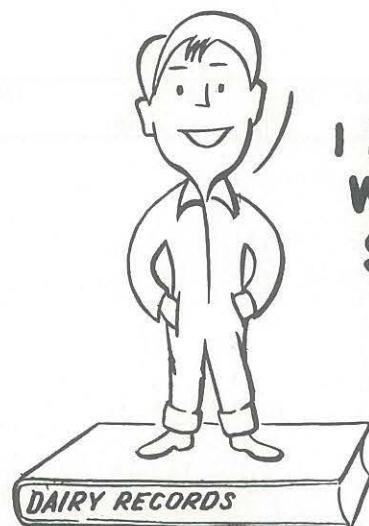


WHY KEEP RECORDS?



They help you to:

1. Cull out low producers and increase net income.
2. Feed grain to each cow according to her production and save money.
3. Select cows whose calves should be good herd replacements.

**You can't afford to *Dairy*
without production records!**



10M-2-69

Results of the

KENTUCKY HYBRID CORN PERFORMANCE TEST — 1968

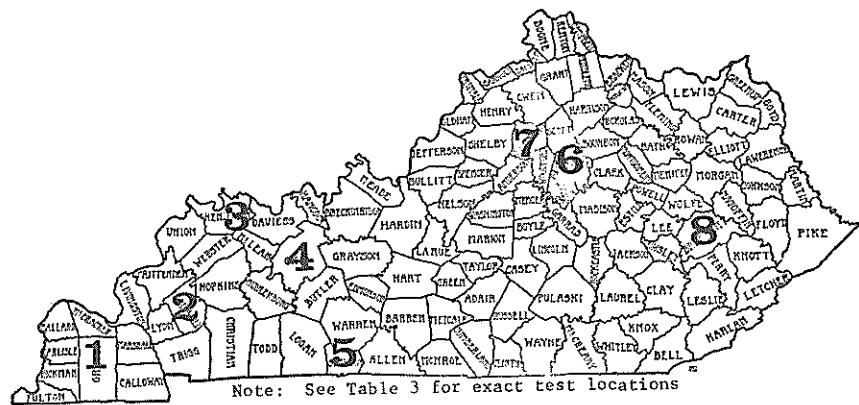
C. G. Poneleit
K. O. Evans

PROGRESS REPORT 177
JANUARY 1969

UNIVERSITY OF KENTUCKY • AGRICULTURAL EXPERIMENT STATION
DEPARTMENT OF AGRONOMY • LEXINGTON



TESTING LOCATIONS OF THE 1968
KENTUCKY HYBRID CORN PERFORMANCE TRIALS



ACKNOWLEDGMENTS

Acknowledgments are made to Mr. Gary Hicks and Mr. John Byers, Department of Agronomy, for assistance in summarizing the results presented in this progress report. Also acknowledgments are made to the following persons who aided in the conduct of this year's performance test.

Shirley Phillips, State Grains Specialist, Lexington, Ky.
Charles Tutt, Research Specialist, Princeton, Ky.
Paul Appel, Station Superintendent, Princeton, Ky.
C. E. Wyatt, Area Extension Agent, Mayfield, Ky.
Stuart Brabant, Area Extension Agent, Henderson, Ky.
John Kavanaugh, Area Extension Agent, Hartford, Ky.
Clifton Taylor, Area Extension Agent, Franklin, Ky.
George Armstrong, Station Superintendent, Quicksand, Ky.

Table 25 (continued)

Hybrid	MDM 1968	Virus 1967	Rating 1966	1967 Yield Bu/A
P.A.G. SX31	7.2			
Stewart Card. SX39	7.2			
Pioneer 3196	7.2	5.4		53.7
Crib Filler 123	7.5	6.4		21.1
Dekalb XL346	7.5			
Pioneer 3542	7.5			
Dekalb XL45	7.7			
P.A.G. SX52	7.8			
T-E Bonusmaker-S	8.0	6.0		24.5
Stewart Card. S-845	8.2			
P.A.G. SX48	8.3			
Yellow Average	6.3	4.4	5.7	52.2
<u>White</u>				
Pioneer 511A	3.8			
Funk's G-4831	4.2			
Dekalb 999W	4.3			
Stull's 500W	4.3			
Ky 5921W	4.3	3.0	4.5	85.4
S.S.935W	4.5	3.4		101.4
Princeton 990-B	4.5			
Princeton 920-A	4.7	2.5	4.5	100.6
Meacham's MX-75W	4.7	3.6		111.0
Schenk S-96W	4.8	2.5	4.8	105.5
Corn Filler 183W	5.0	3.7	4.8	81.5
Stull's 800W	5.2	4.2	5.5	65.8
T-E M-20W	5.2	2.5	6.0	106.9
W.O. King & Son K60	5.3			
P.A.G. SX80	5.3			
Funk's G-5830W	5.7			
Dekalb XL390W	5.8			
Meacham's MX-50W	6.5			
White Average	4.9	3.2	5.1	94.8
GRAND AVERAGE	5.9	4.0	5.4	65.8

* 1966 at Vanceburg, Ky.
1967 and 1968 at Frankfort, Ky.

