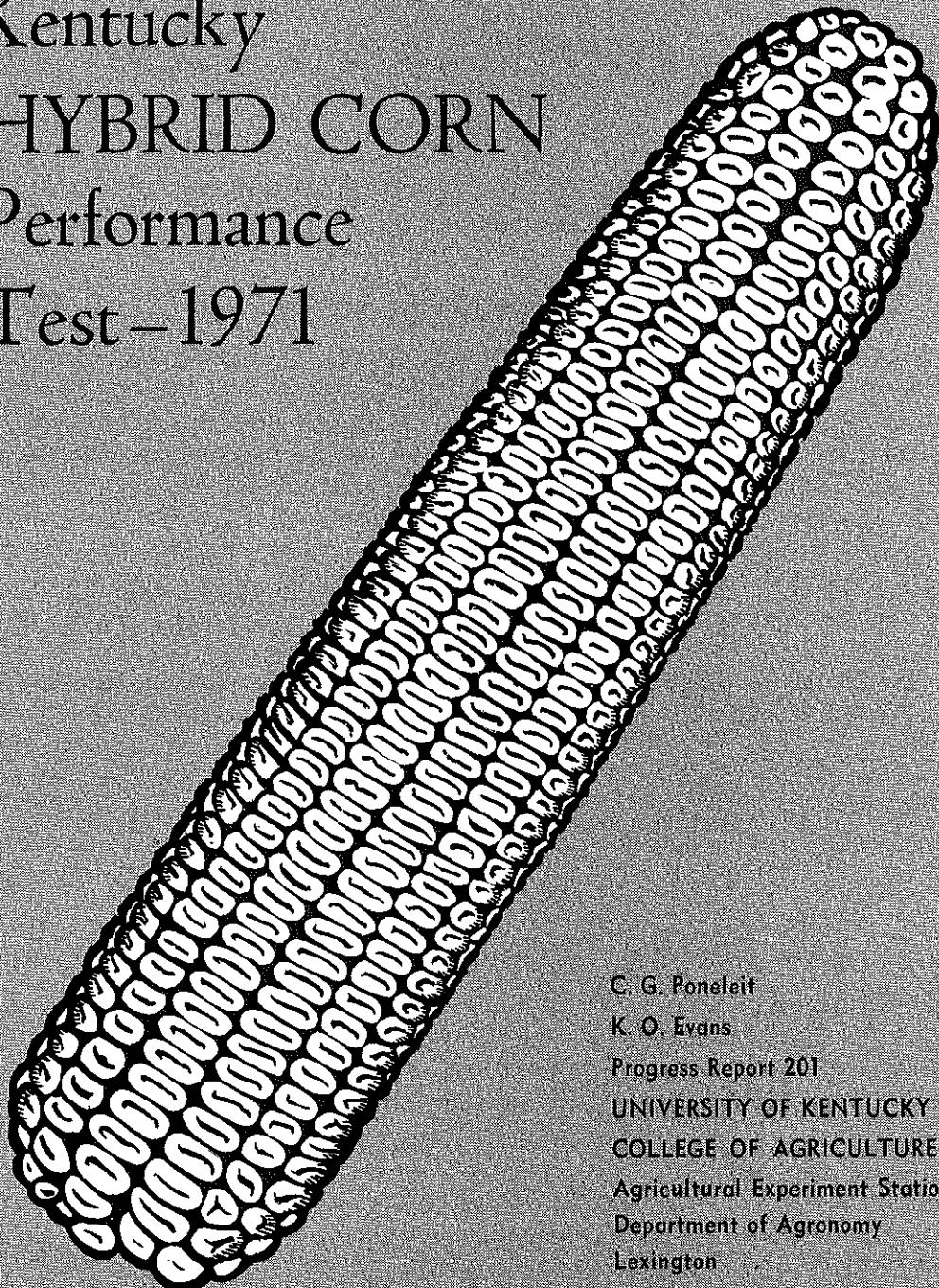


Kentucky HYBRID CORN Performance Test—1971



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**



ACKNOWLEDGMENTS

The authors are grateful to Mr. John Byers, Department of Agronomy, for his assistance in summarizing the results presented in this progress report and to Dr. A. S. Williams, Department of Plant Pathology, for evaluation of the corn leaf diseases. Also acknowledgments are made to the following persons who aided in the conduct of this year's performance test:

Charles Tutt, Research Specialist, West Kentucky Substation, Princeton.
 Paul Appel, Superintendent, West Kentucky Substation, Princeton.
 Dr. James Herbek, Extension Specialist in Grain Crops, West Kentucky Substation, Princeton.
 George Armstrong, Superintendent, Robinson Substation, Quicksand.
 G. E. Wyatt, Area Extension Agent, Mayfield.
 Stuart Brabant, Area Extension Agent, Henderson.
 John Kavanaugh, Area Extension Agent, Hartford.
 Clifton Taylor, Area Extension Agent, Franklin.
 Dr. Morris Bitzer, Extension Specialist in Grain Crops, Lexington.

LIST OF TABLES

1.—Pedigree of Experiment Station Hybrids in 1971	(Page) 5
2.—Hybrids Tested in 1971	6
3.—Agronomic Information Pertaining to 1971 Test Locations	9
4.—Annual Summary, Normal Population, Lowes, Ky.	10
5.—Annual Summary, Normal Population, Princeton, Ky.	11
6.—Annual Summary, Normal Population, Henderson, Ky.	12
7.—Annual Summary, Normal Population, Hartford, Ky.	13
8.—Annual Summary, Normal Population, Franklin, Ky.	14
9.—Annual Summary, Normal Population, Lexington, Ky.	15
10.—Annual Summary, Normal Population, Quicksand, Ky.	16
11.—Annual Summary, Normal Population, All Non-Virus Locations, 1971	17
12.—Two-Year Summary, Normal Population, All Non-Virus Locations, 1969 and 1971	18
13.—Three-Year Summary, Normal Population, All Non-Virus Locations, 1968, 1969, and 1971	18
14.—Annual Summary, High Population, Princeton, Ky.	19
15.—Annual Summary, High Population, Lexington, Ky.	20
16.—Annual Summary, High Population, Princeton and Lexington, Ky.	21
17.—Two-Year Summary, High Population, Princeton and Lexington, Ky., 1969 and 1971	22
18.—Three-Year Summary, High Population, Princeton and Lexington, Ky., 1968, 1969, and 1971	22
19.—Maize Dwarf Mosaic Virus Test, Frankfort, Ky., 1971	22
20.—Corn Leaf Diseases Rated at Henderson and Hartford in 1971	24

Kentucky Hybrid Corn Performance Test-1971

By G. 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 CI66)

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	Stewart Hybrids, Inc.
SX71	A	"	2X	Route 1 Princeville, Ill. 61559
Stull's 555W	A	White	4X	Stull Bros. Inc.
560WSP	A,B	"	3X	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	Trojan Seed Co.
TXS113	A	"	2X	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 lbs/A P- 50 lbs/A K-100 lbs/A	AAtrex and Sutan Preplant	April 22	Sept. 23 " 24	
(2) Princeton, Ky. Western Ky. Substation	Huntington & Lindside Silt Loam	N-150 lbs/A P-None K- 50 lbs/A	AAtrex Broadcast	April 27 " 28	Sept. 28 thru Oct. 1	
(3) Henderson, Ky. James McConathy	Wakeland Silt Loam	N-200 lbs/A P- 75 lbs/A K-100 lb/A	AAtrex and Sutan Preplant	June 18	Nov. 10 " 11	
(4) Hartford, Ky. Walter and Earl Campbell	Stendal Silt Loam	N-200 lbs/A P-None K-None	AAtrex and Sutan Preplant	May 25	Oct. 7 " 8	
(5) Franklin, Ky. Robert Wade	Pembroke Silt Loam	N-150 lbs/A P- 85 lbs/A 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 lbs/A 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 lbs/A P-None K- 50 lbs/A	AAtrex Broadcast	June 10	Nov. 16	MDM and Johnsongrass Competition
(8) Quicksand, Ky. Robinson Substation	Philo Silt Loam	N-150 lbs/A P- 40 lbs/A K- 50 lbs/A	AAtrex and Sutan Preplant	May 20	Oct. 27 " 28	MDM

