.G. SYN 2	132.8	23.3	0.5	9.9	92.2	
SCHENK SX-110N	148.7	16.8	0.0	5.2	90.6	P.A.G. SX98	151.9	23.4	1.1	5.0	92.2	
PIONEER 3571	128.8	17.1	0.0	1.3	83.3	SO STATES 866	148.7	23.4	0.0	27.0	95.3	
DEKALB EXP 68	124.7	17.6	0.0	2.8	91.7	STULL'S 809ASP	142.4	23.4	0.0	13.0	85.9	
FUNK'S G4455	136.8	18.2	1.2	4.7	89.1	TROJAN TXS122	148.6	23.6	0.0	9.1	89.6	
PIONEER 3516	128.4	18.5	0.0	15.9	90.6	PRINCETON SX836	177.3	23.6	0.0	1.1	89.1	
P.A.G. SX83	123.2	19.0	0.0	3.5	88.5	PIONEER TX751	164.7	23.8	0.0	11.5	87.5	
NORTHRUP-KING PY611	139.7	19.2	0.0	20.8	89.6	TROJAN TX119	134.5	23.9	1.4	5.6	76.0	
PRINCETON SX650	123.3	19.3	0.0	0.0	89.6	FUNK'S G5757	158.3	24.0	4.5	1.7	90.6	
TROJAN TXS118	112.7	19.3	0.0	19.4	77.1	DERALB XL85A	146.7	24.1	0.0	8.9	87.5	
TROJAN TXS112	143.0	19.4	0.0	3.5	82.8	F2 OF 3834	111.7	24.3	0.0	8.2	85.4	
PIONEER 3518	131.1	19.5	0.0	0.0	89.1	MCNAIR 3838	132.3	24.5	6.0	13.2	92.2	
STEWART CARDINAL SX58	122.1	19.5	0.0	6.3	83.3	DEKALB F880	116.0	24.6	8.9	11.4	88.0	
P.A.G. 438	129.8	19.8	1.1	7.8	86.5	ASGROW RX100	129.2	25.2	0.0	3.2	81.8	
PRINCETON SX850	172.2	19.9	0.0	13.2	96.4	MCNAIR 2210	150.6	25.2	0.0	13.9	89.1	
FUNK'S G4466	121.9	19.9	0.0	17.0	95.3	P.A.G. SYN 3	125.2	25.4	0.0	6.7	85.9	
KENTUCKY 105	78.4	19.9	0.0	62.5	79.7	TAYLOR-EVANS MASTERMAKER	163.2	25.4	0.0	0.0	82.3	
NORTHRUP-KING PY678	128.3	20.0	1.1	13.1	89.1	REID'S YELLOW DENT	71.2	25.7	13.3	28.0	74.5	
TROJAN TX115	132.7	20.0	0.6	8.2	88.5	STULL'S 809SX	163.6	26.5	0.0	4.4	87.0	
SO STATES 860	110.3	20.1	0.0	25.4	82.3	STULL'S 877SX	147.6	27.4	0.0	10.6	84.4	
MIGRO M-0702	139.6	20.3	0.0	3.5	84.4	CONLEE TEX-28A	108.9	27.5	6.6	44.8	79.2	
DEKALB XL64	156.1	20.3	0.6	8.4	93.8	FUNK'S G4761	151.7	28.0	3.2	0.0	78.1	
NORTHRUP-KING PY616	116.7	20.6	0.0	20.2	89.6	LEWIS SEED CO. EX 828	140.3	30.6	1.9	33.7	82.3	
DEKALB XL81	130.2	20.8	0.0	19.3	88.5	YELLOW AVERAGE	136.1	22.1	0.8	11.5	86.9	
TROJAN TXS113	154.3	20.8	0.5	6.8	91.1	WHITE	KENTUCKY 5921W	102.3	18.9	2.6	27.0	78.6
STULL'S 807ASX	129.6	20.9	0.5	16.0	90.6	SCHENK SS-101W	129.7	22.7	7.5	34.8	91.1	
TAYLOR-EVANS CASHMAKER	122.5	21.0	0.0	10.7	82.8	FUNK'S EXP 23981W	123.1	23.5	2.2	15.9	92.2	
PRINCETON SX823	137.1	21.3	0.0	2.9	88.5	PIONEER 511A	135.5	23.6	1.1	27.7	94.8	
DEKALB XL66	124.3	21.3	0.0	10.4	85.4	STULL'S 560WSP	149.2	23.8	1.8	8.9	82.3	
PIONEER 3368	169.2	21.4	0.0	9.1	92.2	SCHENK SX-XO4N	90.8	24.2	1.3	34.2	84.4	
F2 OF SX39	98.5	21.5	0.0	6.7	89.1	HICKORY KING	71.1	24.2	1.3	44.7	47.9	
COOP. T308	91.4	21.6	0.0	18.9	82.3	P.A.G. SYN 1	123.8	24.8	3.0	22.1	84.9	
PIONEER 3329	148.4	22.1	0.0	11.5	87.5	F2 OF 644W	112.0	24.8	1.8	11.4	90.6	
SCHENK SX-440N	151.1	22.1	0.0	15.5	85.4	SCHENK SS-303N	93.4	25.2	0.0	6.5	53.6	
STEWART CARDINAL SX71	192.2	22.1	0.0	4.1	92.2	STULL'S 850WSX	132.1	25.4	1.1	17.8	90.1	
PIONEER 3369A	197.4	22.2	0.0	0.0	90.1	STULL'S 555W	178.9	25.8	0.0	6.0	95.8	
SO STATES 909E	118.9	22.3	2.6	30.5	83.3	F2 OF 511A	124.9	26.5	2.2	18.7	96.9	
PIONEER 3334	136.7	22.4	0.0	7.8	84.9	P.A.G. 17525W	136.7	26.8	2.9	13.5	79.2	
MIGRO M-0711	161.1	23.0	0.0	7.8	80.7	BOONE COUNTY WHITE	89.2	27.0	13.0	43.0	83.9	
TROJAN TXS119	147.5	23.0	0.0	1.8	83.3	FUNK'S G508W	141.4	27.5	2.0	9.8	75.0	
P.A.G. SX39	153.7	23.1	0.0	12.0	91.7	P.A.G. 644W	142.2	28.7	0.0	3.0	86.5	
MIGRO M-465X	128.2	23.1	0.0	1.3	73.4	FUNK'S G4895W	111.2	32.0	1.1	11.3	83.3	
ASGROW RX99	124.9	23.2	0.7	4.8	85.9	WHITE AVERAGE	121.5	25.3	3.3	17.6	82.8	
FUNK'S G4520	132.2	23.2	1.1	17.3	94.3	GRAND AVERAGE	133.2	22.8	1.3	12.7	86.1	
P.A.G. SX91	128.9	23.3	0.0	5.6	91.1							

TABLE 8--ANNUAL SUMMARY, NORMAL POPULATION, FRANKLIN, KY.