Table 25. Maize Dwarf Mosaic Virus Test, Normal Population,
Frankfort and Vanceburg, Ky. *

Hybrid	MDM 1968	Virus 1967	Rating 1966	1967 Yield Bu/A
<u>Yellow</u>				
Funk's G-4761	3.0			
P.A.G. SX17	3.2			
S.S. 866	4.0	1.7	3.2	108.1
Ky 105	4.2	1.2	2.8	98.5
Funk's G-5757	4.2			
Pioneer 3306	4.8	4.2		56.7
Pioneer 3369A	5.2			
T-E VR-20-Y	5.2	3.0		71.7
Funk's G-4384	5.3			
Princeton SX-804	5.3	3.3	5.5	60.3
Stull's 720	5.3			
Stewart Card. SX47	5.7	4.6		51.8
Meacham's MX-10Y	5.8			
Stull's 807A	5.8	5.1		46.2
Crib Filler 105	6.0	4.7		68.3
Pioneer 3308	6.0			
Schenk SS-75A	6.2			
Ky 6514	6.2			
P.A.G. SX99	6.3			
Stull's 707	6.3			
P.A.G. SX29	6.3			
S.S. 720	6.5			
T-E E-20-Y-A	6.5	5.0	6.8	30.4
S.S. 820S	6.5	5.0	7.0	30.5
Crib Filler 66	6.5	5.0	8.0	30.2
Dekalb XL342	6.5			
S.S. 860	6.7	4.2	5.5	60.6
Dekalb XL85	6.7			
Pioneer 3564	6.8			
Dekalb XL66	6.8			
Princeton SX-803	7.0	4.7	7.0	34.3
Stull's 727	7.0			
Schenk SS-77A	7.0	5.7		40.9
Funk's G-4697	7.0			
Funk's G-4595	7.0			

(continued)

LIST OF TABLES

1. Hybrids Tested in 1968.
2. Pedigrees of Experiment Station Hybrids Tested in 1968.
3. Agronomic Information Pertaining to 1968 Test Locations.
4. Annual Summary, Normal Population, Lowes, Ky.
5. Annual Summary, Normal Population, Princeton, Ky.
6. 2-Year Summary, Normal Population, Princeton, Ky.
7. 3-Year Summary, Normal Population, Princeton, Ky.
8. Annual Summary, Normal Population, Henderson, Ky.
9. Annual Summary, Normal Population, Hartford, Ky.
10. 2-Year Summary, Normal Population, Hartford, Ky.
11. 3-Year Summary, Normal Population, Hartford, Ky.
12. Annual Summary, Normal Population, Franklin, Ky.
13. Annual Summary, Normal Population, Lexington, Ky.
14. 2-Year Summary, Normal Population, Lexington, Ky.
15. 3-Year Summary, Normal Population, Lexington, Ky.
16. Annual Summary, Normal Population, Quicksand, Ky.
17. Annual Summary, Normal Populations, All Non-Virus Locations.*
18. Annual Summary, High Population, Princeton, Ky.
19. 2-Year Summary, High Population, Princeton, Ky.
20. 3-Year Summary, High Population, Princeton, Ky.
21. Annual Summary, High Population, Lexington, Ky.
22. 2-Year Summary, High Population, Lexington, Ky.
23. 3-Year Summary, High Population, Lexington, Ky.
24. Annual Summary, High Population, Princeton and Lexington, Ky.
25. Maize Dwarf Mosaic Virus Test, Normal Population, Frankfort, Ky.

* Quicksand Included

Table 24 (continued)

RESULTS OF THE KENTUCKY HYBRID CORN
PERFORMANCE TEST IN 1968

C. G. Poneleit and K. O. Evans

INTRODUCTION

The information presented in this progress report is intended to provide farmers, seedsmen and other interested persons with unbiased performance estimates of hybrid seed corn sold in Kentucky. Although the general objective of the 1968 test is the same as past years, changes have been made which will hopefully increase the usefulness to all concerned.

A most noticeable change is the substitution of mechanical planting and harvesting for hand methods. The intent of this change is to provide procedures which resemble, as closely as possible, the actual procedures used by farmers. An equal number of kernels was planted for each hybrid at a particular population so that a hybrid's field germination and survival fitness would be evaluated under actual growing conditions. The grain was harvested by machine with no gleaning of dropped ears. Only grain picked up and passed through the harvesting equipment contributed to yield. Therefore, yields shown in the tables reflect the hybrid's ability to germinate and survive through the growing season, its resistance to lodging and diseases, and its harvestability as well as its inherent ability to produce grain. Other important changes are the selection of hybrids to be included in the test, the number of hybrids included, and the number of testing locations. These alterations assure an adequate sampling of available corn hybrids and of soil and climatic variation in the state.

TESTING PROCEDURE

Selection of Entries

The 64 hybrids shown in table 1 were selected from those being marketed in Kentucky. An asterisk (*) identifies several new hybrids that will be available for the first time in 1969. The hybrids to be included were recommended by two independent groups: (1) a committee of farmers with broad interests throughout the state and (2) the hybrid corn companies. The final choices

Hybrid	Yield Bu/A	% Moist At Harv	% Lodged Root	% Lodged Stalk	% Stand
Funk's G-4697	85.1	19.7	12.4	23.0	86.5
Princeton SX-804	94.3	19.8	13.5	17.1	89.8
Stull's 720	105.8	19.9	10.4	12.2	84.9
Ky 6514	81.8	20.0	18.9	15.6	90.6
Meacham's MX-10Y	95.9	20.1	28.8	10.6	87.5
Crib Filler 66	91.5	20.2	11.7	11.4	88.5
Funk's G-4761	80.8	20.2	0.3	9.0	86.2
S.S. 866	98.6	20.3	6.9	13.4	86.5
Crib Filler 105	104.1	20.5	8.8	5.6	84.0
Dekalb XL85	101.1	20.7	5.5	9.0	84.4
P.A.G. SX99	79.6	22.3	8.9	14.0	93.2
Yellow Average	92.5	18.8	12.9	14.5	86.2
White					
Ky 5921W	96.6	19.0	26.3	15.0	84.9
Stull's 500WC	84.2	19.1	19.7	18.2	85.7
S.S. 935W	95.2	19.5	18.6	12.5	87.0
Crib Filler 183W	86.3	19.5	31.2	17.1	85.9
T-E M-20W	88.5	19.9	23.5	21.6	90.4
Dekalb 999W	99.3	20.0	30.7	16.6	84.0
W.O.King & Son K60	89.0	20.0	22.4	23.7	85.4
Schenk S-96W	75.8	20.1	14.8	12.8	87.8
Princeton 920-A	91.5	20.3	20.0	17.6	83.9
Princeton 990-B	79.8	20.4	12.4	21.8	83.6
P.A.G. SX80	93.2	20.5	1.2	11.6	84.9
Funk's G-5830W	77.9	20.6	1.4	22.4	86.5
Meacham's MX-75W	71.1	20.7	20.6	7.0	91.4
Pioneer 511A	86.6	21.0	16.6	16.9	87.5
Meacham's MX-50W	85.9	21.0	42.2	17.9	88.0
Dekalb XL390W	92.3	21.1	29.6	16.4	88.0
Stull's 800W	85.8	21.9	18.8	13.6	80.5
Funk's G-4831	98.3	22.3	9.4	7.8	73.2
White Average	87.6	20.4	20.0	16.1	85.5
GRAND AVERAGE	91.1	19.2	14.9	14.9	86.0