TABLE 4--ANNUAL SUMMARY, NORMAL POPULATION, LOWES, 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																	
NORTHROP-KING X155	86.5	16.4	0.0	2.9	90.1	STULL'S 809SX	168.8	22.3	0.0	0.0	87.5						
KENTUCKY 105	97.7	16.8	0.7	3.5	80.5	MIGRO M-0601A	157.7	22.5	0.0	0.6	77.1						
SCHENK SX-110N	176.8	17.0	0.0	0.0	90.6	P.A.G. SX91	124.7	22.6	0.0	0.0	88.5						
STEWART CARDINAL SX58	126.0	19.2	0.7	0.7	87.0	F2 OF SX39	100.1	22.6	0.0	1.1	91.7						
NORTHROP-KING PX678	145.3	19.2	0.0	0.0	85.9	REID'S YELLOW DENT	93.9	22.7	10.8	5.8	83.3						
TROJAN TXS112	165.2	19.6	0.0	0.0	78.6	PIONEER 3518	127.9	22.7	0.0	1.8	84.4						
PIONEER 3571	131.4	19.6	0.0	0.0	80.7	FUNK'S G5757	170.4	23.2	1.1	0.7	89.1						
TAYLOR-EVANS CASHMAKER	158.4	19.7	0.0	0.0	88.5	DEKALB XL64	143.4	23.3	0.0	0.6	87.5						
SCHENK SX-440N	179.1	19.7	0.0	0.0	87.0	STULL'S 809ASP	154.7	23.4	0.0	0.7	79.2						
PRINCETON SX850	182.8	19.8	0.0	0.0	91.1	ASGROW RX100	117.2	23.6	0.0	0.7	78.6						
TROJAN TX115	152.5	19.8	0.0	0.6	85.4	FUNK'S G4646	167.7	23.6	0.0	0.0	90.6						
PIONEER 3369A	195.3	19.8	0.0	0.0	92.7	MCNAIR 2210	180.8	23.7	0.0	0.5	96.4						
DEKALB XL85A	188.9	20.0	0.6	0.0	92.2	TROJAN TX119	161.3	23.8	2.2	2.2	79.2						
MIGRO M-0702	160.4	20.1	0.0	0.6	90.1	PRINCETON SX836	174.3	23.9	0.0	0.0	82.8						
NORTHROP-KING PX611	166.3	20.2	0.0	1.0	94.3	STULL'S 877SX	158.3	24.3	0.6	1.2	88.5						
PIONEER 3334	162.8	20.3	0.0	0.0	80.2	DEKALB F880	108.4	24.7	2.7	2.1	95.8						
STULL'S 807ASX	180.4	20.4	0.0	0.0	88.0	ASGROW RX99	158.7	24.7	0.0	0.0	87.5						
PIONEER 3308	165.4	20.5	0.0	0.6	84.9	TROJAN TXS113	160.8	24.7	0.5	0.0	93.2						
FUNK'S G4455	121.3	20.5	0.0	0.8	81.3	FUNK'S G4550	146.9	25.4	0.0	0.0	89.1						
P.A.G. SX83	178.0	20.5	0.0	0.0	95.8	FUNK'S G4761	158.4	25.5	0.0	0.0	77.1						
DEKALB XL81	145.0	20.6	0.0	0.0	88.0	LEWIS SEED CO. EX 828	167.3	27.1	12.4	1.9	84.9						
P.A.G. 438	155.1	20.7	0.0	1.7	91.1	CONLEE TEX-28A	160.4	29.3	7.2	2.6	81.8						
P.A.G. SX39	186.0	20.7	0.0	0.0	92.2	YELLOW AVERAGE		154.3	21.7	0.6	0.8	87.1					
PIONEER 3516	162.1	20.8	0.0	0.0	93.8	WHITE											
PIONEER 3329	184.4	20.8	0.0	0.0	89.6	KENTUCKY 5921W	135.0	18.8	1.3	2.7	87.2						
SO STATES 909E	181.4	20.9	0.5	0.5	94.3	BOONE COUNTY WHITE	130.5	23.4	11.9	6.3	89.6						
PRINCETON SX650	166.7	20.9	1.2	0.0	88.5	P.A.G. SYN 1	148.4	23.5	0.5	2.5	85.4						
MIGRO M-46SX	112.4	20.9	0.0	0.0	67.2	FUNK'S G508W	165.6	23.5	1.9	1.3	81.8						
PIONEER 3368	190.2	20.9	0.0	0.0	94.3	STULL'S 560WSP	161.4	23.6	0.0	0.0	94.8						
F2 OF 3334	108.0	21.1	0.0	2.1	78.6	HICKORY KING	56.7	23.7	18.1	3.1	49.5						
MIGRO M-0711	174.1	21.4	0.0	0.0	87.0	FUNK'S EXP 23981W	169.5	24.0	2.2	0.0	93.2						
TROJAN TXS119	171.0	21.7	0.0	0.6	85.4	STULL'S 555W	154.2	24.5	0.6	0.0	90.6						
TROJAN TXS122	170.8	21.7	0.0	0.0	92.2	SCHENK SX-X04N	154.1	24.7	0.0	0.0	75.5						
DEKALB EXP 68	151.1	21.7	0.0	0.0	84.9	P.A.G. I7525W	165.0	25.1	0.0	0.0	88.0						
DEKALB XL66	144.3	21.7	0.0	0.0	91.7	F2 OF 511A	161.0	25.5	2.1	0.5	96.4						
PIONEER X7571	179.1	21.7	0.0	0.0	89.1	STULL'S 850WSX	175.2	26.1	0.0	0.0	89.6						
TAYLOR-EVANS MASTERMAKER	175.9	21.8	0.0	2.4	85.4	SCHENK SS-303N	84.2	26.2	0.0	3.0	52.6						
SO STATES 860	139.0	21.8	0.0	0.6	85.9	F2 OF 644W	117.3	26.6	0.0	0.0	85.9						
SO STATES 866	160.1	21.8	0.0	0.5	97.4	PIioneer 511A	192.8	26.7	1.1	0.6	93.2						
COOP. T308	116.8	21.8	0.0	8.2	P.A.G. 644W	149.5	26.7	0.0	0.0	90.1							
SO STATES 865	172.3	21.8	0.0	0.0	97.9	SCHENK SS-101N	197.0	26.8	0.0	0.0	92.2						
PRINCETON SX823	146.0	21.9	0.6	0.0	88.0	FUNK'S G4895W	123.9	28.5	7.3	0.0	77.6						
MCNAIR X210F	185.1	22.0	0.0	0.0	82.8	WHITE AVERAGE		146.1	24.6	2.5	1.2	84.2					
P.A.G. SYN 2	146.0	22.0	0.0	1.1	94.3	GRAND AVERAGE		152.6	22.3	1.0	0.9	86.5					
STEWART CARDINAL SX71	166.4	22.1	0.0	0.0	83.3												
TROJAN TXS118	131.0	22.1	0.0	0.6	77.6												
P.A.G. SX98	174.6	22.1	0.0	0.0	84.9												
MCNAIR 3838	180.4	22.3	0.0	0.6	93.2												

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											
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	CONLEE 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 TXS119	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. EX 828	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					
MIGRO M-46SX	126.0	19.4	0.0	4.7	76.6		130.7	20.1	0.6	4.8	87.8
ASGROW RX100	121.0	19.4	0.0	0.0	81.3	WHITE					
MIGRO M-0702	122.1	19.4	0.0	4.3	87.0	KENTUCKY 5921W	84.3	17.6	0.8	23.6	91.4
TROJAN TXS113	140.4	19.4	1.2	2.8	93.2	BOONE COUNTY WHITE	115.9	19.8	2.9	2.7	83.3
P.A.G. SYN 2	118.3	19.4	0.0	5.7	87.5	FUNK'S G508W	147.1	21.3	1.9	3.1	82.8
STULL'S 807ASX	156.6	19.4	1.1	1.7	94.3	STULL'S 555W	142.4	21.5	2.3	4.5	91.7
FUNK'S G5757	145.3	19.6	0.0	3.8	95.3	F2 OF 511A	134.9	21.6	1.1	4.8	96.9
TAYLOR-EVANS MASTERMAKER	160.2	19.6	0.0	1.3	84.4	HICKORY KING	63.3	21.7	5.7	12.5	45.8
MCNAIR X210F	156.1	19.6	0.0	2.4	82.3	FUNK'S EXP 23981W	131.7	21.8	0.0	4.3	97.9
PIONEER 3571	124.1	19.7	0.0	3.5	88.0	STULL'S 560WSP	146.4	22.0	1.1	2.9	91.7
PIONEER X7571	138.4	19.8	0.0	4.1	89.6	F2 OF 644W	115.7	22.2	0.0	1.2	85.4
PIONEER 3334	157.5	19.8	0.0	1.1	88.0	STULL'S 850WSX	169.1	22.4	5.8	3.4	89.1
SO STATES 909E	139.2	19.9	6.4	2.9	90.6	PIONEER 511A	155.8	22.5	0.0	2.4	89.6
DEKALB EXP 68	137.6	19.9	0.0	6.6	91.1	SCHENK SS-303N	84.9	22.7	0.0	4.9	51.6
PRINCETON SX650	145.7	20.0	0.0	2.2	92.2	P.A.G. SYN 1	112.2	22.8	0.7	4.4	83.3
COOP. T308	98.2	20.0	0.0	10.6	88.5	SCHENK SX-X04N	138.8	23.0	0.0	4.2	73.4
PIONEER 3308	133.4	20.1	0.0	1.2	88.0	P.A.G. 17525W	154.9	23.0	0.7	3.1	83.9
P.A.G. 438	88.3	20.1	0.0	19.1	SCHENK SS-101N	164.0	23.8	0.6	5.6	93.8	
DEKALB XL64	119.9	20.1	0.6	5.8	FUNK'S G4895W	110.8	25.6	3.8	3.9	80.7	
DEKALB XL66	106.6	20.2	0.0	3.9	P.A.G. 644W	162.0	26.1	0.0	2.3	89.6	
PIONEER 3329	156.9	20.2	0.0	3.3	WHITE AVERAGE						
PIONEER 3368	153.7	20.3	0.0	0.6	92.2		127.3	22.1	1.5	6.2	83.9
F2 OF 3334	87.4	20.3	0.0	2.0	85.4	GRAND AVERAGE	130.0	20.5	0.8	5.1	87.0
TROJAN TXS122	158.7	20.3	0.0	7.0	92.2						
STULL'S 877SX	148.5	20.6	0.0	1.2	82.3						