HYBRID	YIELD BU/AAC	Avg % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND	HYBRID	YIELD BU/AAC	Avg % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND
YELLOW NORTHRUP-KING X155	69.8	15.1	0.0	7.7	75.5	YELLOW FUNK'S G4646	155.0	21.6	0.0	8.4	84.4
KENTUCKY 105	70.0	16.3	0.0	27.5	76.8	MCNAIR 2210	150.2	21.6	0.0	7.8	80.2
SCHENK SX-110N	154.7	16.8	0.0	6.9	82.8	TAYLOR-EVANS MASTERMAKER	147.9	21.6	0.0	3.4	76.6
FUNK'S G4455	147.0	17.3	0.0	5.8	89.1	SO STATES 909E	136.4	21.7	0.0	4.0	91.1
PIONEER R 3571	137.2	17.9	0.0	3.7	80.7	P.A.G. SX91	118.7	22.0	0.0	1.2	85.9
PIONEER R 3518	18.1	0.0	0.0	3.2	82.3	SO STATES 866	145.2	22.0	0.0	5.4	95.8
TROJAN TX115	129.2	18.1	0.0	10.0	83.9	FUNK'S G4550	143.0	22.1	0.0	5.8	78.6
PIONEER R 3516	150.8	18.4	0.0	2.2	92.7	MCNAIR 3838	174.2	22.1	0.0	6.8	90.1
NORTHRUP-KING PX678	145.3	18.5	0.0	7.6	89.1	TROJAN TX119	155.8	22.3	0.0	3.2	87.0
P.A.G. SX83	159.4	18.7	0.0	6.2	84.9	FUNK'S G5757	169.7	22.4	0.0	2.9	86.5
SCHENK SX-440N	151.5	18.8	0.0	2.6	80.7	ASGROW RX100	90.6	22.4	0.0	66.7	
TROJAN TXS112	136.8	18.9	0.0	3.3	78.6	MCNAIR X210F	158.5	22.5	0.0	5.1	82.3
DEKALB EXP 68	156.6	19.1	0.0	4.8	90.6	P.A.G. SX98	135.8	22.6	0.0	5.8	80.7
DEKALB XL81	161.9	19.1	0.0	3.1	84.9	MIGRO M-465X	116.5	22.7	0.0	6.3	72.9
PRINCETON SX850	163.1	19.2	0.0	4.9	95.3	TROJAN TX119	136.4	22.8	0.0	3.5	78.1
NORTHRUP-KING PX611	141.8	19.2	0.0	7.8	87.0	DEKALB F880	94.3	23.0	0.0	9.3	82.8
SO STATES 860	124.3	19.3	0.0	4.7	77.1	FUNK'S G4761	105.2	23.1	0.0	4.0	65.6
PIONEER 3329	181.5	19.3	0.0	2.3	91.1	ASGROW RX99	131.8	23.3	0.0	1.5	73.4
PIONEER 3308	158.7	19.4	0.0	2.6	78.6	LEWIS SEED CO.	121.8	24.5	0.0	15.1	79.2
PRINCETON SX823	130.4	19.4	0.0	1.4	78.6	STULL'S 877SX	155.3	25.4	0.0	5.4	89.6
PIONEER 3334	141.5	19.7	0.0	2.7	78.6	REID'S YELLOW DENT	83.4	25.5	0.0	17.4	75.5
MIGRO M-0702	138.7	19.7	0.0	4.5	81.3	CONLEE TEX.28A	100.0	25.8	0.0	8.4	62.5
P.A.G. 438	136.0	19.7	0.0	5.8	82.3	YELLOW AVERAGE	138.4	20.6	0.0	6.0	82.5
PIONEER 3369A	170.3	19.7	0.0	5.1	81.8	WHITE					
PRINCETON SX650	147.9	19.7	0.0	1.1	89.1	KENTUCKY 5921W	93.4	17.2	0.0	24.1	81.3
STEWART CARDINAL SX58	107.2	20.1	0.0	19.3	85.9	BODINE COUNTY WHITE	93.5	21.5	0.0	19.6	69.8
PRINCETON SX836	176.6	20.2	0.0	5.0	85.9	STULL'S 555W	153.0	21.7	0.0	10.6	89.1
TROJAN TXS113	148.7	20.2	0.0	0.0	80.2	F2 OF 511A	116.8	22.0	0.0	7.5	90.6
SO STATES 865	150.9	20.3	0.0	5.0	64.9	PIONEER 511A	158.2	22.0	0.0	9.3	83.3
TROJAN TXS118	120.7	20.4	0.0	3.9	77.1	HICKORY KING	55.4	22.2	0.0	20.0	47.9
STULL'S 807ASX	160.1	20.5	0.0	6.3	91.1	FUNK'S G508W	136.1	22.3	0.0	7.7	87.5
DEKALB XL85A	170.7	20.6	0.0	1.8	82.3	FUNK'S EXP 23981W	145.9	22.8	0.0	3.6	93.9
P.A.G. SX39	167.2	20.7	0.0	4.3	85.4	P.A.G. SYN 1	111.7	23.1	0.0	8.1	84.9
F2 OF 3334	85.5	20.7	0.0	12.2	72.4	SCHENK SX-X04N	123.0	23.3	0.0	3.7	69.3
TROJAN TXS122	151.2	20.8	0.0	3.1	83.9	P.A.G. 644W	158.8	23.4	0.0	2.4	86.5
STULL'S 809ASP	156.9	20.9	0.0	7.1	88.5	COPP. T308	644W				
P.A.G. SYN 2	129.1	20.8	0.0	12.1	82.3	FUNK'S G4895W	111.8	23.9	0.0	5.0	67.7
COOP. T308	85.5	20.8	0.0	1.8	83.9	STULL'S 560NSP	155.1	24.0	0.0	6.3	91.7
TAYLOR-EVANS CASHMAKER	138.8	20.9	0.0	1.1	89.1	SCHENK SS-101N	157.2	24.0	0.0	3.7	85.4
DEKALB XL64	144.5	20.9	0.0	1.2	88.5	F2 OF 644W	108.3	24.1	0.0	7.1	84.4
STEWART CARDINAL SX71	193.5	20.9	0.0	8.9	81.3	P.A.G. 1.7525W	140.3	24.4	0.0	6.0	87.0
STULL'S 809ASP	117.5	21.0	0.0	3.0	68.2	SCHENK SS-303N	90.2	24.5	0.0	4.4	55.7
MIGRO M-0601A	167.9	21.0	0.0	3.1	86.5	STULL'S 850WSX	156.6	26.8	0.0	4.0	81.8
PIONEER 3368	131.6	21.1	0.0	1.9	82.8	WHITE AVERAGE	124.1	22.7	0.0	9.3	79.9
F2 OF SX39	176.6	21.2	0.0	6.5	89.6	GRAND AVERAGE	135.4	21.0	0.0	6.7	81.9
MIGRO M-0711	92.4	21.4	0.0	16.6	82.3		77.1	3.4			

TABLE 9--ANNUAL SUMMARY, NORMAL POPULATION, LEXINGTON, KY.

HYBRID	YIELD BU/A	Avg % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND	HYBRID	YIELD BU/A	Avg % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND
YELLOW SCHENK SX-110N	174.9	16.9	9.3	1.1	90.1	YELLOW MIGRO M-0711	164.7	22.9	0.0	0.7	89.1
PIONEER 3571	169.0	17.1	0.0	94.8	F2 OF 3334	139.8	22.9	3.4	4.5	91.7	
NORTHRUP-KING X155	91.8	17.4	6.4	8.0	PIONEER X1571	194.0	22.9	0.0	1.2	89.6	
KENTUCKY 105	112.6	18.4	15.1	8.7	SO STATES 865	180.9	23.0	16.7	4.2	100.0	
PRINCETON SX650	182.6	18.6	0.0	0.0	TAYLOR-EVANS MASTERMAKER	165.5	23.0	1.1	2.3	90.1	
FUNK'S G4455	143.7	18.7	1.1	2.7	DEKALB XL81	193.4	23.1	0.0	0.0	95.3	
MIGRO M-0702	161.9	18.9	1.2	2.4	FUNK'S G4666	180.0	23.1	6.9	0.5	93.2	
DEKALB EXP 68	141.9	18.9	0.0	4.1	STULL'S 809ASP	149.6	23.4	5.6	3.7	83.3	
STEWART CARDINAL SX58	138.3	19.8	0.0	1.1	P.A.G. SX98	166.0	23.5	1.0	1.0	90.1	
PIONEER 3518	157.5	20.1	1.2	1.1	MCNATR 3838	190.7	23.8	0.0	1.6	98.4	
TROJAN TXS118	147.7	20.1	0.0	1.3	SO STATES 909E	141.2	24.0	22.4	6.2	89.6	
TROJAN TXS112	186.8	20.2	0.0	0.0	STULL'S 877SX	157.5	24.0	3.4	6.6	93.2	
DEKALB XL64	186.3	20.2	0.0	2.2	STULL'S 809SX	175.8	24.0	3.3	3.8	95.3	
DEKALB XL66	166.9	20.4	2.2	0.6	PIONEER 3329	167.6	24.1	0.0	1.6	94.8	
NORTHRUP-KING PX6778	164.8	20.5	0.0	3.7	TROJAN TX119	137.3	24.1	1.4	6.5	81.8	
NORTHRUP-KING PX616	186.4	20.6	0.5	2.7	REID'S YELLOW DENT	78.1	24.1	31.2	8.2	75.5	
PIONEER 3516	180.9	20.6	3.5	2.7	DEKALB XL85A	188.3	24.2	0.0	2.3	90.6	
P.A.G. SX83	187.9	20.7	1.6	1.6	P.A.G. SYN 3	148.9	24.5	20.1	5.5	92.2	
MIGRO M-465X	133.9	20.8	0.8	2.1	DEKALB F880	102.5	25.2	5.9	5.4	89.1	
SCHENK SX-440N	216.6	20.9	0.0	0.0	FUNK'S G5757	189.9	25.4	6.6	1.9	85.4	
NORTHRUP-KING PX611	170.0	21.0	0.6	5.4	FUNK'S G4761	159.9	27.5	6.6	0.6	83.3	
TROJAN TX115	133.6	21.0	0.0	2.4	LEWIS SEED CO.	146.8	30.7	13.9	5.3	89.6	
TAYLOR-EVANS CASHMAKER	147.6	21.1	0.0	4.7	CONLEE TEX-28A	153.3	31.8	10.0	10.9	88.0	
PRINCETON SX850	195.8	21.2	0.0	0.6	YELLOW AVERAGE	164.2	22.1	3.6	2.8	90.4	
TROJAN TXS113	196.5	21.3	0.5	1.6	WHITE HICKORY KING	74.2	23.2	19.0	7.4	63.0	
STULL'S 807ASX	193.1	21.4	0.6	1.7	STULL'S 560WSP	179.6	23.4	9.3	6.8	97.9	
PIONEER 3334	216.4	21.6	0.6	2.3	KENTUCKY 5921W	150.1	23.7	12.8	8.3	94.8	
SD STATES 860	123.1	21.6	0.6	1.1	FUNK'S EXP 23981W	184.2	24.3	5.3	0.6	92.2	
TROJAN TXS122	196.4	21.7	4.0	0.6	FUNK'S G500W	171.0	24.9	1.2	7.1	89.1	
PRINCETON SX823	166.1	21.7	1.2	0.0	PIONEER 511A	179.8	25.0	4.8	95.3	95.3	
P.A.G. 438	165.7	21.8	0.0	3.9	F2 OF 644W	158.5	25.6	9.8	2.8	93.2	
PRINCETON SX836	200.5	21.9	1.7	0.6	BOONE COUNTY WHITE	105.3	25.6	34.9	5.3	80.7	
P.A.G. SX39	188.3	22.0	0.0	0.0	SCHENK SS-303N	113.7	22.1	19.1	3.8	54.2	
STEWARD CARDINAL SX71	200.5	22.1	1.9	0.6	STULL'S 555W	155.7	26.4	12.4	5.0	91.7	
MCNAIR 2210	179.4	22.1	6.7	1.8	P.A.G. 644W	180.5	26.5	18.0	3.9	89.1	
MCNAIR X210F	202.5	22.2	0.7	87.5	P.A.G. SYN 1	155.4	26.6	6.1	6.5	87.0	
COOP. T308	112.7	22.2	0.0	11.7	F2 OF 511A	145.7	27.1	10.8	4.7	97.4	
PIONEER 3368	196.7	22.3	0.0	0.0	SCHENK SX-X04N	176.7	27.2	14.1	3.4	75.0	
P.A.G. SYN 2	145.9	22.3	2.4	5.0	SCHENK SS-101N	218.0	27.5	3.3	2.8	96.4	
PIONEER 3308	154.0	22.5	2.4	1.6	P.A.G. 17525W	175.0	28.7	14.0	2.4	91.1	
F2 OF SX39	107.0	22.5	6.6	6.0	STULL'S 850WSX	192.8	29.2	4.0	92.2	92.2	
P.A.G. SX91	163.8	22.5	2.8	1.1	FUNK'S G4395W	110.7	29.6	11.0	4.3	75.0	
SO STATES 866	158.8	22.5	9.5	3.3	WHITE AVERAGE	156.9	26.2	12.9	4.7	86.4	
TROJAN TXS119	170.4	22.6	0.0	1.1	GRAND AVERAGE	162.8	22.9	5.4	3.2	89.6	
FUNK'S G4550	176.4	22.7	0.5	1.6							
ASGROW RX99	143.8	22.7	1.7	3.1							
MIGRO M-0601A	169.5	22.8	0.0	0.0							
ASGROW RX100	144.1	22.8	5.5	4.3							