Table 24. Annual Summary, High Populations, Princeton and Lexington, Ky.

Hybrid	Yield Bu/A	% Moist At Harv	% Lodging Root	% Stalk	% Stand
<u>Yellow</u>					
P.A.G. SX48	55.7	15.3	28.2	31.1	86.7
Stewart Card.S-845	67.3	16.4	19.4	26.2	82.8
P.A.G. SX31	102.0	16.7	12.3	13.4	84.9
Stewart Card. SX39	67.7	16.8	6.0	16.5	89.1
Funk's G-4384	96.5	16.9	6.7	19.6	88.0
P.A.G. SX52	93.0	16.9	40.0	11.8	87.2
Pioneer 3564	103.9	17.4	3.4	10.5	86.7
Pioneer 3542	99.6	17.7	6.2	11.5	84.4
P.A.G. SX29	101.9	17.7	6.6	18.0	84.9
Stull's 727	87.9	18.0	3.7	19.4	79.4
S.S. 720	90.4	18.2	27.7	13.3	88.5
Dekalb XL346	77.6	18.3	7.4	10.8	76.3
Dekalb XL45	109.2	18.3	5.2	11.2	87.8
T-E VR-20-Y	92.2	18.5	18.9	11.1	84.1
Stewart Card. SX47	100.5	18.5	13.7	16.4	87.0
Stull's 707	104.1	18.5	28.5	7.8	90.6
P.A.G. SX17	106.2	18.5	1.0	27.1	84.4
Dekalb XL342	89.9	18.5	13.0	19.3	87.5
Funk's G-4595	90.0	18.6	28.8	9.6	87.0
S.S. 820S	87.7	18.6	32.2	13.3	90.6
T-E E-20-Y-A	85.1	18.7	10.9	10.7	85.2
Pioneer 3306	107.1	18.8	4.1	13.0	79.4
Pioneer 3308	99.0	18.8	8.5	8.2	81.5
T-E Bonusmaker-S	89.7	18.8	26.9	11.0	89.5
Pioneer 3369A	118.7	18.8	0.0	11.5	84.4
Schenk SS-77A	79.0	18.9	14.8	17.2	88.8
Schenk SS-75A	83.4	18.9	0.0	19.9	89.1
Stull's 807A	90.5	19.0	19.0	8.3	85.4
S.S.860	79.7	19.0	31.9	21.9	85.2
Ky 105	80.0	19.0	4.2	21.3	84.6
Princeton SX-803	99.6	19.1	1.2	11.2	86.5
Pioneer 3196	100.5	19.2	1.4	21.2	84.6
Dekalb XL66	110.0	19.5	16.7	7.0	90.9
Crib Filler 123	94.1	19.7	14.9	13.7	82.6
Funk's G-5757	95.6	19.7	5.8	10.6	88.3

(continued)

were made by the testing personnel and state grains specialist. Seed for planting was obtained by test personnel from local seed dealers throughout the state. The hybrids listed in table 1 represent those hybrids grown on the majority of Kentucky's corn acreage.

Location of Tests

In 1968, tests were conducted in eight different soil or climatic areas of the state. The map at the beginning of this report shows the location and table 3 presents pertinent agronomic data for each location. Five test sites were located in the western section of the state and three in the eastern section. Three of the sites were on University of Kentucky research farms and five in farmers' fields. At two locations, Princeton and Lexington, both a normal and high population test were grown.

The Frankfort location was specifically chosen because of the presence of maize dwarf mosaic virus, a disease which threatens corn production in certain parts of the state. The Quicksand location had an unforeseen but mild infestation of m.d.m.v. Also unforeseen was the heavy infestation of leaf blight at the Henderson location. Although ratings for leaf blight were not made, varietal resistance to this disease is indicated by the hybrid's ability to yield under these conditions.

Obviously, every soil and climatic condition is not represented but with the limitations of time and resources the selected locations do an adequate job of sampling the major corn growing areas.

Cultural Practices

For all locations, ground was broken and worked to prepare a good seedbed by conventional tillage procedures. Fertilizer was applied as indicated by soil tests. Herbicides were used for weed control and supplemented with post emergence cultivation when necessary. Table 3 shows the specific fertilizer and herbicide treatments for each location.

Experimental Design

Uncontrollable variability owing to minor variation of soil type, fertility and other factors was sampled by using three replications of an 8 x 8 balanced lattice. A separate randomization was employed for each location. The data presented in tables 4

through 25 have been 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. Special planting heads replaced normal planter plates and boxes to permit clean-out after planting each plot row. Each hybrid plot consisted of 3 side-by-side rows. The 2 outer rows bordered the middle row from competitive effects of neighboring hybrids and were not used for collection of data. Row width at all locations was 38 inches. Population was varied by altering combinations of row length and number of kernels planted per row. A procedure more representative of Farmer practices, uniformity of depth and spacing, and convenience to the testing personnel are advantages of this new procedure over the old hand planting technique.