TABLE 6--ANNUAL SUMMARY, NORMAL POPULATION, HENDERSON, 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	62.8	17.3	4.2	30.3	90.1	MCAIR X210F	128.6	24.0	1.9	17.3	84.4	
PIONEER 3518	108.3	17.3	2.5	12.1	89.1	PIONEER X7571	146.7	24.1	5.5	15.5	94.3	
PIONEER 3571	114.1	18.5	2.5	12.7	84.4	TROJAN TX119	130.8	24.1	0.0	9.9	90.6	
PIONEER 3334	123.9	19.3	1.3	14.1	81.8	TROJAN TXS119	121.7	24.2	2.3	13.5	84.9	
FUNK'S G4455	83.8	19.5	1.1	15.1	76.0	TAYLOR-EVANS MASTERMAKER	131.8	24.2	2.6	15.8	89.1	
SCHENK SX-110N	121.4	19.6	33.0	16.3	89.6	FUNK'S G4550	112.3	24.3	16.0	14.9	88.0	
TROJAN TX115	101.6	20.4	2.6	17.3	83.9	ASGROW RX99	101.4	24.4	0.0	12.5	76.0	
STEWART CARDINAL SX58	71.1	20.6	17.7	36.3	90.1	P.A.G. SX91	99.5	24.5	24.0	12.0	87.0	
TROJAN TXS112	124.5	20.6	47.0	13.2	87.0	SO STATES 909E	81.0	24.6	60.5	22.3	89.6	
PIONEER 3516	122.3	20.7	3.9	13.0	80.2	ASGROW RX100	101.3	24.6	0.7	7.3	77.1	
MIGRO M-46SX	98.9	20.7	6.1	11.2	65.1	DEKALB XL85A	126.7	25.0	41.4	22.1	85.9	
DEKALB EXP 68	91.2	21.0	0.0	11.2	80.2	FUNK'S G4761	101.6	25.1	3.0	6.0	79.2	
NORTHRUP-KING PX678	119.2	21.1	23.7	12.4	90.1	MIGRO M-0711	131.5	25.2	0.0	5.1	91.1	
STULL'S 80TASX	127.3	21.1	11.0	20.6	91.1	STULL'S 809SX	126.8	25.3	12.1	7.7	84.4	
DEKALB XL64	126.7	21.2	6.2	11.5	86.5	SO STATES 860	83.8	25.4	73.9	10.8	74.0	
PIONEER 3329	130.4	21.3	3.0	19.1	84.9	FUNK'S G5757	113.8	25.7	33.3	12.5	92.2	
SO STATES 865	136.5	21.3	51.5	11.7	92.7	MCAIR 2210	145.1	25.8	1.6	15.9	94.3	
TROJAN TXS118	95.4	21.4	3.1	35.1	85.4	MCAIR 3838	135.5	26.4	21.3	14.9	90.6	
MIGRO M-0702	111.5	21.6	6.5	13.8	91.1	DEKALB F880	66.7	26.6	49.8	34.7	86.5	
PRINCETON SX650	131.4	21.7	11.6	10.7	88.5	P.A.G. SYN 3	98.9	27.2	14.5	20.2	87.0	
NORTHRUP-KING PX616	122.1	21.8	4.7	25.0	89.6	LEWIS SEED CO. EX 828	99.0	29.3	44.0	20.4	81.8	
TAYLOR-EVANS CASHMAKER	95.6	21.8	2.6	22.3	78.1	REID'S YELLOW DENT	51.6	30.4	67.8	20.8	68.8	
SCHENK SX-440N	127.9	21.8	8.3	14.6	88.0	CONLEE TEX-28A	92.1	32.3	34.4	38.5	84.9	
PRINCETON SX850	138.7	21.9	8.4	16.8	90.1	YELLOW AVERAGE		110.8	23.1	15.1	17.3	85.4
DEKALB XL66	83.1	22.0	35.0	16.1	73.4	WHITE						
TROJAN TXS122	130.2	22.1	1.7	24.3	92.2	PIONEER 511A	106.0	25.2	31.3	19.6	74.5	
PIONEER 3369A	147.0	22.1	0.0	17.1	93.2	FUNK'S G508W	97.9	25.3	44.2	13.9	76.0	
P.A.G. SX98	132.7	22.1	0.0	9.6	93.8	STULL'S 560WSP	103.4	25.5	61.7	14.9	90.6	
KENTUCKY 105	29.0	22.2	71.6	24.1	58.3	FUNK'S EXP 23981W	110.5	26.0	35.3	20.6	91.1	
NORTHRUP-KING PX611	100.8	22.2	46.7	23.3	89.6	SCHENK SS-303N	82.3	26.1	21.3	5.3	47.9	
PRINCETON SX836	114.4	22.4	1.3	9.5	83.9	STULL'S 555W	120.8	26.2	46.9	17.2	82.3	
PIONEER 3308	109.0	22.6	3.4	14.4	F2 OF 644W	85.2	26.3	21.7	5.7	90.6		
TROJAN TXS113	119.4	22.7	14.0	21.1	89.1	P.A.G. SYN 1	94.8	26.3	45.0	14.9	89.6	
P.A.G. SX83	111.9	22.8	27.5	19.8	94.8	HICKORY KING	45.6	26.4	58.4	13.7	53.6	
F2 OF SX39	85.4	22.8	8.8	33.8	KENTUCKY 5921W	44.4	26.5	69.3	21.3	75.5		
STEWART CARDINAL SX71	143.6	22.9	2.8	19.2	91.7	P.A.G. 644W	115.5	27.8	11.2	14.2	84.9	
P.A.G. 438	100.9	22.9	10.1	35.5	SCHENK SS-101N	134.7	27.8	38.1	8.6	90.1		
STULL'S 809ASP	124.7	22.9	1.7	21.9	87.5	BOONE COUNTY WHITE	57.9	28.0	73.0	19.7	78.1	
MIGRO M-0601A	107.5	23.3	4.0	7.2	84.9	STULL'S 850WSX	140.2	28.4	13.1	13.7	84.9	
DEKALB XL81	120.4	23.4	9.9	19.8	85.9	SCHENK SX-X04N	119.9	28.9	6.3	10.0	72.9	
COOP. T308	75.8	23.5	1.7	34.2	84.9	P.A.G. 1752W	115.3	29.1	4.0	12.3	78.6	
PRINCETON SX823	108.6	23.5	0.0	6.5	85.9	F2 OF 511A	73.0	29.2	61.8	13.6	81.3	
P.A.G. SYN 2	91.7	23.6	9.2	16.1	83.9	FUNK'S G4895W	77.3	32.6	17.9	13.3	70.8	
STULL'S 877SX	129.7	23.6	1.9	26.9	WHITE AVERAGE		95.8	27.3	36.7	14.0	78.5	
SO STATES 866	122.2	23.7	37.4	11.1	89.6	GRAND AVERAGE		107.8	23.9	19.4	16.6	84.0
PIONEER 3368	149.1	23.7	1.1	6.1	91.7							
P.A.G. SX39	136.4	23.8	3.5	16.9	88.5							
FUNK'S G4646	140.1	23.9	14.2	11.7	96.9							
F2 OF 3334	52.1	24.0	8.3	9.1	53.6							