TABLE 10--ANNUAL SUMMARY, NORMAL POPULATION, QUICKSAND, KY.

HYBRID	YIELD BU/AC	AVG % MOIST	% ROOT LODGED	% STALK LODGED	% STALK % STAND	HYBRID	YIELD BU/AC		AVG % MOIST		% ROOT LODGED		% STALK LODGED		% STALK % STAND				
							YELLOW	FUNK'S G5757	102.6	20.9	0.7	69.3	WHITE	KENTUCKY 5921W	73.6	19.9	0.9	4.1	56.8
YELLOW	60.7	17.3	0.0	8.0	54.2	FUNK'S G4646	108.6	21.1	1.3	2.2	77.1	PIONEER 3571	67.6	17.9	0.0	4.9	52.1	60.4	
PIONEER 3571	54.7	17.8	0.0	12.6	46.9	PIONEER 3334	91.2	21.1	0.0	1.7	60.4	PIONEER 3518	67.6	17.9	0.0	4.9	52.1	64.1	
PIONEER 3518	54.7	17.8	0.0	4.9	52.1	SO. STATES 865	90.5	21.2	0.0	3.1	56.8	KENTUCKY 105	55.1	18.1	0.0	8.8	52.3	56.8	
KENTUCKY 105	67.6	17.9	0.0	8.8	52.3	STULL'S 807ASX	65.2	21.2	0.0	5.8	56.8	SD. STATES 865	99.6	18.1	0.0	3.6	74.0	41.1	
SD. STATES 865	99.6	18.1	0.0	3.6	74.0	MIGRO M-0601A	42.0	21.3	2.8	1.9	55.7	NORTHrup-KING PX611	71.3	18.2	0.0	5.1	56.8	55.7	
NORTHrup-KING PX611	71.3	18.2	0.0	5.1	56.8	STULL'S 809ASP	93.2	21.3	0.0	2.2	55.7	SO. STATES 860	70.5	18.4	0.0	4.0	46.9	55.7	
SO. STATES 860	70.5	18.4	0.0	4.0	46.9	DEKALB XL66	60.1	21.6	0.0	6.5	60.4	PIONEER 3329	73.1	18.4	0.0	2.9	47.9	60.4	
PIONEER 3329	73.1	18.4	0.0	2.9	47.9	PRINCETON SX836	90.5	21.6	0.0	3.3	70.8	FUNK'S G4455	69.5	18.4	0.0	3.1	56.8	53.1	
FUNK'S G4455	69.5	18.4	0.0	3.1	56.8	PRINCETON SX823	47.0	21.7	0.0	13.0	41.1	DEKALB XL81	78.4	18.5	0.0	2.8	67.7	41.1	
DEKALB XL81	78.4	18.5	0.0	2.8	67.7	ASGROW RX100	59.4	22.0	0.0	1.3	41.1	P.A.G. SX83	88.6	18.5	0.0	0.9	59.9	41.1	
P.A.G. SX83	88.6	18.5	0.0	0.9	59.9	PIONEER X7571	101.5	22.1	0.0	1.8	65.1	SCHENK SX-110N	97.6	18.6	1.1	2.4	62.5	65.1	
SCHENK SX-110N	97.6	18.6	1.1	2.4	62.5	TROJAN TX119	67.2	22.3	0.0	12.5	60.4	PIONEER 3516	107.8	18.7	0.7	71.9	71.9	60.4	
PIONEER 3516	107.8	18.7	0.7	0.7	71.9	MCNAIR 3838	122.1	22.3	2.5	81.3	81.3	TROJAN TX512	81.5	18.8	0.0	0.0	55.2	81.3	
TROJAN TX512	81.5	18.8	0.0	0.0	55.2	P.A.G. SX39	87.7	22.4	2.6	56.3	56.3	NORTHrup-KING PX678	67.3	19.1	0.0	0.9	61.5	49.0	
NORTHrup-KING PX678	67.3	19.1	0.0	0.9	61.5	REID'S YELLOW DENT	62.3	22.6	4.1	49.5	49.5	PRINCETON SX650	105.8	19.2	1.2	0.0	77.1	59.4	
PRINCETON SX650	105.8	19.2	1.2	0.0	77.1	STULL'S 877SX	93.5	22.6	0.0	4.6	59.4	TAYLOR-EVANS CASHMAKER	73.8	19.3	0.0	0.6	60.9	59.4	
TAYLOR-EVANS CASHMAKER	73.8	19.3	0.0	0.6	60.9	MCNAIR X210F	93.8	22.9	0.6	0.0	59.4	COOP. T308	43.9	19.3	3.7	18.5	48.4	59.4	
COOP. T308	43.9	19.3	3.7	2.2	60.4	FUNK'S G4761	75.7	23.3	0.0	0.0	49.0	MIGRO M-0711	83.5	19.3	0.7	4.4	60.4	49.0	
MIGRO M-0711	83.5	19.3	0.7	2.2	60.4	DEKALB F880	73.2	23.9	2.7	3.5	67.2	STEWART CARDINAL SX71	129.1	19.3	0.6	4.4	76.0	67.2	
STEWART CARDINAL SX71	129.1	19.3	0.6	4.4	76.0	CONLEE TEX-28A	93.7	24.1	0.0	7.2	59.4	PIONEER 3308	89.6	19.4	1.0	6.9	57.3	59.4	
PIONEER 3308	89.6	19.4	1.0	6.9	57.3	LEWIS SEED CO.	80.3	25.8	0.0	5.3	54.7	PRINCETON SX850	106.5	19.4	0.7	4.2	64.6	54.7	
PRINCETON SX850	106.5	19.4	0.7	4.2	64.6	YELLOW AVERAGE	77.3	20.3	0.6	4.3	58.5	TROJAN TX519	75.6	19.4	0.0	2.9	55.7	58.5	
TROJAN TX519	75.6	19.4	0.0	2.9	55.7	WHITE AVERAGE	77.3	20.3	0.6	4.3	58.5	P.A.G. SX98	60.7	19.4	0.0	2.6	52.6	58.5	
P.A.G. SX98	60.7	19.4	0.0	2.6	52.6	WHITE	KENTUCKY 5921W	73.6	19.9	0.9	4.1	56.8	SCHENK SX-440N	103.1	19.4	0.0	0.7	65.6	56.8
SCHENK SX-440N	103.1	19.4	0.0	0.7	65.6	WHITE	KENTUCKY 5921W	73.6	19.9	0.9	4.1	56.8	MIGRO M-465X	57.5	19.5	0.0	4.9	47.9	56.8
MIGRO M-465X	57.5	19.5	0.0	4.9	47.9	FUNK'S G508W	88.0	20.9	0.0	1.2	57.8	DEKALB XL64	49.8	19.5	0.0	4.9	53.1	57.8	
DEKALB XL64	49.8	19.5	0.0	4.9	53.1	STULL'S 555W	100.4	21.9	0.0	2.2	58.3	SO. STATES 866	88.4	19.7	0.0	10.8	70.3	58.3	
SO. STATES 866	88.4	19.7	0.0	10.8	70.3	SCHENK SX-X04N	97.5	22.0	0.7	0.7	52.6	P.A.G. 438	63.0	19.8	0.9	10.8	65.6	52.6	
P.A.G. 438	63.0	19.8	0.9	10.8	65.6	HICKORY KING	48.0	22.4	3.5	4.5	34.4	STULL'S 800SX	59.3	19.8	0.0	9.1	39.6	34.4	
STULL'S 800SX	59.3	19.8	0.0	9.1	39.6	P.A.G. 17525W	64.8	22.8	0.0	44.3	44.3	STEWART CARDINAL SX58	62.5	19.8	1.7	10.0	60.9	44.3	
STEWART CARDINAL SX58	62.5	19.8	1.7	10.0	60.9	SCHENK SS-101W	110.7	22.9	2.4	0.0	75.5	F2 OF 3334	38.6	19.8	0.0	2.0	44.8	75.5	
F2 OF 3334	38.6	19.8	0.0	2.0	44.8	SCHENK SS-303N	52.7	22.9	1.8	1.6	30.7	DEKALB EXP 6.8	85.8	19.8	0.0	4.5	58.9	30.7	
DEKALB EXP 6.8	85.8	19.8	0.0	4.5	58.9	STULL'S 560WSP	103.2	22.9	0.0	1.7	71.9	NORTHrup-KING X155	49.0	19.9	3.0	8.7	43.8	71.9	
NORTHrup-KING X155	49.0	19.9	3.0	8.7	43.8	F2 OF 511A	84.6	23.0	0.0	1.5	68.8	TROJAN TX115	61.6	19.9	0.0	4.5	47.9	68.8	
TROJAN TX115	61.6	19.9	0.0	4.5	47.9	P.A.G. SYN 1	79.8	23.1	0.0	2.8	60.9	F2 OF SX39	57.1	20.0	0.0	8.7	53.6	60.9	
F2 OF SX39	57.1	20.0	0.0	8.7	53.6	FUNK'S G4895W	55.3	23.2	0.0	1.0	46.4	ASGROW RX99	95.5	20.0	1.0	6.1	64.1	46.4	
ASGROW RX99	95.5	20.0	1.0	6.1	64.1	BODNE COUNTY WHITE	97.4	23.4	10.6	3.0	66.7	P.A.G. SYN 2	70.7	20.0	1.0	5.8	57.8	66.7	
P.A.G. SYN 2	70.7	20.0	1.0	5.8	57.8	F2 OF 644W	74.9	23.6	0.0	0.0	57.8	TAYLOR-EVANS MASTERMAKER	63.9	20.2	0.0	1.9	54.2	57.8	
TAYLOR-EVANS MASTERMAKER	63.9	20.2	0.0	1.9	54.2	P.A.G. 644W	101.4	24.1	0.0	0.0	55.2	TROJAN TX5113	78.5	20.4	0.0	9.1	49.0	55.2	
TROJAN TX5113	78.5	20.4	0.0	9.1	49.0	STULL'S 850WSX	96.4	24.6	7.3	0.0	61.5	MIGRO M-0702	86.4	20.4	1.7	60.9	60.9	61.5	
MIGRO M-0702	86.4	20.4	1.7	60.9	60.9	FUNK'S EXP 23981W	87.6	25.0	0.7	0.7	67.7	PIONEER 3368	83.7	20.6	1.0	68.8	87.6	67.7	
PIONEER 3368	83.7	20.6	1.0	68.8	68.8	PIONEER 511A	83.4	26.0	0.0	0.0	68.8	MCNAIR 2210	95.1	20.6	1.0	57.3	57.3	68.8	
MCNAIR 2210	95.1	20.6	1.0	57.3	57.3	WHITE AVERAGE	82.8	22.9	1.5	1.5	57.5	TROJAN TX5118	101.3	20.6	4.4	0.7	78.6	57.5	
TROJAN TX5118	101.3	20.6	4.4	0.7	78.6	GRAND AVERAGE	78.5	20.8	0.8	3.7	58.3	P.A.G. SX91	81.6	20.7	0.0	5.6	59.4	58.3	
P.A.G. SX91	81.6	20.7	0.0	5.6	59.4		68.0	20.8	0.0	3.4	55.7	DEKALB XL85A	68.0	20.8	0.0	0.0	0.0	55.7	
DEKALB XL85A	68.0	20.8	0.0	0.0	0.0							FUNK'S G4550							