Harvesting

All plots were harvested with a conventional tractor-mounted, one-row picker-sheller. Each middle row of the 3-row hybrid plot was picked, shelled, and the grain collected in a burlap sack. The weight and moisture content of the grain from each plot were then recorded. Acre yields were calculated and adjusted to No. 2 corn at 15.5% moisture. Only grain picked up by the harvesting equipment appears in the yield column of the tables since plots were not gleaned for dropped or missed ears.

Maize Dwarf Mosaic Virus

At Frankfort and Quicksand, m.d.m. ratings were made on all hybrids. The ratings presented in Tables 16 and 25 will be of use when selecting hybrids for areas where this disease is prevalent. As indicated by the severity of the ratings, m.d.m.v. infestation was much heavier at Frankfort than at Quicksand. At Frankfort, animal pests destroyed the grain of many entries; therefore, grain yield data was not collected in 1968. However virus ratings from the 1968, 1967 and 1966 tests as well as grain yields from the 1967 test are presented in Table 25. In general, yield of a hybrid is positively correlated with the m.d.m. rating as can be seen from the 1967 data.

Crib Filler 123	81.6	20.0	29.7	19.2	82.3
Stull's 720	108.3	20.2	20.8	18.1	92.2
Princeton SX-804	94.4	20.2	27.1	19.5	89.1
Funk's G-4761	76.5	20.3	0.6	9.6	90.6
Meacham's MX-10Y	90.7	20.3	57.6	13.7	91.1
Crib Filler 105	105.1	20.3	17.6	7.5	90.1
Dekalb XL85	103.6	20.4	10.9	14.2	89.1
Funk's G-4697	89.9	20.5	24.7	26.3	89.1
Dekalb XL66	113.0	20.6	33.5	10.2	97.4
Ky 6514	80.2	20.8	37.8	18.9	92.2
Crib Filler 66	97.9	20.9	23.3	10.8	91.7
P.A.G. SX99	66.1	22.1	17.8	16.8	95.8
Yellow Average	90.0	19.0	25.8	17.2	89.3
<u>White</u>					
Stull's 500WC	75.1	19.4	39.5	16.3	93.7
Ky 5921W	85.5	19.7	52.6	20.7	94.8
P.A.G. SX80	74.6	19.8	2.5	17.8	84.9
T-E M-20W	79.0	20.1	47.0	24.7	90.6
S.S. 935W	82.3	20.2	37.2	17.3	92.7
Crib Filler 183W	73.7	20.2	62.3	17.9	89.6
Dekalb 999W	89.3	20.4	61.5	19.9	83.3
King & Son K60	78.9	20.5	44.8	27.8	85.4
Funk's G-5830W	67.3	20.7	2.8	23.1	83.3
Schenk S-96W	59.2	20.7	29.6	12.8	89.6
Meacham's MX-75W	58.3	21.0	41.1	7.7	93.2
Pioneer 511A	78.2	21.4	33.1	18.3	84.9
Princeton 920-A	72.4	21.4	40.0	23.0	82.3
Dekalb XL390W	101.0	21.5	59.1	19.0	88.0
Princeton 990-B	65.6	21.6	24.7	20.0	81.2
Meacham's MX-50W	84.3	21.8	83.8	27.0	88.0
Stull's 800W	91.2	22.2	37.6	17.7	81.8
Funk's G-4831	91.0	23.3	18.7	5.7	64.6
White Average	78.2	20.9	39.9	18.7	86.2
GRAND AVERAGE	86.6	19.5	29.8	17.7	88.5

Table 23. Three-Year Summary, High Population, Lexington, Ky. 1966-67-68

Hybrid	Yield Bu/A	% Moist At Harv	% Lodged Root	% Stalk	Stand
<u>Yellow</u>					
S.S. 820S	86.1	19.7	25.7	8.4	98.8
T-E E-20-Y-A	86.2	20.1	13.7	9.4	89.4
Princeton SX-803	99.7	20.6	1.0	13.0	94.8
S.S. 866	97.6	21.0	8.8	9.9	93.7
Crib Filler 66	96.8	21.1	15.6	14.3	93.9
S.S. 860	87.4	21.1	22.6	10.9	96.3
Princeton SX-804	100.5	21.2	15.9	11.5	96.1
Ky 105	90.0	21.4	8.1	17.7	91.6
Yellow Average	93.0	20.8	13.8	11.9	94.3
<u>White</u>					
Ky 5921W	94.9	21.2	15.9	15.7	93.9
Crib Filler 183W	97.6	21.6	27.9	11.7	96.4
Schenk S-96W	89.2	21.7	11.2	14.3	94.9
T-E M-20W	100.6	21.8	19.3	15.5	95.9
Princeton 920-A	92.5	22.4	16.6	17.9	93.1
Stull's 800W	94.6	22.8	15.4	8.2	84.7
White Average	94.9	22.0	17.7	13.9	93.2
GRAND AVERAGE	93.8	21.3	15.6	12.7	93.8

Table 21. Annual Summary, High Population
Lexington, Ky.