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

HYBRID	YIELD BU/AC	Avg % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND	HYBRID	YIELD BU/AC	Avg % MDIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND
YELLOW											
NORTHRUP-KING X155	105.1	15.1	0.5	2.9	91.7	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 X7571	164.7	23.8	0.0	11.5	87.5
NORTHRUP-KING PX611	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	DEKALB 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 3334	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 G4646	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 PX678	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 PX616	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					
TROJAN TXS113	154.3	20.8	0.5	6.8	91.1		136.1	22.1	0.8	11.5	86.9
STULL'S 807ASX	129.6	20.9	0.5	16.0	90.6	WHITE					
TAYLOR-EVANS CASHMAKER	122.5	21.0	0.0	10.7	82.8	KENTUCKY 5921W	102.3	18.9	2.6	27.0	78.6
PRINCETON SX823	137.1	21.3	0.0	2.9	88.5	SCHENK SS-101N	129.7	22.7	7.5	34.8	91.1
DEKALB XL66	124.3	21.3	0.0	10.4	85.4	FUNK'S EXP 23981W	123.1	23.5	2.2	15.9	92.2
PIONEER 3368	169.2	21.4	0.0	9.1	92.2	PIONEER 511A	135.5	23.6	1.1	27.7	94.8
F2 OF SX39	98.5	21.5	0.0	6.7	89.1	STULL'S 560WSP	149.2	23.8	1.8	8.9	82.3
COOP. T308	91.4	21.6	0.0	18.9	82.3	SCHENK SX-X04N	90.8	24.2	1.3	34.2	84.4
PIONEER 3329	148.4	22.1	0.0	11.5	87.5	HICKORY KING	71.1	24.2	16.1	4.7	47.9
SCHENK SX-440N	151.1	22.1	0.0	15.5	85.4	P.A.G. SYN 1	123.8	24.8	3.0	22.1	84.9
STEWART CARDINAL SX71	192.2	22.1	0.0	4.1	92.2	F2 OF 644W	112.0	24.8	1.8	11.4	90.6
PIONEER 3369A	197.4	22.2	0.0	0.0	90.1	SCHENK SS-303N	93.4	25.2	0.0	6.5	53.6
SO STATES 909E	118.9	22.3	2.6	30.5	83.3	STULL'S 850WSX	132.1	25.4	1.1	17.8	90.1
PIONEER 3334	136.7	22.4	0.0	7.8	84.9	STULL'S 555W	178.9	25.8	0.0	6.0	95.8
MIGRO M-0601A	114.8	22.5	0.7	3.8	80.7	F2 OF 511A	124.9	26.5	2.2	18.7	96.9
SO STATES 865	159.1	22.7	0.0	19.4	85.4	P.A.G. 17525W	136.7	26.8	2.9	13.5	79.2
MCNAIR X210F	120.7	22.7	0.0	44.2	86.5	BOONE COUNTY WHITE	89.2	27.0	13.0	43.0	83.9
PIONEER 3308	155.1	22.8	0.0	11.3	80.7	FUNK'S G508W	141.4	27.5	2.0	9.8	75.0
MIGRO M-0711	161.1	23.0	0.0	2.2	92.2	P.A.G. 644W	142.2	28.7	0.0	3.0	86.5
TROJAN TXS119	147.5	23.0	0.0	1.8	83.3	FUNK'S G4895W	111.2	32.0	1.1	11.3	83.3
P.A.G. SX39	153.7	23.1	0.0	12.0	91.7	WHITE AVERAGE					
MIGRO M-46SX	128.2	23.1	0.0	1.3	73.4		121.5	25.3	3.3	17.6	82.8
ASGROW RX99	124.9	23.2	0.7	4.8	85.9	GRAND AVERAGE					
FUNK'S G4550	132.2	23.2	1.1	17.3	94.3		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/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	69.8	15.1	0.0	7.7	75.5	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 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 3518	134.5	18.1	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 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 TXS119	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	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-46SX	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. EX 828	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											
PIONEER 3369A	170.3	19.7	0.0	5.1	81.8		138.4	20.6	0.0	6.0	82.5						
PRINCETON SX650	147.9	19.7	0.0	1.1	89.1	WHITE											
STEWART CARDINAL SX58	107.2	20.1	0.0	19.3	85.9	KENTUCKY 5921W	93.4	17.2	0.0	24.1	81.3						
PRINCETON SX836	176.6	20.2	0.0	5.0	85.9	BOONE COUNTY WHITE	93.5	21.5	0.0	19.6	69.8						
TROJAN TXS113	148.7	20.2	0.0	0.0	80.2	STULL'S 555W	153.0	21.7	0.0	10.6	89.1						
SO. STATES 865	150.9	20.3	0.0	5.0	84.9	F2 OF 511A	116.8	22.0	0.0	7.5	90.6						
TROJAN TXS118	120.7	20.4	0.0	3.9	77.1	PIONEER 511A	158.2	22.0	0.0	9.3	83.3						
STULL'S 807ASK	160.1	20.5	0.0	6.3	HICKORY KING	55.4	22.2	0.0	20.0	47.9							
DEKALB XL85A	170.7	20.6	0.0	1.8	FUNK'S G508W	136.1	22.3	0.0	7.7	87.5							
P.A.G. SX39	167.2	20.7	0.0	4.3	FUNK'S EXP 23981W	145.9	22.8	0.0	3.6	93.8							
F2 OF 3334	85.5	20.7	0.0	12.2	72.4	P.A.G. SYN 1	111.7	23.1	0.0	8.1	84.9						
TROJAN TXS122	151.2	20.8	0.0	3.1	83.9	SCHENK SX-X04N	123.0	23.3	0.0	3.7	69.3						
P.A.G. SYN 2	129.1	20.8	0.0	7.1	88.5	P.A.G. 644W	158.8	23.4	0.0	2.4	86.5						
COOP. T308	85.5	20.8	0.0	12.1	82.3	FUNK'S G4895W	111.8	23.9	0.0	5.0	67.7						
TAYLOR-EVANS CASHMAKER	138.8	20.9	0.0	1.8	STULL'S 560WSP	155.1	24.0	0.0	6.3	91.7							
DEKALB XL64	144.5	20.9	0.0	1.1	SCHENK SS-101N	157.2	24.0	0.0	3.7	85.4							
STEWART CARDINAL SX71	193.5	20.9	0.0	1.2	F2 OF 644W	108.3	24.1	0.0	7.1	84.4							
STULL'S 809ASP	156.9	20.9	0.0	8.9	P.A.G. 17525W	140.3	24.4	0.0	6.0	87.0							
MIGRO M-0601A	117.5	21.0	0.0	3.0	SCHENK SS-303N	90.2	24.5	0.0	4.4	55.7							
PIONEER 3368	167.9	21.0	0.0	3.1	STULL'S 850WSX	156.6	26.8	0.0	4.0	81.8							
DEKALB XL66	131.6	21.1	0.0	1.9	WHITE AVERAGE												
STULL'S 809SX	157.6	21.1	0.0	6.5		124.1	22.7	0.0	9.3	79.9							
PIONEER X7571	176.6	21.2	0.0	2.4	GRAND AVERAGE												
F2 OF SX39	92.4	21.4	0.0	16.6		135.4	21.0	0.0	6.7	81.9							
MIGRO M-0711	164.0	21.5	0.0	3.4													