TABLE 11--ANNUAL SUMMARY, NORMAL POPULATION, ALL NON-VIRUS LOCATIONS, 1971

HYBRID	YIELD BU/AC	Avg % MOIST	% ROOT LODGED	% STALK LODGED	% STALK % STAND	HYBRID	YIELD BU/AC	Avg % MOIST	% ROOT LODGED	% STALK LODGED	% STALK % STAND
YELLOW											
NORTHROP-KING X155	77.6	16.7	2.0	10.0	81.8	YELLOW DEKALB XL85A	150.6	22.2	6.1	6.1	83.8
SCHENK SX-110N	147.9	17.5	6.3	5.0	85.4	TAYLOR-EVANS MASTERMAKER	144.1	22.3	0.5	3.9	80.3
KENTUCKY 105	72.6	17.9	8.4	21.5	71.6	MCNAIR X210F	149.3	22.3	0.4	10.1	80.7
PIONEER 3571	123.6	18.2	0.4	4.2	80.9	P.A.G. SX39	152.6	22.3	0.9	5.5	85.9
FUNK'S G4455	117.4	18.6	0.5	4.9	82.7	MIGRO M-0711	148.7	22.3	0.1	1.9	83.5
PIONEER 3518	121.0	19.2	0.6	4.8	81.3	TROJAN TXS119	140.2	22.4	0.3	3.4	82.3
PIONEER 3516	141.0	19.4	1.2	6.6	87.6	P.A.G. SX91	122.3	22.4	4.4	3.1	87.7
TROJAN TXS112	138.2	19.4	6.7	4.0	78.5	FUNK'S G4550	126.4	22.5	2.5	8.7	84.4
NORTHROP-KING PX678	129.2	19.5	3.5	5.5	86.3	STULL'S 809ASP	136.1	22.7	1.0	7.9	79.6
STEWART CARDINAL SX58	106.0	19.6	2.9	12.3	83.5	MCNAIR 2210	151.6	22.8	1.3	6.9	85.5
TROJAN TX115	119.2	19.6	0.5	6.1	81.8	ASGROW RX100	109.0	22.9	0.9	2.4	73.2
NORTHROP-KING PX611	132.4	19.7	6.7	9.3	86.8	STULL'S 809SX	143.9	22.9	2.2	5.1	81.8
DEKALB EXP 68	127.0	19.7	0.0	4.8	83.6	ASGROW RX99	128.3	22.9	0.3	3.5	79.5
P.A.G. SX83	145.3	19.8	4.2	5.1	87.6	FUNK'S G5757	150.0	23.0	6.6	3.4	86.9
PRINCETON SX650	143.3	19.9	2.0	2.0	88.6	TROJAN TX119	127.1	23.4	0.7	6.1	77.7
PRINCETON SX850	160.0	20.0	1.3	6.4	89.1	MCNAIR 3838	156.4	23.5	4.5	6.2	91.6
MIGRO M-0702	131.5	20.0	1.3	4.4	83.4	STULL'S 877SX	141.5	24.0	0.8	8.1	83.3
PIONEER 3334	143.7	20.1	0.3	4.7	79.4	DEKALB F880	94.0	24.2	10.3	10.0	85.1
SCHENK SX-44ON	153.2	20.2	1.2	4.9	83.6	FUNK'S G4761	126.7	25.3	1.8	1.5	73.0
TAYLOR-EVANS CASHMAKER	122.8	20.4	0.4	6.0	81.6	REID'S YELLOW DENT	74.6	25.4	18.9	13.7	72.2
TROJAN TXS118	113.3	20.5	0.4	9.9	76.9	P.A.G. SYN 3	124.3	25.7	11.5	10.8	88.4
DEKALB XL81	139.2	20.6	1.4	6.7	87.2	LEWIS SEED CO.	125.4	27.5	10.7	12.9	79.7
PIONEER 3369A	166.2	20.7	0.1	4.0	86.3	CONLEE TEX.28A	117.8	27.7	9.1	17.1	76.9
P.A.G. 438	119.8	20.7	1.7	12.1	85.5	YELLOW AVERAGE	130.3	21.4	3.1	6.8	82.7
STULL'S 807ASK	144.6	20.7	1.9	7.4	86.5	WHITE	97.2	19.7	8.2	15.0	80.2
DEKALB XL64	132.4	20.8	1.0	4.9	84.7	HICKORY KING	5921W	23.4	17.2	9.4	48.9
SO STATES 860	109.6	20.9	0.4	7.1	74.3	STULL'S 560WSP	142.6	23.6	10.6	5.9	88.7
PIONEER 3329	148.9	20.9	0.4	5.8	84.3	FUNK'S G508W	135.3	23.7	7.3	6.3	78.6
NORTHROP-KING PX616	141.8	21.0	1.7	15.9	92.4	STULL'S EXP 23981W	136.1	23.9	6.5	6.5	89.7
MIGRO M-465X	110.5	21.0	1.0	4.3	68.1	STULL'S 555W	143.5	24.0	8.9	6.5	85.6
PIONEER 3308	137.9	21.0	1.0	5.5	76.5	BOONE COUNTY WHITE	98.5	24.1	20.9	14.2	78.9
STEWART CARDINAL SX71	169.2	21.0	0.7	4.5	86.6	P.A.G. SYN 1	118.0	24.3	7.9	8.8	82.3
DEKALB XL66	116.7	21.2	5.3	5.6	83.1	PIONEER 511A	144.5	24.5	5.5	9.2	85.6
PRINCETON SX823	120.9	21.3	0.3	3.6	82.1	F2 OF 644W	110.3	24.7	4.8	4.0	84.0
SO STATES 865	148.5	21.3	10.0	6.7	89.8	SCHENK SS-XO4N	128.7	24.7	3.2	8.0	71.9
COOP. T308	89.2	21.3	0.8	16.3	80.1	SCHENK SS-303N	85.9	24.8	6.0	4.2	49.5
TROJAN TXS113	142.7	21.4	2.4	4.9	86.2	F2 OF 511A	120.1	25.0	11.1	7.3	89.7
PIONEER 3368	158.6	21.4	0.2	2.9	89.0	SCHENK SS-101N	158.8	25.1	7.4	7.9	89.2
TROJAN TXS122	146.0	21.5	0.8	7.6	84.4	F2 OF 644W	135.7	25.7	3.1	5.3	78.9
P.A.G. SYN 2	119.2	21.6	1.9	6.6	85.1	STULL'S 850WSX	151.8	26.1	7.6	6.1	84.2
F2 OF SX39	88.7	21.8	2.3	10.9	82.1	P.A.G. 644W	144.3	26.2	4.2	3.7	83.1
P.A.G. SX98	133.9	21.8	0.3	4.3	82.4	FUNK'S G4895W	100.1	27.9	5.6	71.7	81.9
F2 OF 3334	89.0	21.9	1.7	5.7	73.1	WHITE AVERAGE	122.0	24.4	8.1	7.7	79.0
FUNK'S G4646	145.8	22.0	3.4	5.8	90.0	GRAND AVERAGE	128.6	22.0	4.1	7.0	81.9
SO STATES 909E	126.9	22.1	13.2	9.9	86.1						
PRINCETON SX836	152.3	22.1	0.4	3.2	85.4						
SO STATES 866	138.6	22.1	7.0	8.1	91.0						
MIGRO M-0601A	117.6	22.2	1.1	2.8	73.7						
PIONEER X7571	157.3	22.2	0.8	5.2	86.4						