Hybrid	Yield Bu/A	% Moist At Harv	% Lodged Root	% Stalk	% Stand
<u>Yellow</u>					
P.A.G. SX48	53.1	15.0	56.3	24.5	87.5
P.A.G. SK31	99.8	15.7	24.5	23.0	88.0
Stew.Card. S-845	63.2	16.5	38.9	23.0	86.5
Stew.Card. SX39	72.0	16.6	11.9	19.6	95.3
P.A.G. SX29	90.2	17.3	13.2	22.6	87.0
Pioneer 3564	104.4	17.3	6.7	14.6	84.9
Funk's G-4384	92.6	17.4	13.5	25.6	91.1
P.A.G. SX52	80.2	17.6	79.9	14.5	93.8
Pioneer 3542	101.4	18.0	12.4	15.9	89.6
Dekalb XL45	103.8	18.2	10.4	14.5	93.7
T-E E-20-Y-A	73.4	18.5	21.8	14.6	87.5
Stull's 727	86.5	18.5	7.3	20.4	75.5
S.S. 720	84.4	18.6	55.4	15.3	92.2
Dekalb XL342	97.5	18.6	26.1	23.7	87.5
Dekalb XL346	81.0	18.6	14.7	14.8	77.1
S.S. 820S	67.5	18.6	64.4	15.0	97.9
Pioneer 3369A	123.2	18.7	0.0	16.0	90.6
Pioneer 3306	113.5	18.7	8.2	13.2	84.4
Pioneer 3308	85.7	18.7	17.0	8.0	85.9
P.A.G. SX17	100.5	18.8	1.9	37.1	85.9
Stew.Card. SX47	104.0	18.8	27.4	14.0	96.4
T-E VR-20-Y	89.9	18.8	37.8	11.0	90.6
Funk's G-4595	88.9	18.9	56.5	12.6	88.0
Schenk SS-77A	72.8	19.0	29.7	18.4	94.8
Stull's 707	92.2	19.1	57.0	12.4	96.4
S.S. 860	71.9	19.1	63.7	21.0	86.5
Stull's 807A	79.1	19.2	37.9	7.1	82.8
Schenk SS-75A	82.8	19.4	0.0	27.4	90.1
Pioneer 3196	108.7	19.5	2.9	20.8	88.5
Funk's G-5757	99.3	19.6	11.7	16.0	87.5
T-E Bonusmaker-S	73.6	19.6	53.9	16.9	95.3
Princeton SX-803	117.9	19.9	2.4	18.5	90.6
Ky 105	76.8	20.0	8.5	23.8	83.3
S.S. 866	98.8	20.0	13.3	13.2	86.5

Table 22. Two-Year Summary, High Population,
Lexington, Ky., 1967-68

Hybrid	Yield Bu/A	% Moist At Harv	% Lodged Root	% Stalk	% Stand
<u>Yellow</u>					
Stew.Card. SX47	120.7	19.8	23.3	7.8	97.5
S.S. 820S	93.7	20.2	50.8	6.7	97.6
T-E Bonusmaker-S	92.4	20.3	39.3	8.8	95.6
Stull's 807A	102.7	20.4	22.8	7.7	90.6
T-E E-20-Y-A	89.5	20.4	26.8	9.6	83.0
Pioneer 3306	116.5	20.4	14.1	8.1	89.1
Schenk SS-77A	106.8	20.5	18.6	11.2	97.5
T-E VR-20-Y	95.8	20.6	33.1	9.4	93.6
S.S. 866	100.2	20.9	17.6	8.4	93.9
S.S. 860	90.0	21.0	44.1	12.3	93.3
Crib Filler 105	124.3	21.0	22.5	7.1	95.8
Pioneer 3196	117.0	21.2	2.2	13.2	93.5
Ky 105	87.3	21.3	16.2	16.0	85.6
Crib Filler 123	102.2	21.4	29.2	15.3	90.0
Princeton SX-803	119.7	21.6	2.0	14.3	92.7
Princeton SX-804	110.8	21.7	30.7	14.0	93.5
Crib Filler 66	109.4	22.0	31.3	7.6	96.7
Yellow Average	104.6	20.9	25.0	10.4	92.9
<u>White</u>					
T-E M-20W	100.8	21.5	38.1	16.9	94.8
Ky 5921W	93.3	21.6	31.3	15.8	89.2
Crib Filler 183W	92.2	21.8	55.3	10.8	93.5
S.S. 935W	103.3	22.1	37.6	12.2	95.1
Schenk S-96W	84.8	22.2	22.5	13.2	93.5
Meacham's MX-75W	74.4	22.7	35.5	5.2	94.1
Princeton 920-A	90.0	22.7	32.7	16.8	89.1
Stull's .800W	83.1	23.1	30.9	10.2	73.7
White Average	90.2	22.2	35.5	12.6	90.4
GRAND AVERAGE	100.0	21.3	28.3	11.2	92.1

RESULTS

Tables 4 through 25 present the results of the 1968 Kentucky Hybrid Corn Performance Test. The heading of each table describes the number of years data included in the table, the plant population and the location of the test. The Princeton, Hartford and Lexington locations have 2- and 3-year summaries as well as annual summaries. For each table where more than one year's data is included in the averages, plant population has varied from year to year. In 1966 and 1967 plots were overplanted and thinned to 17,424 and 23,232 plants per acre for the normal and high population, respectively. In 1968, approximately 20,000 and 26,700 kernels were planted per acre to constitute the normal and high populations. The plots were not thinned in 1968. The percent stand indicated in each annual table, when multiplied by the number of kernels planted per acre, will give the actual plant population for that hybrid. A percent stand less than 100 would indicate some loss of plants owing to incomplete germination, seedling diseases or other factors. A stand reduction of 15% is not uncommon for most hybrids.

Although the data collected in different years are not entirely comparable the results have been pooled since averages over years are generally more reliable than a single year's data. In future bulletins this problem will be eliminated.

It is not the purpose of this bulletin to recommend particular varieties, but rather to provide unbiased test results of hybrids grown under common conditions. When using these test results to rate hybrids, the reader should consider in addition to relative yielding ability, the hybrid's ability to produce good stands, to withstand lodging, to resist disease and its maturity. Data for these factors are also listed in the tables. However, the reader should remember that these factors have already entered into the yield column since each factor makes either a positive or negative contribution to final grain yield.

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 in this test do not allow comparisons such as a hybrid grown at one location and population with another hybrid grown at a different location and population.