TABLE 9--ANNUAL SUMMARY, NORMAL POPULATION, 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											
SCHENK SX-110N	174.9	16.9	9.3	1.1	90.1	MIGRO M-0711	164.7	22.9	0.0	0.7	89.1
PIONEER 3571	169.0	17.1	0.0	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	97.4	PIONEER X7571	194.0	22.9	0.0	1.2	89.6
KENTUCKY 105	112.6	18.4	15.1	8.7	83.3	SO STATES 865	180.9	23.0	16.7	4.2	100.0
PRINCETON SX650	182.6	18.6	0.0	0.0	95.3	TAYLOR-EVANS MASTERMAKER	165.5	23.0	1.1	2.3	90.1
FUNK'S G4455	143.7	18.7	1.1	2.7	95.3	DEKALB XL81	193.4	23.1	0.0	0.0	95.3
MIGRO M-0702	161.9	18.9	1.2	2.4	89.1	FUNK'S G4646	180.0	23.1	6.9	0.5	93.2
DEKALB EXP 68	141.9	18.9	0.0	4.1	87.5	STULL'S 809ASP	149.6	23.4	5.6	3.7	83.3
STEWART CARDINAL SX58	138.3	19.8	0.0	1.1	89.1	P.A.G. SX98	166.0	23.5	1.0	1.0	90.1
PIONEER 3518	157.5	20.1	1.2	1.1	90.6	MCNAIR 3838	190.7	23.8	0.0	1.6	98.4
TROJAN TXS118	147.7	20.1	0.0	1.3	84.4	SO STATES 909E	141.2	24.0	22.4	6.2	89.6
TROJAN TXS112	186.8	20.2	0.0	0.0	83.3	STULL'S 877SX	157.5	24.0	3.4	6.6	93.2
DEKALB XL64	186.3	20.2	0.0	2.2	94.3	STULL'S 809SX	175.8	24.0	3.3	3.8	95.3
DEKALB XL66	166.9	20.4	2.2	0.6	94.3	PIONEER 3329	167.6	24.1	0.0	1.6	94.8
NORTHRUP-KING PX678	164.8	20.5	0.0	3.7	97.4	TROJAN TX119	137.3	24.1	1.4	6.5	81.8
NORTHRUP-KING PX616	186.4	20.6	0.5	2.7	97.9	REID'S YELLOW DENT	78.1	24.1	31.2	8.2	75.5
PIONEER 3516	180.9	20.6	3.5	2.7	92.2	DEKALB XL85A	188.3	24.2	0.0	2.3	90.6
P.A.G. SX83	187.9	20.7	1.6	1.1	96.4	P.A.G. SYN 3	148.9	24.5	20.1	5.5	92.2
MIGRO M-46SX	133.9	20.8	0.8	2.1	73.4	DEKALB F880	102.5	25.2	5.9	5.4	89.1
SCHENK SX-440N	216.6	20.9	0.0	0.0	93.8	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	91.7	LEWIS SEED CO. EX 828	146.8	30.7	13.9	5.3	89.6
TAYLOR-EVANS CASHMAKER	147.6	21.1	0.0	4.7	90.1	CONLEE TEX.28A	153.3	31.8	10.0	10.9	88.0
PRINCETON SX850	195.8	21.2	0.0	0.6	92.2	YELLOW AVERAGE					
TROJAN TXS113	196.5	21.3	0.5	1.6	96.9		164.2	22.1	3.6	2.8	90.4
STULL'S 807ASX	193.1	21.4	0.6	1.7	93.8	WHITE					
PIONEER 3334	216.4	21.6	0.6	2.3	90.1	HICKORY KING	74.2	23.2	19.0	7.4	63.0
PIONEER 3369A	202.3	21.6	0.6	1.1	91.1	STULL'S 560WSP	179.6	23.4	9.3	6.8	97.9
SO STATES 860	123.1	21.6	4.8	4.8	78.6	KENTUCKY 5921W	150.1	23.7	12.8	8.3	94.8
TROJAN TXS122	196.4	21.7	4.0	0.6	91.7	FUNK'S EXP 23981W	184.2	24.3	5.3	0.6	92.2
PRINCETON SX823	166.1	21.7	1.2	0.0	90.6	FUNK'S G508W	171.0	24.9	1.2	7.1	89.1
P.A.G. 438	165.7	21.8	0.0	3.9	94.8	PIONEER 511A	179.8	25.5	5.0	4.8	95.3
PRINCETON SX836	200.5	21.9	1.7	0.6	92.2	F2 OF 644W	158.5	25.6	9.8	2.8	93.2
P.A.G. SX39	188.3	22.0	0.0	0.0	93.2	BOONE COUNTY WHITE	105.3	25.6	34.9	5.3	80.7
STEWART CARDINAL SX71	200.5	22.1	1.9	0.6	91.7	SCHENK SS-303N	113.7	26.2	19.1	3.8	54.2
MCNAIR 2210	179.4	22.1	6.7	1.8	84.9	STULL'S 555W	155.1	26.4	12.4	5.0	91.7
MCNAIR X210F	202.5	22.2	0.0	1.8	87.5	P.A.G. 644W	180.5	26.5	18.0	3.9	89.1
COOP. T308	112.7	22.2	0.0	11.7	84.9	P.A.G. SYN 1	155.4	26.6	6.1	6.5	87.0
PIONEER 3368	196.7	22.3	0.0	0.0	97.4	F2 OF 511A	145.7	27.1	10.8	4.7	97.4
P.A.G. SYN 2	145.9	22.3	2.4	5.0	91.7	SCHENK SX-X04N	176.7	27.2	14.1	3.4	75.0
PIONEER 3308	154.0	22.5	2.4	1.6	72.9	SCHENK SS-101N	218.0	27.5	3.3	2.8	96.4
F2 OF SX39	107.0	22.5	6.6	6.0	83.3	P.A.G. 17525W	173.0	28.7	14.0	2.4	91.1
P.A.G. SX91	163.8	22.5	2.8	1.1	93.8	STULL'S 850WSX	192.8	29.2	25.9	4.0	92.2
SO STATES 866	158.8	22.5	9.5	3.3	94.8	FUNK'S G4895W	110.7	29.6	11.0	4.3	75.0
TROJAN TXS119	170.4	22.6	0.0	1.1	93.2	WHITE AVERAGE					
FUNK'S G4550	176.4	22.7	0.5	1.6	96.4		156.9	26.2	12.9	4.7	86.4
ASGROW RX99	143.8	22.7	1.7	3.1	89.1	GRAND AVERAGE					
MIGRO M-0601A	169.5	22.8	0.0	0.0	91.7		162.8	22.9	5.4	3.2	89.6
ASGROW RX100	144.1	22.8	5.5	4.3	85.9						

TABLE 10--ANNUAL SUMMARY, NORMAL POPULATION, QUICKSAND, 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												
PIONEER 3571	60.7	17.3	0.0	8.0	54.2	FUNK'S G5757	102.6	20.9	0.7	0.7	69.3	
PIONEER 3518	54.7	17.8	0.0	12.6	46.9	FUNK'S G4646	108.6	21.1	1.3	2.2	77.1	
PIONEER 3334	67.6	17.9	0.0	4.9	52.1	PIONEER 3369A	91.2	21.1	0.0	1.7	60.4	
KENTUCKY 105	55.1	18.1	0.0	8.8	52.3	SO STATES 909E	90.5	21.2	0.0	3.1	64.1	
SO STATES 865	99.6	18.1	0.8	3.6	74.0	STULL'S 807ASX	65.2	21.2	0.0	5.8	56.8	
NORTHRUP-KING PX611	71.3	18.2	0.0	5.1	56.8	MIGRO M-0601A	42.0	21.3	2.8	1.9	41.1	
SO STATES 860	70.5	18.4	0.0	0.0	46.9	STULL'S 809ASP	93.2	21.3	0.0	2.2	55.7	
PIONEER 3329	73.1	18.4	0.0	2.9	47.9	DEKALB XL66	60.1	21.6	0.0	6.5	60.4	
FUNK'S G4455	69.5	18.4	0.0	3.1	56.8	PRINCETON SX836	90.5	21.6	0.0	3.3	70.8	
DEKALB XL81	78.4	18.5	0.0	2.8	67.7	PRINCETON SX823	47.0	21.7	0.0	13.0	53.1	
P.A.G. SX83	88.6	18.5	0.0	0.9	59.9	ASGROW RX100	59.4	22.0	0.0	1.3	41.1	
SCHENK SX-110N	97.6	18.6	1.1	2.4	62.5	PIONEER X7571	101.5	22.1	0.0	1.8	65.1	
PIONEER 3516	107.8	18.7	0.7	0.7	71.9	TROJAN TX119	67.2	22.3	0.0	12.5	60.4	
TROJAN TXS112	81.5	18.8	0.0	0.0	55.2	MCNAIR 3838	122.1	22.3	2.5	1.7	81.3	
NORTHRUP-KING PX678	67.3	19.1	0.0	0.9	61.5	P.A.G. SX39	87.7	22.4	2.6	3.7	56.3	
PRINCETON SX650	105.8	19.2	1.2	0.0	77.1	REID'S YELLOW DENT	62.3	22.6	4.1	4.2	49.5	
TAYLOR-EVANS CASHMAKER	73.8	19.3	0.0	0.6	60.9	STULL'S 877SX	93.5	22.6	0.0	4.6	59.4	
COOP. T308	43.9	19.3	3.7	18.5	48.4	MCNAIR X210F	93.8	22.9	0.6	0.0	59.4	
MIGRO M-0711	83.5	19.3	0.7	2.2	60.4	FUNK'S G4761	75.7	23.3	0.0	0.0	49.0	
STEWART CARDINAL SX71	129.1	19.3	0.6	4.4	76.0	DEKALB FB80	73.2	23.9	2.7	3.5	67.2	
PIONEER 3308	89.6	19.4	1.0	6.9	57.3	CONLEE TEX-28A	93.7	24.1	0.0	7.2	59.4	
PRINCETON SX850	106.5	19.4	0.7	4.2	64.6	LEWIS SEED CO. EX 828	80.3	25.8	0.0	5.3	54.7	
TROJAN TXS119	75.6	19.4	0.0	2.9	55.7	YELLOW 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	WHITE						
SCHENK SX-440N	103.1	19.4	0.0	0.7	65.6	KENTUCKY 5921W	73.6	19.9	0.9	4.1	56.8	
MIGRO M-46SX	57.5	19.5	0.0	4.2	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	STULL'S 555W	100.4	21.9	0.0	2.2	58.3	
SO STATES 866	88.4	19.7	0.0	7.0	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	HICKORY KING	48.0	22.4	3.5	4.5	34.4	
STULL'S 809SX	59.3	19.8	0.0	9.1	39.6	P.A.G. 17525W	64.8	22.8	0.0	0.0	44.3	
STEWART CARDINAL SX58	62.5	19.8	1.7	10.0	60.9	SCHENK SS-101N	110.7	22.9	2.4	0.0	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 68	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	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	P.A.G. SYN I	79.8	23.1	0.0	2.8	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	0.0	1.0	64.1	BOONE COUNTY WHITE	97.4	23.4	10.6	3.0	66.7	
P.A.G. SYN 2	70.7	20.0	1.0	1.0	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	P.A.G. 644W	101.4	24.1	0.0	0.0	55.2	
TROJAN TXS113	78.5	20.4	0.0	2.0	59.9	STULL'S 850WSX	96.4	24.6	7.3	0.0	61.5	
TROJAN TXS122	66.3	20.4	0.0	9.1	49.0	FUNK'S EXP 23981W	87.6	25.0	0.7	0.7	67.7	
MIGRO M-0702	86.4	20.4	1.7	1.7	60.9	PIONEER 511A	83.4	26.0	0.0	0.0	68.8	
PIONEER 3368	83.7	20.6	0.0	1.6	68.8	WHITE AVERAGE		82.8	22.9	1.5	1.5	57.5
MCNAIR 2210	95.1	20.6	1.0	2.4	57.3	GRAND AVERAGE		78.5	20.8	0.8	3.7	58.3
TROJAN TXS118	55.5	20.6	0.0	5.4	51.6							
P.A.G. SX91	101.3	20.6	4.4	0.7	78.6							
DEKALB XL85A	81.6	20.7	0.0	5.6	59.4							
FUNK'S G4550	68.0	20.8	0.0	3.4	55.7							