TABLE 12--TWO-YEAR SUMMARY, NORMAL POPULATION,
ALL NON-VIRUS LOCATIONS, 1969 AND 1971

HYBRID	YIELD BU/AAC	Avg % MOIST LODGED	% ROOT LODGED	% STALK LODGED	% STALK % STAND	HYBRID	YIELD BU/AAC	Avg % MOIST LODGED	% ROOT LODGED	% STALK LODGED	% STALK % STAND
YELLOW						YELLOW					
PIONEER 3516	135.8	17.2	0.6	8.0	90.4	KENTUCKY 105	92.7	18.1	5.2	15.3	78.3
KENTUCKY 105	90.8	17.4	5.7	17.1	80.3	DEKALB XL66	119.3	18.9	3.2	9.4	88.1
TROJAN TXS112	136.3	17.4	3.8	4.4	85.2	PIONEER 3369A	150.4	19.1	1.0	5.6	87.0
TAYLOR-EVANS CASHMAKER	122.0	18.2	0.2	6.2	86.8	SO STATES 860	114.9	19.1	9.5	9.5	81.8
PIONEER 3369A	158.9	18.5	0.3	5.7	89.2	PIONEER 3308	133.6	19.3	1.7	6.7	83.4
SO STATES 865	136.0	18.7	5.5	9.7	91.2	STULL'S 80TASX	128.3	19.5	2.4	7.1	86.8
PIONEER 3308	139.4	18.8	0.5	6.8	84.5	TROJAN TXS122	132.4	19.5	0.9	6.1	89.3
DEKALB XL66	121.1	18.8	2.7	10.7	86.3	FUNK'S G5757	131.3	20.8	5.9	4.1	87.1
SO STATES 860	116.6	18.8	6.5	9.5	82.8	SO STATES 866	128.7	21.5	5.2	6.5	86.6
TROJAN TXS122	135.7	19.1	0.4	6.9	89.0	FUNK'S G4761	123.3	22.0	3.1	3.3	85.6
STULL'S 80TASX	134.2	19.2	1.2	7.1	85.3	YELLOW AVERAGE	124.7	19.7	3.8	7.6	85.2
TAYLOR-EVANS MASTERMAKER	148.0	19.8	0.3	4.6	87.4						
FUNK'S G5757	144.8	20.6	3.9	4.4	87.9	WHITE					
FUNK'S G4761	127.3	21.8	1.2	2.6	82.6	KENTUCKY 5921W	111.5	19.3	8.0	11.5	84.4
YELLOW AVERAGE	131.1	18.8	2.4	7.6	86.2	PIONEER 511A	130.4	22.2	4.6	9.3	86.1
WHITE						STULL'S 850WSX	128.7	22.5	5.7	8.4	85.7
KENTUCKY 5921W	107.8	18.8	5.5	12.3	83.3	WHITE AVERAGE	122.8	21.2	6.2	9.9	85.3
PIONEER 511A	137.0	22.2	3.4	10.5	87.8						
STULL'S 850WSX	138.9	22.5	4.0	9.1	86.3						
STULL'S 555W	143.5	24.0	8.9	6.5	85.6						
FUNK'S G4895W	112.5	25.3	3.7	6.6	80.5						
WHITE AVERAGE	125.1	22.2	4.7	9.5	84.5						
GRAND AVERAGE	129.6	19.7	3.0	8.1	85.8						

TABLE 14--ANNUAL SUMMARY, HIGH POPULATION, PRINCETON, KY.