Table 1. Hybrids Tested in 1968

Hybrid	Color	Cross**	Source of Hybrid
Crib Filler 66	Yellow	2X	Mitchell Farms
105	"	2X	Windfall, Ind.
123	"	4X	
183W	White	4X	
Dekalb XL342	Yellow	3X	Dekalb Agricultural
XL346	"	3X	Association
XL390W	White	3X	De Kalb, Ill.
999W	"	4X	
XL45	Yellow	2X	
XL66	"	2X	
XL85	"	2X	
Funk's G-4384	Yellow	2X	Funk Bros. Seed Co.
G-4595*	"	3X	1300 W. Washington St.
G-4697	"	3X	Bloomington, Ill.
G-4761 *	"	3X	
G-4831	White	2X	
G-5757	Yellow	4X	
G-5830W	White	4X	
K.A.E.S. Ky 105	Yellow	4X	Univ. of Kentucky
Ky 5921W	White	4X	Agri. Exp. Sta.
Ky 6514	Yellow	4X	Lexington, Ky.
Meacham's MX-10Y	19.0	0.0	Meacham's Hybrids
Princeton SX-804	19.4	0.0	Route 3
Crib Filler 66	19.5	0.0	Morganfield, Ky.
Stull's 720	19.6	0.0	
Funk's G-5757	19.8	0.0	
Meacham's MX-10Y	19.9	0.0	
Funk's G-4761	20.2	0.0	
S.S. 866	20.6	0.6	
Crib Filler 105	20.7	0.0	
Dekalb XL85	20.9	0.0	
P.A.G. SX99	22.5	0.0	
Yellow Average	18.6	0.04	Yellow Average
White			White
Ky 5921W	18.4	0.0	Schenk S-96W
S.S. 935W	18.9	0.0	Ky 5921W
Crib Filler 183W	18.9	0.0	Crib Filler 183W
Stull's 500WC	18.9	0.0	T-E M-20W
Princeton 920-A	19.1	0.0	Princeton 920-A
Princeton 990-B	19.3	0.0	Stull's 800W
Schenk S-96W	19.5	0.0	
King & Son K60	19.5	0.0	
Dekalb 999W	19.7	0.0	
T-E M-20W	19.8	0.0	
Meacham's MX-50W	20.2	0.6	
Meacham's MX-75W	20.4	0.0	
Funk's G-5830W	20.5	0.0	
Pioneer 511A	20.5	0.0	
Dekalb XL390W	20.7	0.0	
P.A.G. SX80	21.2	0.0	
Funk's G-4831	21.3	0.0	
Stull's 800W	21.6	0.0	
White Average	19.9	0.03	White Average
GRAND AVERAGE	18.9	0.04	GRAND AVERAGE

(continued)

Table 20. Three-Year Summary, High Population, Princeton, Ky. 1966-67-68

Hybrid	Yield Bu/A	% At Harv	% Root	% Stalk	% Stand
<u>Yellow</u>					
S.S. 820S	99.2	22.5	0.6	8.8	86.0
S.S. 860	82.5	22.8	0.0	11.6	85.2
Princeton SX-803	77.8	23.5	0.0	4.5	84.8
T-E E-20-Y-A	94.1	23.6	0.1	7.6	84.2
Princeton SX-804	93.8	23.8	0.0	7.5	89.8
Crib Filler 66	79.2	24.4	0.0	7.0	87.9
Ky 105	89.1	24.8	0.1	11.1	99.6
S.S. 866	98.0	25.6	0.1	8.4	91.0
Yellow Average	89.2	23.9	0.1	8.3	88.6
<u>White</u>					
Schenk S-96W	90.5	23.6	0.0	8.1	89.3
Ky 5921W	98.5	24.4	0.0	6.7	86.8
Crib Filler 183W	88.5	24.6	0.0	8.2	85.6
T-E M-20W	102.4	25.0	0.1	11.2	89.0
Princeton 920-A	97.1	26.0	0.0	7.3	89.6
Stull's 800W	82.4	28.4	0.0	8.4	74.8
White Average	93.2	25.3	0.1	8.3	85.8
GRAND AVERAGE	90.9	24.5	0.1	8.3	87.4

Funk's G-4697	80.3	19.0	0.0	19.6	83.9
Ky 6514	83.4	19.3	0.0	12.3	89.1
Crib Filler 123	106.6	19.4	0.0	8.2	82.8
Princeton SX-804	94.3	19.4	0.0	14.7	90.6
Crib Filler 66	85.1	19.5	0.0	11.9	85.4
Stull's 720	103.3	19.6	0.0	6.3	77.6
Funk's G-5757	91.8	19.8	0.0	5.2	89.1
Meacham's MX-10Y	101.1	19.9	0.0	7.4	83.9
Funk's G-4761	85.2	20.2	0.0	8.3	81.8
S.S. 866	98.4	20.6	0.6	13.5	86.5
Crib Filler 105	103.1	20.7	0.0	3.8	78.1
Dekalb XL85	98.6	20.9	0.0	3.8	79.7
P.A.G. SX99	93.1	22.5	0.0	11.1	90.6
Yellow Average	95.0	18.6	0.04	11.7	83.0
White					
Ky 5921W	107.7	18.4	0.0	9.2	75.0
S.S. 935W	108.1	18.9	0.0	7.6	81.2
Crib Filler 183W	98.8	18.9	0.0	16.2	82.3
Stull's 500WC	93.3	18.9	0.0	20.2	77.6
Princeton 920-A	110.5	19.1	0.0	12.2	85.4
Princeton 990-B	93.9	19.3	0.0	23.5	85.9
Schenk S-96W	92.5	19.5	0.0	12.8	85.9
King & Son K60	99.1	19.5	0.0	19.6	85.4
Dekalb 999W	109.3	19.7	0.0	13.4	84.9
T-E M-20W	98.1	19.8	0.0	18.5	90.1
Meacham's MX-50W	87.5	20.2	0.6	8.8	88.0
Meacham's MX-75W	84.0	20.4	0.0	6.4	89.6
Funk's G-5830W	88.6	20.5	0.0	21.8	89.6
Pioneer 511A	95.0	20.5	0.0	15.4	90.1
Dekalb XL390W	83.6	20.7	0.0	13.8	88.0
P.A.G. SX80	111.8	21.2	0.0	5.3	84.9
Funk's G-4831	105.7	21.3	0.0	10.0	81.8
Stull's 800W	80.3	21.6	0.0	9.6	79.2
White Average	97.1	19.9	0.03	13.6	84.7
GRAND AVERAGE	95.6	18.9	0.04	12.2	83.5

Table 18. Annual Summary, High Population, Princeton, Ky.