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

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	77.6	16.7	2.0	10.0	81.8	DEKALB XL85A	150.6	22.2	6.1	6.1	83.8	
SCHENK SX-11ON	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	
NORTHRUP-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	
NORTHRUP-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-440N	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. EX 828	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 807ASX	144.6	20.7	1.9	7.4	86.5	WHITE						
DEKALB XL64	132.4	20.8	1.0	4.9	84.7	KENTUCKY 5921W	97.2	19.7	8.2	15.0	80.2	
SO STATES 860	109.6	20.9	11.9	7.1	74.3	HICKORY KING	59.2	23.4	17.2	9.4	48.9	
PIONEER 3329	148.9	20.9	0.4	5.8	84.3	STULL'S 560WSP	142.6	23.6	10.6	5.9	88.7	
NORTHRUP-KING PX616	141.8	21.0	1.7	15.9	92.4	FUNK'S G508W	135.3	23.7	7.3	6.3	78.6	
MIGRO M-465X	110.5	21.0	1.0	4.3	68.1	FUNK'S EXP 23981W	136.1	23.9	6.5	6.5	89.7	
PIONEER 3308	137.9	21.0	1.0	5.5	76.5	STULL'S 555W	143.5	24.0	8.9	6.5	85.6	
STEWART CARDINAL SX71	169.2	21.0	0.7	4.5	86.6	BOONE COUNTY WHITE	98.5	24.1	20.9	14.2	78.9	
DEKALB XL66	116.7	21.2	5.3	5.6	83.1	P.A.G. SYN 1	118.0	24.3	7.9	8.8	82.3	
PRINCETON SX823	120.9	21.3	0.3	3.6	82.1	PIioneer 511A	144.5	24.5	5.5	9.2	85.6	
SO STATES 865	148.5	21.3	10.0	6.7	89.8	F2 OF 644W	110.3	24.7	4.8	4.0	84.0	
COOP. T308	89.2	21.3	0.8	16.3	80.1	SCHENK SX-X04N	128.7	24.7	3.2	8.0	71.9	
TROJAN TXS113	142.7	21.4	2.4	4.9	86.2	SCHENK SS-303N	85.9	24.8	6.0	4.2	49.5	
PIONEER 3368	158.6	21.4	0.2	2.9	89.0	F2 OF 511A	120.1	25.0	11.1	7.3	89.7	
TROJAN TXS122	146.0	21.5	0.8	7.6	84.4	SCHENK SS-101N	158.8	25.1	7.4	7.9	89.2	
P.A.G. SYN 2	119.2	21.6	1.9	6.6	85.1	P.A.G. 17525W	135.7	25.7	3.1	5.3	78.9	
F2 OF SX39	88.7	21.8	2.3	10.9	82.1	STULL'S 850WSX	151.8	26.1	7.6	6.1	84.2	
P.A.G. SX98	133.9	21.8	0.3	4.3	82.4	P.A.G. 644W	144.3	26.2	4.2	3.7	83.1	
F2 OF 3334	89.0	21.9	1.7	5.7	73.1	FUNK'S G4895W	100.1	27.9	5.9	5.6	71.7	
FUNK'S G4646	145.8	22.0	3.4	5.8	90.0	WHITE AVERAGE		122.0	24.4	8.1	7.7	79.0
SO STATES 909E	126.9	22.1	13.2	9.9	86.1	GRAND AVERAGE		128.6	22.0	4.1	7.0	81.9
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/AC	AVG % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND
YELLOW					
PIONEER 3516	135.8	17.2	0.6	8.0	90.4
KENTUCKY 105	90.8	17.4	5.7	17.1	80.3
TROJAN TXS112	136.3	17.4	3.8	4.4	85.2
TAYLOR-EVANS CASHMAKER	122.0	18.2	0.2	6.2	86.8
PIONEER 3369A	158.9	18.5	0.3	5.7	89.2
SO STATES 865	136.0	18.7	5.5	9.7	91.2
PIONEER 3308	139.4	18.8	0.5	6.8	84.5
DEKALB XL66	121.1	18.8	2.7	10.7	86.3
SO STATES 860	116.6	18.8	6.5	9.5	82.8
TROJAN TXS122	135.7	19.1	0.4	6.9	89.0
STULL'S 807ASX	134.2	19.2	1.2	7.1	85.3
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
FUNK'S G4761	127.3	21.8	1.2	2.6	82.6
YELLOW AVERAGE	131.1	18.8	2.4	7.6	86.2
WHITE					
KENTUCKY 5921W	107.8	18.8	5.5	12.3	83.3
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 13--THREE-YEAR SUMMARY, NORMAL POPULATION,
ALL NON-VIRUS LOCATIONS, 1968, 1969 AND 1971

HYBRID	YIELD BU/AC	AVG % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND
YELLOW					
KENTUCKY 105	92.7	18.1	5.2	15.3	78.3
DEKALB XL66	119.3	18.9	3.2	9.4	88.1
PIONEER 3369A	150.4	19.1	1.0	5.6	87.0
SO STATES 860	114.9	19.1	9.1	9.5	81.8
PIONEER 3308	133.6	19.3	1.7	6.7	83.4
STULL'S 807ASX	128.3	19.5	2.4	7.1	86.8
TROJAN TXS122	132.4	19.5	0.9	6.1	89.3
FUNK'S G5757	131.3	20.8	5.9	4.1	87.1
SO STATES 866	128.7	21.5	5.2	6.5	86.6
FUNK'S G4761	123.3	22.0	3.1	3.3	85.6
YELLOW AVERAGE	124.7	19.7	3.8	7.6	85.2
WHITE					
KENTUCKY 5921W	111.5	19.3	8.0	11.5	84.4
PIONEER 511A	130.4	22.2	4.6	9.3	86.1
STULL'S 850WSX	128.7	22.5	5.7	8.4	85.7
WHITE AVERAGE	122.8	21.2	6.2	9.9	85.3
GRAND AVERAGE	124.3	20.1	4.4	8.2	85.2

TABLE 14--ANNUAL SUMMARY, HIGH 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												
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	84.9	YELLOW AVERAGE		119.3	20.9	0.1	5.1	83.1
TROJAN TX115	119.1	20.0	0.0	4.0	84.9	WHITE						
NORTHRUP-KING PX678	106.6	20.1	0.3	3.8	91.7	KENTUCKY 5921W	89.6	18.8	0.0	15.9	82.7	
FUNK'S G4455	97.5	20.2	0.0	0.6	90.9	P.A.G. SYN 1	113.9	20.7	0.0	9.6	76.3	
PIONEER 3518	92.9	20.2	0.0	2.9	81.8	PIONEER 511A	145.9	21.4	0.0	7.5	83.3	
MCNAIR X210F	154.7	20.2	0.0	3.4	77.9	HICKORY KING	45.0	21.8	9.5	11.4	27.9	
SCHENK SX-440N	128.3	20.2	0.0	1.1	89.1	STULL'S 555W	128.3	21.8	0.0	4.4	88.3	
MCNAIR 2210	140.2	20.4	0.0	4.8	85.4	FUNK'S G508W	126.9	23.1	1.0	2.6	75.5	
STEWART CARDINAL SX71	147.1	20.4	0.0	3.6	86.5	BOONE COUNTY WHITE	110.4	23.1	1.6	10.8	78.6	
PIONEER 3368	137.7	20.5	0.0	1.5	82.0	P.A.G. 17525W	129.0	23.4	0.0	2.9	73.4	
STULL'S 809SX	136.9	20.8	0.0	4.1	88.0	SCHENK SS-303N	97.3	23.9	0.9	1.4	46.4	
SO STATES 866	146.8	20.8	0.0	2.0	91.7	STULL'S 850WSX	149.8	24.1	2.4	5.8	82.3	
STULL'S 807ASX	123.4	20.9	0.0	2.9	81.5	STULL'S 560WSP	143.7	25.0	0.0	2.9	81.5	
PIONEER 3329	151.7	21.0	0.0	3.5	88.8	F2 OF 511A	121.6	25.1	0.6	6.7	87.2	
P.A.G. 438	112.1	21.0	0.0	3.6	85.9	F2 OF 644W	115.0	25.3	0.0	2.7	87.0	
DEKALB XL66	106.7	21.0	0.0	2.5	83.9	FUNK'S G4895W	100.6	26.5	1.8	2.8	74.5	
PIONEER 3334	123.0	21.0	0.0	1.5	83.1	SCHENK SS-101N	143.3	26.6	0.0	3.1	83.6	
MIGRO M-0601A	118.8	21.2	0.0	1.8	75.8	SCHENK SX-X04N	142.8	26.7	0.0	1.9	73.7	
PIONEER 3516	135.9	21.4	0.0	3.1	89.1	FUNK'S EXP 23981W	113.6	27.7	1.1	2.9	90.1	
P.A.G. SX39	131.8	21.4	0.0	3.2	91.7	P.A.G. 644W	142.1	28.6	0.0	1.6	78.4	
SO STATES 909E	130.3	21.5	2.8	5.0	78.4	WHITE AVERAGE		118.3	23.8	1.0	5.9	76.5
DEKALB XL81	106.7	21.5	0.0	2.9	91.4	GRAND AVERAGE		119.1	21.5	0.3	5.3	81.7
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							