HYBRID	YIELD BU/A	Avg % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND	HYBRID	YIELD BU/A	Avg % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND					
YELLOW																
NORTHRUP-KING X155	87.4	16.0	0.0	10.8	84.6	STULL'S 877SX	130.0	21.8	0.0	2.4	82.8					
SCHENK SX-110N	120.6	17.8	0.0	3.1	85.4	P.A.G. SX98	125.6	21.9	0.0	2.7	89.3					
REID'S YELLOW DENT	46.1	18.2	0.0	36.0	70.3	DEKALB F880	103.9	22.0	0.3	4.1	79.4					
P.A.G. SX83	149.1	18.8	0.0	2.1	87.5	CONLEE TEX.28A	108.3	22.0	0.0	5.6	71.6					
PIONEER 3571	115.2	18.9	0.0	1.6	83.9	MIGRO M-0711	151.9	22.1	0.0	3.2	82.0					
KENTUCKY 105	56.3	19.1	0.3	33.1	74.3	STULL'S 809ASP	117.6	22.3	1.1	6.7	70.1					
PIONEER 3308	132.6	19.3	0.0	2.3	87.8	F2 OF 3334	77.2	22.3	0.0	6.4	82.3					
PRINCETON SX823	76.8	19.4	0.0	0.9	84.4	FUNK'S G4550	111.3	22.3	0.0	1.5	89.1					
TROJAN TXS118	117.4	19.4	0.0	4.1	76.0	PRINCETON SX836	117.2	22.4	0.3	1.2	83.3					
PIONEER 3369A	150.7	19.5	0.0	3.8	89.8	SO STATES 865	146.2	22.4	0.3	2.1	89.6					
PRINCETON SX850	133.3	19.5	0.0	5.4	84.6	FUNK'S G4761	134.2	22.5	0.0	0.7	72.9					
PRINCETON SX650	130.7	19.5	0.0	1.0	83.1	TROJAN TX119	128.8	22.5	0.0	3.1	65.6					
STEWART CARDINAL SX58	83.9	19.5	0.0	17.0	86.5	TROJAN TXS119	134.2	22.6	0.0	4.0	81.5					
DEKALB XL85A	127.0	19.5	0.0	2.1	88.8	FUNK'S G5757	135.0	22.6	0.0	0.6	85.7					
TAYLOR-EVANS CASHMAKER	111.4	19.6	0.0	2.7	89.6	ASGROW RX99	127.9	22.7	0.0	3.8	75.8					
COOP. T308	92.3	19.6	0.0	14.5	71.9	FUNK'S G4646	129.3	22.9	0.0	1.7	88.5					
P.A.G. SX91	88.4	19.7	0.0	1.2	91.1	MCNAIR 3838	150.9	23.1	0.0	3.5	90.1					
MIGRO M-0702	118.9	19.7	0.0	4.4	89.6	DEKALB XL64	89.9	23.4	0.0	2.3	90.4					
TROJAN TXS112	119.9	19.7	0.0	5.8	69.8	NORTHRUP-KING PX611	117.9	23.8	0.0	5.0	93.0					
DEKALB EXP 68	116.8	19.8	0.0	7.2	81.5	TAYLOR-EVANS MASTERMAKER	145.5	23.9	0.0	3.1	80.5					
MIGRO M-46SX	120.6	19.9	0.0	1.6	63.8	TROJAN TXS122	126.0	24.1	0.0	2.2	84.4					
P.A.G. SYN 2	127.4	20.0	0.9	6.2	83.6	LEWIS SEED CO. EX 828	126.5	24.7	1.6	6.7	77.3					
SO STATES 860	116.3	20.0	1.1	5.5	78.4	YELLOW AVERAGE										
TROJAN TX115	119.1	20.0	4.0	84.9	84.9		119.3	20.9	0.1	5.1	83.1					
NORTHRUP-KING P X678	106.6	20.1	0.3	3.8	91.7											
FUNK'S G4455	97.5	20.2	0.0	0.6	90.9											
PIONEER 3518	92.9	20.2	0.0	2.9	81.8											
MCNAIR X210F	154.7	20.2	0.0	3.4	77.9											
SCHENK SX-440N	128.3	20.2	0.0	1.1	89.1											
MCNAIR 2210	140.2	20.4	0.0	4.8	85.4											
STEWART CARDINAL SX71	147.1	20.4	0.0	3.6	86.5											
PIONEER 3368	137.7	20.5	0.0	1.5	82.0											
STULL'S 809SX	136.9	20.8	0.0	4.1	88.0											
SO STATES 866	146.8	20.8	0.0	2.0	91.7											
STULL'S 807ASX	123.4	20.9	0.0	2.9	81.5											
PIONEER 3329	151.7	21.0	0.0	3.5	88.8											
P.A.G. 438	112.1	21.0	0.0	3.6	85.9											
DEKALB XL66	106.7	21.0	0.0	2.5	83.9											
PIONEER 3334	123.0	21.0	0.0	1.5	83.1											
MIGRO M-0601A	118.8	21.2	0.0	1.8	75.8											
PIONEER 3516	135.9	21.4	0.0	3.1	89.1											
P.A.G. SX39	131.8	21.4	0.0	3.2	91.7											
SO STATES 909E	130.3	21.5	2.8	5.0	78.4											
DEKALB XL81	106.7	21.5	0.0	2.9	91.4											
TROJAN TXS113	133.6	21.6	0.0	1.4	90.1											
PIONEER X7571	152.5	21.6	0.0	3.0	88.3											
F2 OF SX39	84.1	21.7	0.0	5.7	85.7											
ASGROW RX100	120.5	21.7	0.0	10.9	73.4											
WHITE AVERAGE																
							118.3	23.8	1.0	5.9	76.5					
							119.1	21.5	0.3	5.3	81.7					
GRAND AVERAGE																

TABLE 15--ANNUAL SUMMARY, HIGH POPULATION, LEXINGTON, KY.

HYBRID	YIELD BU/AC	AUG % MOIST	% ROOT LODGED	% STALK LODGED	% STALK STAND	HYBRID	YIELD BU/AC	AUG % MOIST	% ROOT LODGED	% STALK LODGED	% STALK STAND									
YELLOW	65.5	15.3	13.6	7.3	75.0	YELLOW	124.3	22.4	7.3	1.7	64.8									
NORTHrup-KING X155	151.6	16.4	11.5	0.6	84.4	MCAIR 2210	142.0	22.4	45.9	2.2	94.8									
PIONEER 3571	152.4	17.0	2.0	82.6	82.6	SO. STATES 865	158.1	22.5	8.4	3.3	75.8									
KENCK SX-110N	81.8	17.7	31.0	9.3	68.2	PIONEER X7571	117.1	22.6	2.4	3.0	71.4									
KENTUCKY 105	121.8	17.9	14.8	2.4	85.4	TROJAN TXS119	131.1	22.7	1.2	2.2	70.8									
NORTHrup-KING PX678	134.2	18.0	8.1	4.7	77.9	TAYLOR-EVANS MASTERMAKER	96.7	22.7	8.3	5.8	81.3									
TROJAN TXS118	118.3	18.2	7.0	2.0	77.9	F2 OF 3334	117.6	22.8	30.5	3.7	78.6									
STEWART CARDINAL SX58	153.1	18.5	6.5	3.5	89.3	SO. STATES 866	142.4	22.9	17.4	1.6	80.7									
P.A.G. SX39	137.7	18.8	11.2	0.3	79.4	DEKALB XL85A	105.7	22.9	1.2	8.6	84.1									
PRINCETON SX650	125.6	18.9	4.3	3.1	71.6	COOP. T308	163.6	23.1	0.5	1.5	91.7									
REID'S YELLOW DENT	134.1	18.9	3.3	1.2	83.3	PIONEER 3368	142.8	23.4	18.0	4.7	80.5									
DEKALB EXP 68	115.4	19.1	14.6	6.7	78.9	STULL'S 877SX	127.5	23.4	10.2	3.3	85.2									
FUNK'S G4455	129.8	19.2	0.6	2.8	82.6	DEKALB F880	99.8	23.4	18.2	9.9	78.9									
TROJAN TX115	147.4	19.3	15.7	2.2	85.4	MCNAIR 3838	149.9	23.5	8.7	3.8	87.8									
NORTHrup-KING PX611	157.9	19.3	9.7	4.0	72.4	MIGRO M-0711	123.8	23.8	0.3	1.8	63.3									
TROJAN TXS112	129.9	19.6	0.0	2.1	72.7	P.A.G. SX91	119.5	23.9	33.3	1.6	75.3									
MIGRO M-0702	121.9	19.7	4.3	5.0	84.6	DEKALB XL81	162.4	24.0	0.6	2.8	91.1									
NORTHrup-KING PX616	134.2	19.7	1.5	7.5	86.5	FUNK'S G4646	172.3	24.2	16.1	2.2	81.0									
TAYLOR-EVANS CASHMAKER	149.8	19.8	0.9	1.2	83.3	FUNK'S G5757	143.2	24.5	37.6	2.1	87.8									
PIONEER 3518	173.4	19.9	4.8	4.9	84.9	P.A.G. SYN 3	106.1	24.7	48.9	3.8	86.8									
PRINCETON SX850	137.7	19.9	1.3	1.2	72.4	FUNK'S G4761	131.8	25.9	29.4	1.8	75.5									
P.A.G. SX98	117.7	20.1	24.4	6.8	71.1	LEWIS SEED CO.	126.0	28.7	34.1	10.5	71.1									
SO. STATES 860	169.5	20.2	9.2	1.7	91.4	CONLEE TEX. 28A	113.9	30.8	35.2	5.6	78.1									
STULL'S 807AX	151.3	20.4	7.5	2.0	79.9	YELLOW AVERAGE	135.8	21.3	11.3	3.6	79.6									
DEKALB XL66	172.8	20.5	4.4	3.4	85.2															
SCHEK SX-440N	115.9	20.5	16.3	5.9	83.6															
P.A.G. SYN 2	105.2	20.5	6.5	5.5	85.2															
SO. STATES 909E	169.5	20.6	8.1	1.2	87.0															
DEKALB XL64	156.9	20.6	7.4	1.3	80.2															
P.A.G. SX83	117.5	20.8	3.5	3.8	52.1															
PIONEER 3308	138.1	20.8	0.9	1.5	83.6															
ASGROW RX99	139.2	20.9	3.3	4.3	69.3															
MIGRO M-46SX	152.9	20.9	1.0	2.7	73.2															
PIONEER 3334	161.7	21.0	2.6	2.9	89.8															
STEWART CARDINAL SX71	110.6	21.1	1.4	5.9	67.2															
ASGROW RX100	98.8	21.5	5.2	4.6	76.0															
F2 OF SX39	159.3	21.5	1.5	6.4	84.6															
PIONEER 3329	158.8	21.6	0.8	1.7	86.2															
PIONEER 3369A	162.5	21.6	6.9	1.8	89.6															
PIONEER 3516	121.6	21.7	16.0	5.1	82.0															
P.A.G. 438	147.6	21.7	4.3	4.2	74.7															
STULL'S 809ASP	125.2	21.9	5.3	1.1	71.9															
MIGRO M-0601A	138.3	21.9	0.7	5.1	76.0															
TROJAN TX119	158.9	21.9	13.2	2.4	72.7															
MCNAIR X210F	136.1	22.0	5.9	1.7	77.1															
PRINCETON SX836	144.7	22.0	17.2	2.7	88.0															
STULL'S 809SX	143.7	22.0	5.7	1.3	71.4															
PRINCETON SX823	157.9	22.1	18.4	4.7	82.0															
TROJAN TXS113	158.5	22.1	3.5	3.5	84.9															
TROJAN TXS122						GRAND AVERAGE	132.6	22.3	16.5	4.0	78.9									

TABLE 16--ANNUAL SUMMARY, HIGH POPULATION, PRINCETON AND LEXINGTON, KY.