Hybrid	Yield Bu/A	% Moist At Harv	% Lodged Root	% Lodged Stalk	% Stand
<u>Yellow</u>					
P.A.G. SX48	58.3	15.5	0.0	37.7	85.9
P.A.G. SX52	105.8	16.2	0.0	9.1	80.7
Stew.Card. S-845	71.3	16.2	0.0	29.4	79.2
Funk's G-4384	100.5	16.4	0.0	13.5	84.9
Stew.Card. SX39	63.5	16.9	0.0	13.3	82.8
Pioneer 3542	97.7	17.4	0.0	7.2	79.2
Stull's 727	89.4	17.5	0.0	18.3	83.3
Pioneer 3564	103.4	17.6	0.0	6.4	88.5
P.A.G. SX31	104.2	17.7	0.0	3.7	81.8
S.S. 720	96.4	17.9	0.0	11.2	84.9
Dekalb XL346	74.2	17.9	0.0	6.8	75.5
Stull's 707	116.0	17.9	0.0	3.1	84.9
T-E Bonusmaker-S	105.8	18.0	0.0	5.1	81.8
Ky 105	83.2	18.1	0.0	18.8	85.9
T-E VR-20-Y	94.4	18.2	0.0	11.2	77.6
P.A.G. SX29	113.6	18.2	0.0	13.2	82.8
Stew.Card. SX47	97.0	18.2	0.0	18.8	77.6
P.A.G. SX17	111.9	18.3	0.0	17.4	82.8
Princeton SX-803	81.3	18.3	0.0	3.8	82.3
Schenk SS-75A	83.9	18.3	0.0	12.4	88.0
Dekalb XL66	106.9	18.3	0.0	3.7	84.4
Funk's G-4595	91.1	18.4	1.2	6.6	85.9
Dekalb XL45	114.7	18.4	0.0	7.8	81.8
Dekalb XL342	82.4	18.5	0.0	15.0	87.5
S.S. 820S	108.0	18.7	0.0	11.6	83.3
Schenk SS-77A	85.2	18.8	0.0	16.0	82.8
Stull's 807A	102.0	18.8	0.0	9.5	88.0
Pioneer 3196	92.3	18.8	0.0	21.6	80.7
Pioneer 3306	100.7	18.8	0.0	12.8	74.5
Pioneer 3308	112.3	18.9	0.0	8.5	77.1
T-E E-20-Y-A	96.9	18.9	0.0	6.8	82.8
S.S. 860	87.4	18.9	0.0	22.8	83.9
Pioneer 3369A	114.3	18.9	0.0	7.0	78.1

Table 19. Two-Year Summary, High Population, Princeton, Ky, 1967-68

Hybrid	Yield Bu/A	% Moist At Harv	% Lodged Root	% Lodged Stalk	% Stand
<u>Yellow</u>					
T-E Bonusmaker-S	106.4	19.9	0.0	6.0	86.0
Stew.Card. SX47	109.6	20.4	0.6	11.5	86.8
Stull's 807A	124.1	20.7	0.0	6.4	95.2
S.S. 820S	118.1	20.8	0.6	8.2	84.8
Pioneer 3306	116.9	20.9	0.0	12.2	88.6
S.S. 860	98.5	20.9	0.0	17.6	86.5
Pioneer 3196	118.8	21.1	0.0	10.8	89.4
Schenk SS-77A	99.8	21.2	0.3	15.7	90.5
T-E VR-20-Y	107.5	21.2	0.4	8.5	88.0
T-E E-20-Y-A	105.7	21.4	0.3	5.3	88.3
Princeton SX-804	115.8	21.5	0.0	9.7	91.8
Ky 105	95.1	21.6	0.3	14.6	87.4
Crib Filler 66	101.5	21.8	0.0	9.9	87.8
Princeton SX-803	96.0	21.8	0.0	4.4	89.1
Crib Filler 105	121.9	22.1	0.0	5.2	90.6
S.S. 866	114.1	22.2	0.2	10.5	90.9
Crib Filler 123	107.4	22.2	0.0	8.3	89.2
Yellow Average	109.2	21.3	0.2	9.7	88.9
<u>White</u>					
Schenk S-96W	110.0	21.4	0.0	8.6	91.0
S.S. 935W	123.2	21.5	0.4	4.5	86.9
Ky 5921W	122.8	22.1	0.0	5.5	88.7
Crib Filler 183W	113.8	22.3	0.0	10.6	91.2
T-E M-20W	120.0	22.5	0.3	12.2	96.9
Meacham's MX-75W	115.8	23.3	0.0	4.5	96.7
Princeton 920-A	120.0	23.4	0.0	6.8	92.5
Stull's 800W	89.8	25.1	0.0	9.4	65.7
White Average	114.4	22.7	0.1	7.8	88.7
GRAND AVERAGE	110.9	21.7	0.14	9.1	88.8

Table 1 (continued)