TABLE 15--ANNUAL SUMMARY, HIGH POPULATION, 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												
NORTHROP-KING X155	65.5	15.3	13.6	7.3	75.0	MCNAIR 2210	124.3	22.4	7.3	1.7	64.8	
PIONEER 3571	151.6	16.4	11.5	0.6	84.4	SO STATES 865	142.0	22.4	45.9	2.2	94.8	
SCHENK SX-110N	152.4	17.0	17.0	2.0	82.6	PIONEER X7571	158.1	22.5	8.4	3.3	75.8	
KENTUCKY 105	81.8	17.7	31.0	9.3	68.2	TROJAN TXS119	117.1	22.6	2.4	3.0	71.4	
NORTHROP-KING PX678	121.8	17.9	14.8	2.4	85.4	TAYLOR-EVANS MASTERMAKER	131.1	22.7	1.2	2.2	70.8	
TROJAN TXS118	134.2	18.0	8.1	4.7	77.9	F2 OF 3334	96.7	22.7	8.3	5.8	81.3	
STEWART CARDINAL SX58	118.3	18.2	7.0	2.0	77.9	SO STATES 866	117.6	22.8	30.5	3.7	78.6	
P.A.G. SX39	153.1	18.5	6.5	3.5	89.3	DEKALB XL85A	142.4	22.9	17.4	1.6	80.7	
PRINCETON SX650	137.7	18.8	11.2	0.3	79.4	COOP. T308	105.7	22.9	1.2	8.6	84.1	
REID'S YELLOW DENT	125.6	18.9	4.3	3.1	71.6	PIONEER 3368	163.6	23.1	0.5	1.5	91.7	
DEKALB EXP 68	134.1	18.9	3.3	1.2	83.3	STULL'S 877SX	142.8	23.4	18.0	4.7	80.5	
FUNK'S G4455	115.4	19.1	14.6	6.7	78.9	FUNK'S G4550	127.5	23.4	10.2	3.3	85.2	
TROJAN TX115	129.8	19.2	0.6	2.8	82.6	DEKALB F880	99.8	23.4	18.2	9.9	78.9	
NORTHROP-KING PX611	147.4	19.3	15.7	2.2	85.4	MCNAIR 3838	149.9	23.5	8.7	3.8	87.8	
TROJAN TXS112	157.9	19.3	9.7	4.0	72.4	MIGRO M-0711	123.8	23.7	0.3	1.8	63.3	
MIGRO M-0702	129.9	19.6	0.0	2.1	72.7	P.A.G. SX91	119.5	23.9	33.3	1.6	75.3	
NORTHROP-KING PX616	121.9	19.7	4.3	5.0	84.6	DEKALB XL81	162.4	24.0	0.6	2.8	91.1	
TAYLOR-EVANS CASHMAKER	134.2	19.7	1.5	7.5	86.5	FUNK'S G4646	172.3	24.2	16.1	2.2	81.0	
PIONEER 3518	149.8	19.8	0.9	1.2	83.3	FUNK'S G5757	143.2	24.5	37.6	2.1	87.8	
PRINCETON SX850	173.4	19.9	4.8	4.9	84.9	P.A.G. SYN 3	106.1	24.7	48.9	3.8	86.2	
P.A.G. SX98	137.7	19.9	1.3	1.2	72.4	FUNK'S G4761	131.8	25.9	29.4	1.8	75.5	
SO STATES 860	117.7	20.1	24.4	6.8	71.1	LEWIS SEED CO. EX 828	126.0	28.7	34.1	10.5	71.1	
STULL'S 807ASX	169.5	20.2	9.2	1.7	91.4	CONLEE TEX. 28A	113.9	30.8	35.2	5.6	78.1	
DEKALB XL66	151.3	20.4	7.5	2.0	79.9	YELLOW AVERAGE		135.8	21.3	11.3	3.6	79.6
SCHENK SX-440N	172.8	20.5	4.4	3.4	85.2	WHITE						
P.A.G. SYN 2	115.9	20.5	16.3	5.9	83.6	KENTUCKY 5921W	99.6	20.4	49.5	1.6	79.9	
SO STATES 909E	103.2	20.5	25.9	6.5	85.2	FUNK'S G508W	142.5	23.1	17.6	6.4	71.1	
DEKALB XL64	169.5	20.6	8.1	1.2	87.0	P.A.G. SYN 1	118.5	23.3	34.3	7.3	82.0	
P.A.G. SX83	156.9	20.6	7.4	1.3	80.2	STULL'S 560WSP	142.3	23.7	41.7	5.7	83.1	
PIONEER 3308	117.5	20.8	3.5	3.8	52.1	SCHENK SS-303N	111.0	23.9	25.3	3.4	47.4	
ASGROW RX99	138.1	20.8	0.9	1.5	83.6	PIONEER 511A	128.6	24.7	39.6	4.2	85.4	
MIGRO M-46SX	139.2	20.9	3.3	4.3	69.3	FUNK'S EXP 23981W	127.8	25.1	16.9	6.0	79.2	
PIONEER 3334	152.9	20.9	1.0	2.7	73.2	BOONE COUNTY WHITE	74.6	25.5	44.2	8.9	64.3	
STEWART CARDINAL SX71	161.7	21.0	2.6	2.9	89.8	HICKORY KING	82.6	25.7	29.9	8.8	61.2	
ASGROW RX100	110.6	21.1	1.4	5.9	67.2	SCHENK SX-X04N	166.4	26.2	33.2	3.9	73.7	
F2 OF SX39	98.8	21.5	5.2	4.6	76.0	STULL'S 850WSX	118.8	27.1	41.1	14.0	65.4	
PIONEER 3329	159.3	21.5	1.5	6.4	84.6	P.A.G. 17525W	123.4	27.2	56.5	2.8	82.8	
PIONEER 3369A	158.8	21.6	0.8	1.7	86.2	F2 OF 644W	105.3	27.3	37.0	5.3	88.3	
PIONEER 3516	162.5	21.6	6.9	1.8	89.6	STULL'S 555W	119.3	27.8	44.5	1.1	88.5	
P.A.G. 438	121.6	21.7	16.0	5.1	82.0	SCHENK SS-101N	156.3	28.3	46.3	5.0	85.4	
STULL'S 809ASP	147.6	21.7	4.3	4.2	74.7	F2 OF 511A	94.6	28.9	45.0	8.4	78.6	
MIGRO M-0601A	125.2	21.9	5.3	1.1	71.9	P.A.G. 644W	141.9	29.5	32.7	3.8	84.9	
TROJAN TX119	138.3	21.9	0.7	5.1	76.0	FUNK'S G4895W	97.4	30.8	35.1	4.8	72.1	
MCNAIR X210F	158.9	21.9	13.2	2.4	72.7	WHITE AVERAGE		119.5	26.0	37.3	5.6	76.3
PRINCETON SX836	136.1	22.0	5.9	1.7	77.1	GRAND AVERAGE		132.6	22.3	16.5	4.0	78.9
STULL'S 809SX	144.7	22.0	17.2	2.7	88.0							
PRINCETON SX823	143.7	22.0	5.7	1.3	71.4							
TROJAN TXS113	157.9	22.1	18.4	4.7	82.0							
TROJAN TXS122	158.5	22.1	1.4	3.5	84.9							