HYBRID	YIELD BU/AC	Avg % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND	HYBRID	YIELD BU/AC	Avg % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND
YELLOW NORTHrup-KING X155	76.5	15.6	6.8	9.0	79.8	YELLOW SO. STATES 866	132.2	21.8	15.2	2.9	85.2
SCHENK SX-110N	136.5	17.4	8.5	2.5	84.0	DEKALB XL64	129.7	22.0	4.0	1.8	88.7
PIONEER 3571	133.4	17.7	5.8	1.1	84.1	STULL'S 809ASP	132.6	22.0	2.7	5.4	72.4
REID'S YELLOW DENT	85.8	18.5	2.1	19.5	71.0	PIONEER X7571	155.3	22.0	4.2	3.1	82.0
KENTUCKY 105	64.8	18.6	10.6	25.2	72.3	PRINCETON SX836	126.6	22.2	3.1	1.5	80.2
TROJAN TXS118	125.8	18.7	4.1	4.4	77.0	TROJAN TX119	133.5	22.2	0.3	4.1	70.8
STEWART CARDINAL SX58	101.1	18.9	3.5	9.5	82.2	SO. STATES 865	144.1	22.4	23.1	2.1	92.2
NORTHrup-KING PX678	114.2	19.0	7.5	3.1	88.5	F2 OF 3334	87.0	22.5	4.2	6.1	81.8
PRINCETON SX650	134.2	19.1	5.6	0.7	81.3	TROJAN TXS119	125.6	22.6	1.2	3.5	76.4
DEKALB EXP 68	125.4	19.3	1.6	4.2	82.4	STULL'S 877SX	136.4	22.6	9.0	3.5	81.6
TROJAN TXS112	138.9	19.5	4.9	7.1	4.9	DEKALB F880	101.8	22.7	9.3	7.0	79.2
MIGRO M-0702	124.4	19.6	0.0	3.2	81.1	DEKALB XL81	134.5	22.7	0.3	2.9	91.3
TROJAN TX115	124.5	19.6	0.3	3.4	83.7	FUNK'S G4550	119.4	22.9	5.1	2.4	87.1
FUNK'S G4455	106.4	19.6	7.3	3.6	84.9	MIGRO M-0711	137.9	22.9	0.1	2.5	72.7
TAYLOR-EVANS CASHMAKER	122.8	19.7	0.8	5.1	88.0	TROJAN TXS122	142.2	23.1	0.7	2.9	84.6
NORTHrup-KING PX616	121.9	19.7	4.3	5.0	84.6	MCNAIR 3838	150.4	23.3	4.3	3.6	88.9
PRINCETON SX850	153.3	19.7	2.4	5.1	84.8	TAYLOR-EVANS MASTERMAKER	138.3	23.3	0.6	2.6	75.7
P.A.G. SX83	153.0	19.7	3.7	1.7	83.9	FUNK'S G4646	150.8	23.5	8.0	1.9	84.8
P.A.G. SX39	142.5	19.9	3.4	90.5	FUNK'S G5757	139.1	23.6	18.8	1.4	86.7	
PIONEER 3518	121.3	20.0	0.5	2.1	82.6	FUNK'S G4761	133.0	24.0	14.7	1.2	74.2
SO. STATES 860	117.0	20.0	12.7	6.2	74.7	P.A.G. SYN 3	106.1	24.7	48.9	3.8	86.2
PIONEER 3308	125.1	20.1	1.8	3.1	69.9	CONLEE TEX-28A	111.1	26.4	17.6	5.6	74.9
P.A.G. SYN 2	121.6	20.2	8.6	6.0	83.6	LEWIS SEED CO. EX 828	126.3	26.7	17.9	8.6	74.2
SCHENK SX-440N	150.6	20.3	2.2	2.3	87.1	YELLOW AVERAGE	127.6	21.1	5.8	4.3	81.3
MIGRO M-465X	129.9	20.4	1.6	3.0	66.5						
PIONEER 3369A	154.8	20.5	0.4	2.7	88.0						
STULL'S 807ASX	146.4	4.6	2.3	86.5							
DEKALB XL66	129.0	20.7	3.7	2.2	81.9	WHITE KENTUCKY 5921W	93.0	19.4	16.5	11.1	81.8
PRINCETON SX823	110.2	20.7	2.9	1.1	77.9	P.A.G. SYN 1	116.2	22.0	17.2	8.4	79.2
STEWART CARDINAL SX71	154.4	20.7	1.3	3.3	88.2	PIONEER R 511A	137.3	23.1	19.8	5.9	84.4
P.A.G. SX98	131.7	20.9	0.6	2.0	80.9	FUNK'S G508W	134.7	23.1	9.3	4.5	73.3
PIONEER 3334	138.0	20.9	0.5	2.1	78.1	HICKORY KING	63.8	23.7	19.7	10.1	44.5
SO. STATES 909E	116.8	21.0	14.4	5.8	75.3	SCHENK SS-303N	104.1	23.9	13.1	2.4	46.9
MCNAIR X210F	156.8	21.1	6.6	2.9	75.3	BOONE COUNTY WHITE	92.5	24.3	22.9	9.8	71.5
DEKALB XL85A	134.7	21.2	8.7	1.8	84.8	STULL'S 560WSP	143.0	24.4	20.9	4.3	82.3
PIONEER 3329	155.5	21.2	0.8	5.0	86.7	STULL'S 555W	123.8	24.8	22.2	2.8	88.4
COOP. T308	99.0	21.3	0.6	11.6	78.0	P.A.G. 17525W	126.2	25.3	28.3	78.1	
P.A.G. 438	116.9	21.3	8.0	4.4	84.0	STULL'S 850WSX	134.3	25.6	21.8	9.9	73.8
MCNAIR 2210	132.3	21.4	3.6	3.3	75.1	F2 OF 644W	110.1	26.3	18.5	4.0	87.6
STULL'S 809SX	140.8	21.4	8.6	3.4	88.0	FUNK'S EXP 23981W	120.7	26.4	9.0	4.4	84.6
ASGROW RX100	115.5	21.4	0.7	8.4	70.3	SCHENK SX-X04N	154.6	26.4	16.6	2.9	73.7
PIONEER 3516	149.2	21.5	3.5	2.5	89.3	F2 OF 511A	108.1	27.0	22.8	7.5	82.9
MIGRO M-0601A	122.0	21.5	2.7	1.4	73.8	SCHENK SS-101N	149.8	27.4	23.2	4.0	84.5
NORTHrup-KING PX611	132.7	21.6	7.9	3.6	89.2	FUNK'S G4895W	99.0	28.6	18.5	3.8	73.3
F2 OF SX39	91.5	21.6	2.6	5.1	80.9	P.A.G. 644W	142.0	29.0	16.3	2.7	81.6
ASGROW RX99	133.0	21.8	0.4	2.7	79.7	WHITE AVERAGE	118.9	24.9	18.6	5.8	76.4
P.A.G. SX91	104.0	21.8	16.7	1.4	83.2						
PIONEER 3368	150.6	21.8	0.3	1.5	86.8						
TROJAN TXS113	145.7	21.8	9.2	3.0	86.1	GRAND AVERAGE	125.8	21.9	8.4	4.6	80.3

TABLE 17--TWO-YEAR SUMMARY, HIGH POPULATION, PRINCETON AND LEXINGTON, KY., 1969 AND 1971

HYBRID ID	YIELD BU/AC	Avg % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND	HYBRID ID	YIELD BU/AC	Avg % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND
YELLOW						YELLOW					
TROJAN TXS112	129.7	17.6	2.9	10.6	75.9	PIONEER 3308	116.4	18.6	4.1	11.7	79.4
TAYLOR-EVANS CASHMAKER	113.6	17.9	1.5	16.8	91.1	SD. STATES 860	101.5	18.6	19.5	18.0	81.9
SD. STATES 860	112.4	18.4	8.5	16.0	80.3	PIONEER 3369A	134.6	18.7	0.2	13.7	85.2
PIONEER 3308	125.1	18.5	0.9	13.4	78.3	KENTUCKY 105	80.9	18.8	10.5	23.2	81.3
PIONEER 3369A	142.6	18.6	0.2	14.8	85.5	STULL'S 807ASX	119.6	19.3	10.4	11.5	84.5
PIONEER 3516	127.8	18.6	3.0	11.9	89.1	DEKALB XL66	113.6	19.5	8.5	15.5	85.4
KENTUCKY 105	81.3	18.7	10.9	24.0	79.9	TROJAN TXS122	117.2	20.7	3.8	12.2	84.8
STULL'S 807ASX	134.2	19.5	3.6	13.1	84.1	FUNK'S G5757	117.8	20.9	11.2	7.8	86.5
DEKALB XL66	115.5	19.6	2.3	19.7	82.6	SD. STATES 866	115.4	21.1	13.3	8.1	85.8
SD. STATES 865	126.2	20.1	15.0	12.4	86.6	FUNK'S G4761	112.3	21.2	7.3	9.5	82.3
TROJAN TXS122	123.7	20.7	0.4	14.4	85.2	YELLOW AVERAGE	112.3	19.7	8.8	13.5	83.6
TAYLOR-EVANS MASTERMAKER	132.6	20.8	0.3	14.4	81.8						
FUNK'S G5757	128.9	21.5	11.0	6.4	85.5	WHITE					
FUNK'S G4761	128.0	21.7	8.9	9.0	80.3	KENTUCKY 5921W	101.1	19.0	17.9	14.8	81.8
YELLOW AVERAGE	122.2	19.4	5.1	14.2	83.3	PIONEER 511A	112.9	21.6	15.9	16.2	83.9
WHITE						STULL'S 850WSX	111.2	23.0	18.9	13.2	79.5
KENTUCKY 5921W	102.9	19.0	10.9	14.8	80.6	WHITE AVERAGE	108.0	21.1	17.6	14.7	81.8
PIONEER 511A	126.1	22.0	11.6	15.9	82.2	GRAND AVERAGE	111.3	20.0	10.9	13.8	83.1
STULL'S 850WSX	123.9	23.5	14.2	12.9	79.0						
STULL'S 555W	123.8	24.8	22.2	2.8	88.4						
FUNK'S G4895W	101.1	26.4	14.0	5.7	82.2						
WHITE AVERAGE	114.0	22.7	13.6	11.4	81.8						
GRAND AVERAGE	120.2	20.3	7.2	13.5	82.9						