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																
NORTHROP-KING X155	76.5	15.6	6.8	9.0	79.8	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					
NORTHROP-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	4.9	71.1	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					
NORTHROP-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	3.2	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	24.2	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 JEX-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										
MIGRO M-46SX	129.9	20.4	1.6	3.0	66.5		127.6	21.1	5.8	4.3	81.3					
PIONEER 3369A	154.8	20.5	0.4	2.7	88.0	WHITE										
STULL'S 807ASX	146.4	20.5	4.6	2.3	86.5	KENTUCKY 5921W	93.0	19.4	16.5	11.1	81.8					
DEKALB XL66	129.0	20.7	3.7	2.2	81.9	P.A.G. SYN 1	116.2	22.0	17.2	8.4	79.2					
PRINCETON SX823	110.2	20.7	2.9	1.1	77.9	PIONEER 511A	137.3	23.1	19.8	5.9	84.4					
STEWART CARDINAL SX71	154.4	20.7	1.3	3.3	88.2	FUNK'S G508W	134.7	23.1	9.3	4.5	73.3					
P.A.G. SX98	131.7	20.9	0.6	2.0	80.9	HICKORY KING	63.8	23.7	19.7	10.1	44.5					
PIONEER 3334	138.0	20.9	0.5	2.1	78.1	SCHENK SS-303N	104.1	23.9	13.1	2.4	46.9					
SO STATES 909E	116.8	21.0	14.4	5.8	81.8	BOONE COUNTY WHITE	92.5	24.3	22.9	9.8	71.5					
MCNAIR X210F	156.8	21.1	6.6	2.9	75.3	STULL'S 560WSP	143.0	24.4	20.9	4.3	82.3					
DEKALB XL85A	134.7	21.2	8.7	1.8	84.8	STULL'S 555W	123.8	24.8	22.2	2.8	88.4					
PIONEER 3329	155.5	21.2	0.8	5.0	86.7	P.A.G. 17525W	126.2	25.3	28.3	2.8	78.1					
CODP. T308	99.0	21.3	0.6	11.6	78.0	STULL'S 850WSX	134.3	25.6	21.8	9.9	73.8					
P.A.G. 438	116.9	21.3	8.0	4.4	84.0	F2 OF 644W	110.1	26.3	18.5	4.0	87.6					
MCNAIR 2210	132.3	21.4	3.6	3.3	75.1	FUNK'S EXP 23981W	120.7	26.4	9.0	4.4	84.6					
STULL'S 809SX	140.8	21.4	8.6	3.4	88.0	SCHENK SX-X04N	154.6	26.4	16.6	2.9	73.7					
ASGROW RX100	115.5	21.4	0.7	8.4	70.3	F2 OF 511A	108.1	27.0	22.8	7.5	82.9					
PIONEER 3516	149.2	21.5	3.5	2.5	89.3	SCHENK SS-101N	149.8	27.4	23.2	4.0	84.5					
MIGRO M-0601A	122.0	21.5	2.7	1.4	73.8	FUNK'S G4895W	99.0	28.6	18.5	3.8	73.3					
NORTHROP-KING PX611	132.7	21.6	7.9	3.6	89.2	P.A.G. 644W	142.0	29.0	16.3	2.7	81.6					
F2 OF SX39	91.5	21.6	2.6	5.1	80.9	WHITE AVERAGE										
ASGROW RX99	133.0	21.8	0.4	2.7	79.7		118.9	24.9	18.6	5.8	76.4					
P.A.G. SX91	104.0	21.8	16.7	1.4	83.2	GRAND AVERAGE										
PIONEER 3368	150.6	21.8	0.3	1.5	86.8		125.8	21.9	8.4	4.6	80.3					
TROJAN TXS113	145.7	21.8	9.2	3.0	86.1											

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

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

TABLE 19--MAIZE DWARF MOSAIC VIRUS TEST, FRANKFORT, KY., 1971

HYBRID	YIELD BU/AC	AVG % MOIST	% ROOT LODGED	% STALK LODGED	AVERAGE % STAND
YELLOW					
KENTUCKY 105	12.8	15.5	15.8	51.8	43.8
TROJAN X6711	71.3	17.6	35.8	21.0	63.5
TROJAN X6712	70.6	18.0	22.5	33.7	68.8
TROJAN X6718	8.7	19.2	0.0	97.2	21.4
P.A.G. 21130	70.3	19.8	12.6	38.0	55.2
STULL'S EXP 911SX	77.1	20.0	25.2	43.9	59.4
PIONEER 3179	81.8	20.6	6.7	46.9	58.9
SO STATES 866	40.9	21.7	23.2	37.0	60.9
FUNK'S G4761	69.7	21.9	25.1	30.5	64.1
PIONEER 3147	97.3	22.1	2.6	58.2	80.7
FUNK'S G4808	63.8	23.4	17.5	49.1	66.1
YELLOW AVERAGE	57.9	19.9	17.9	46.9	57.9
WHITE					
SCHENK SS-101N	36.5	20.1	41.3	22.2	35.4
PIONEER 511A	42.5	20.2	27.8	44.9	59.9
STULL'S 560WSP	57.2	21.5	19.8	57.9	53.6
P.A.G. 644W	78.9	22.3	20.1	35.6	71.9
WHITE AVERAGE	53.8	21.0	27.3	40.1	55.2
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	SCLB	Disease ²			Hybrid	SCLB	Disease ²		
		B-N	BS	R			B-N	BS	R
Asgrow RX99	0.05	3	BN	3	0	Pioneer 3334	0	1	B
RX100	0.05	3.5	BN	T	0	3368	0.05	2.5	BN
Conlee Tex. 28A	0.05	2.5	BN	1	1	3369A	0	3	BN
Dekalb XL64	0	1	BN	T	T	3516	1	0.05	BN
XL66	0.05	2.5	B	T	0	3518	0	3	N
XL85A	0	1	BN	1	1	3571	0	2.5	BN
Exp. 68	0	4	BN	0	0	511A	0	2	BN
F880	1	3	B	1	0	X7571	0	2	BN
Coop. T308	5	4	BN	3	3	Princeton SX650	0	3	BN
Funk's G4455	0.05	.4	B	0	T	SX823	0.05	2	BN
G4550	0	2	BN	2	2	SX836	1	1	N
G4646	0	2	BN	0	1	SX850	0	3	BN
G4761	0	1	BN	T	T	Schenk SS-101N	0	0.05	B
G5757	0	1	BN	2	2	SX-110N	0	3	BN
G508W	0	2	BN	3	2	SS-303N	0.05	1	BN
G4895W	0	2	BN	T	2	SX-440N	1	0.05	BN
Exp. 23981W	0	3	BN	1	0	SX-X04N	0	0.05	BN
K.A.E.S. Ky 105	5	0	O	T	0	So. States SS860	0	4	B
Ky 5921W	5	0	O	T	0	SS865	0	1	B
Lewis Es828	0	3	BN	1	1	SS866	0	2	BN
McNair X210F	0.05	0.05	BN	T	T	SS909E	0	2.5	BN
2210	0	1.5	BN	0	T	Stewart Cardinal SX58	2	2	N
3838	0	1	B	0	T	SX71	0	2	BN
Migro M-465X	0.05	3	BN	T	0	Stull's 555W	0	2	BN
M-0601A	0	2	BN	T	0	560WSP	1	2	BN
M-0702	0	4	BN	1	0	807ASX	0	2.5	BN
M-0711	1	2.5	BN	T	0	809SX	0.05	1.5	BN
Northrup-King PX611	0	2	BN	T	T	809ASP	0	2	BN
PX616	1	3	BN	T	T	850WSX	0.05	0.05	BN
PX678	0	2.5	BN	1	0	877SX	0.05	2	BN
X-155	0	4	N	0	0	Taylor-Evans Cashmaker	0	4	BN
P.A.G. SX39	0.05	3	BN	0	1	Mastermaker	0	2.5	BN
SX83	1	1.5	B	2	0	Trojan TXS112	0.05	2	BN
SX91	0	2	BN	0.05	0	TXS113	1	2	BN
SX98	0.05	3	BN	2	0	TX115	0.05	3	BN
438	0	2	B	2	2	TXS118	0	3.5	B
644W	0	2	BN	1	1	TX119	0	2	BN
17525W	0	1	BN	1	T	TXS119	0	2	BN
Syn. 1	0.05	2	B	1	T	TXS122	0.05	2	BN
Syn. 2	0	3	BN	2	0	Boone County White	0	2	BN
Syn. 3	0.05	2	BN	T	T	Reid's Yellow Dent	0	1.5	B
Pioneer 3308	0	2	BN	2	0	Hickory King	2	2	BN
3329	0	2.5	BN	T	0	F ₂ of 3334	0	2	BN
						F ₂ of SX39	1	3	BN
						F ₂ of 644W	0	1	BN
						F ₂ of 511A	1	3	BN

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 (B = Bacterial Wilt N = Northern Leaf Blight). Separated by microscopic examination BS (Brown Spot caused by Physoderma); R (Rust).