TABLE 18--THREE-YEAR SUMMARY, HIGH POPULATION, PRINCETON AND LEXINGTON, KY., 1968, 1969 AND 1971

HYBRID ID	YIELD BU/AC	Avg % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND	HYBRID ID	YIELD BU/AC	Avg % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND
YELLOW						YELLOW					
KENTUCKY 105						KENTUCKY 105	12.8	15.5	15.8	51.8	43.8
TROJAN X6711						TROJAN X6711	71.3	17.6	35.8	21.0	63.5
TROJAN X6712						TROJAN X6712	70.6	18.0	22.5	33.7	68.8
P.A.G. 21130						TROJAN X6718	8.7	19.2	0.0	9.7.2	21.4
STULL'S EXP 911SX						P.A.G. 21130	70.3	19.8	12.6	38.0	55.2
PIONEER 3179						STULL'S EXP 911SX	77.1	20.0	25.2	43.9	59.4
SD. STATES 866						PIONEER 3179	81.8	20.6	6.7	46.9	58.9
FUNK'S G4761						SD. STATES 866	40.9	21.7	23.2	37.0	60.9
PIONEER 3147						FUNK'S G4761	69.7	21.9	25.1	30.5	64.1
FUNK'S G4808						PIONEER 3147	97.3	22.1	2.6	58.2	80.7
WHITE AVERAGE						FUNK'S G4808	63.8	23.4	17.5	49.1	66.1
GRAND AVERAGE						WHITE AVERAGE	57.9	19.9	17.9	46.9	57.9
WHITE						WHITE					
SCHENK SS-101N						SCHENK SS-101N	36.5	20.1	41.3	22.2	35.4
PIONEER 511A						PIONEER 511A	42.5	20.2	27.8	44.9	59.9
STULL'S 560WSP						STULL'S 560WSP	57.2	21.5	19.8	57.9	53.6
P.A.G. 644W						P.A.G. 644W	78.9	22.3	20.1	35.6	71.9
WHITE AVERAGE						WHITE AVERAGE	53.8	21.0	27.3	40.1	55.2
GRAND AVERAGE						GRAND AVERAGE	56.9	20.2	20.2	45.2	57.2

CORN LEAF DISEASES IN 1971*

Southern corn leaf blight did not develop in Kentucky during 1971 to the extent it developed in 1970. Several reasons can be given for this: (1) the disease developed from local overwintering sources, and spores of the fungus were not blown in from southern areas as in 1970; (2) weather conditions were favorable for development at times, but there was no prolonged favorable weather for rapid disease development; and (3) approximately 80% of the corn planted in Kentucky during 1971 was resistant, i.e., because of normal cytoplasm.

Other diseases did develop during 1971 and although these did not appear to affect yield seriously in the varietal tests, there were differences in disease development. Table 20 attempts to differentiate the response of the varieties in the 1971 Corn Performance Test.

Disease readings were made at Hartford and Henderson on September 8, 16 and 27. The scores in the table are averages of these three readings. Bacterial wilt (Stewart's disease) leaf symptoms and northern leaf blight could not be separated in the field so leaf samples were brought back to the laboratory and examined under the microscope for the presence of the causal bacteria (*Xanthomonas stewartii*) and/or fungus (*Helminthosporium turcicum*).

*Prepared by Dr. A. S. Williams, Department of Plant Pathology.

TABLE 20--CORN LEAF DISEASES RATED AT HENDERSON AND HARTFORD, KY., IN 1971

Hybrid	Disease ²			Disease ²			Disease ²		
	SCLB B-N	SCLB BS	R	Hybrid	SCLB	SCLB B-N	BS	R	
Asgrow RX99	0.05	3 BN	0	Pioneer 3334	0	1 B	1	2	
RX100	0.05	3.5 BN	0	3368	0.05	2.5 BN	1	0	
Conlee Tex. 28A	0.05	2.5 BN	1	3369A	0	3 BN	2	T	
Dekalb XL64	0	1 BN	T	3516	1	0.05 BN	0.05	1	
XL66	0.05	2.5 B	T	3518	0	3 BN	0	T	
XL85A	0	1 BN	1	3571	0	2.5 BN	2	0	
Exp. 68	0	4 BN	0	511A	0	2 BN	2	1	
F880	1	3 B	1	X7571	0	2 BN	0	0	
Coop. T308	5	4 BN	3	Princeton SX650	0	3 BN	1	T	
Funk's G4455	0.05	4 B	0	SX823	0.05	2 BN	0	2	
G4550	0	4 BN	2	SX836	1	1 N	1	0	
G4646	0	2 BN	0	SX850	0	3 BN	0	0	
G4761	0	1 BN	T	Schenk SS-101N	0	0.05 B	T	0	
G5757	0	1 BN	2	SS-110N	0	3 BN	T	0	
G508W	0	2 BN	3	SS-303N	0.05	1 BN	1	1	
G4895W	0	2 BN	2	SX-440N	1	0.05 BN	T	T	
Exp. 23981W	0	3 BN	1	SX-X04N	0	0.05 BN	T	T	
K.A.E.S. Ky 105	5	0	T	So. States SS840	0	4 B	1	0	
Ky 5921W	5	0	T	SS865	0	1 B	1	T	
Lewis Es628	0	3 BN	1	SS866	0	2 BN	T	T	
McNair X210F	0.05	0.05 BN	T	SS909E	0	2.5 BN	0.05	0	
2210	0	1.5 BN	0	Stewart Cardinal SX58	2	2 N	0	0	
3838	0	1 B	0	SX71	0	2 BN	1	1	
Migro M-46SX	0.05	3 BN	T	Stull's 555W	0	2 BN	2	T	
M-0601A	0	2 BN	T	560WSP	1	2 BN	0	1	
M-0702	0	4 BN	1	807ASX	0	2.5 BN	T	T	
M-0711	1	2.5 BN	T	809SX	0.05	1.5 BN	T	T	
Northrup-King EX611	0	2 BN	T	809ASP	0	2 BN	T	T	
EX616	1	3 BN	T	850WSX	0.05	0.05 BN	T	T	
EX678	0	2.5 BN	1	877SX	0.05	2 BN	T	0	
X-155	0	4 N	0	Taylor-Evans Cashmaker	0	4 BN	T	0	
P.A.G. SX39	0.05	3 BN	0	Mastermaker	0	2.5 BN	T	0	
SX83	1	1.5 B	2	Trojan TXS112	0.05	2 BN	0	1	
SX91	0	2 BN	0.05	TXS113	1	2 BN	1	T	
SX98	0.05	3 BN	2	TXS115	0.05	3 BN	2	0	
438	0	2 B	2	TXS118	0	3.5 B	1	0	
644W	0	2 BN	1	TXS119	0	2 BN	3	0	
1752W	0	1 BN	1	TXS119	0.05	2 BN	2	T	
Syn. 1	0.05	2 B	1	TXS122	0.05	2 BN	1	T	
Syn. 2	0	3 BN	.2	Boone County White	0	2 BN	1	0	
Syn. 3	0.05	2 BN	T	Reid's Yellow Dent	0	1.5 B	T	T	
Pioneer 3308	0	2 BN	2	Hickory King	2	2 BN	T	T	
3329	0	2.5 BN	T	F2 of 3334	0	2 BN	T	T	
				F2 of SX39	1	3 BN	T	T	
				F2 of 644W	0	1 BN	T	T	
				F2 of 511A	1	3 BN	1	0	

¹ Disease ratings based on 0 to 5 with 5 being most severe. T = trace. Rating for each variety is an average of scores given at Hartford and Henderson, Ky. on 9-7, 9-16, and 9-27.

² Disease: SCLB (Southern Corn Leaf Blight); B-N = Bacterial Wilt N = Northern Leaf Blight). Separated by microscopic examination BS (Brown Spot caused by Physoderma); R (Rust).