Hybrid	Color	Cross**	Source of Hybrid
Pioneer	511A	White	4X Pioneer Corn Co.
	3196	Yellow	Inc. Union City,
	3306	"	Tenn.
	3308	"	
	3369A	"	2X
	3542	"	3X
	3564	"	2X(Mod)
Princeton	920-A	White	Princeton Farms
	990-B*	White	Princeton, Ind.
	SS-803	Yellow	
	SS-804	Yellow	
Schenk	S-96W	White	Charles H. Schenk
	SS 75A	Yellow	& Son, Route 4
	SS-77A	Yellow	Vincennes, Ind.
Southern State	720	Yellow	Southern States
	820-S	"	Coop., Inc. Div. of
	860	"	Seed & Farm Supply
	866	"	Richmond, Va.
	935W	White	
Stew.Card.	S-845	Yellow	Stewart Hybrids,
	SX39	"	Inc. Route 1
	SX47	"	Princeville, Ind.
Stull's	500W	White	Stull Bros. Inc.
	707	Yellow	Sebree, Ky.
	720*	"	
	727*	"	
	800W	White	
	807A	Yellow	
Taylor-Evans	E-20-Y-A	"	Golden Acre Hybrids
M-20-W	White	4X	Taylor Evans Seed Co.
VR-20-Y	Yellow	4X	Tulia, Texas
Bonusmaker-S	"	2X	

(continued)

Table 1 (continued)

Hybrid	Color	Cross**	Source of Hybrid
W.O.King & Son K60	White	4X	W.O. King & Son Hopkinsville, Ky.

* Hybrids available for the first time in 1969, may be available in limited quantities only.

** 2X = Single Cross, 3X = Three-way Cross, 4X = Double Cross.

MX or SX = Multiple or Special Cross.

Table 2. Pedigrees of Experiment Station Hybrids Tested in 1968

Hybrid	Color	Cross	Pedigree
Ky 105	Yellow	4X	(T8 x CI21E) (38-11 x Oh 7B)
Ky 5921W	White	4X	(CI64 x 33-16) (Ky 201 x CI66)
Ky 6514	Yellow	4X	(H49 x B37) (CI21E x CI03)

Table 17 (continued)

Hybrid	Yield Bu/A	% Moist At Harv	% Lodged		% Stand
			Root	Stalk	
Pioneer 3308	121.8	20.4	3.2	3.4	81.1
Crib Filler 105	125.6	20.4	1.3	4.1	89.9
Princeton SX-804	116.9	20.5	10.0	3.8	85.4
Crib Filler 66	125.5	20.6	10.9	5.5	91.4
Stull's 720	124.8	20.7	3.1	5.6	90.0
S.S. 866	118.7	20.9	1.0	3.9	82.1
Ky. 6514	119.1	21.1	4.2	5.1	91.5
Dekalb XL85	126.3	21.2	4.3	5.3	82.3
Funk's G-5757	104.3	21.3	7.3	3.0	85.6
P.A.G. SX99	114.0	22.4	4.8	6.1	88.2
Funk's G-4761	115.2	22.4	5.3	3.4	91.7
Yellow Average	109.9	19.4	4.8	5.9	85.4
<u>White</u>					
W.O.King & Son K60	120.2	20.3	7.1	6.0	83.0
Schenk S-96W	117.0	20.4	9.5	5.7	84.8
Ky 5921W	120.8	20.4	10.4	6.6	87.2
Crib Filler 183W	118.9	20.4	8.7	8.3	85.7
S.S. 935W	119.8	20.4	7.8	6.1	90.8
T-E M-20W	119.6	20.5	9.0	7.9	90.2
Dekalb 999W	113.4	20.5	4.8	5.8	81.2
Stull's 500WC	121.8	20.6	9.7	8.0	88.1
Princeton 920-A	107.5	21.1	6.1	3.8	82.3
Princeton 990-B	112.0	21.2	7.8	8.7	83.0
P.A.G. SX80	121.3	21.5	0.6	6.4	87.6
Meacham's MX-50W	108.6	21.5	14.2	6.9	88.8
Dekalb XL390W	125.2	21.7	8.8	5.1	86.0
Meacham's MX-75W	107.2	21.8	2.9	4.2	93.5
Funk's G-5830W	108.9	22.0	4.6	6.7	81.7
Pioneer 511A	117.1	22.3	5.2	5.6	82.7
Stull's 800W	108.3	20.4	6.5	4.7	84.4
Funk's G-4831	97.0	22.8	2.4	5.8	63.8
White Average	114.7	21.2	7.0	6.2	84.7
GRAND AVERAGE	111.3	19.9	5.4	6.0	85.2

Table 17. Annual Summary, Normal Population, All Non-Virus locations

Hybrid	Yield Bu/A	% Moist At Harv	% Lodged		% Stand
			Root	Stalk	
<u>Yellow</u>					
P.A.G. SX48	68.6	15.6	10.6	19.6	86.6
Stewart Card. S-845	74.0	16.6	7.5	11.0	87.9
P.A.G. SX31	108.6	16.9	3.5	5.7	81.5
Stewart Card. SX39	83.3	17.6	2.5	11.5	88.7
Funk's G-4384	112.9	17.6	2.6	6.7	85.4
P.A.G. SX52	101.8	17.8	7.5	5.3	87.8
Pioneer 3564	105.6	18.0	1.8	3.9	83.8
Pioneer 3542	103.5	18.0	1.8	3.9	81.0
Dekalb XL45	107.5	18.4	8.4	5.9	90.9
Stull's 727	101.4	18.5	0.4	10.6	70.4
Dekalb XL342	102.8	18.5	2.8	5.7	87.2
P.A.G. SX29	113.6	18.5	1.2	6.3	85.4
P.A.G. SX17	119.2	18.5	0.6	7.8	82.4
T-E Bonusmaker-S	106.9	18.6	12.2	3.3	83.5
S.S.720	117.8	18.6	11.1	9.3	94.3
Dekalb XL346	75.2	18.8	4.5	5.1	68.0
Stewart Card. SX47	118.7	19.1	3.0	4.9	89.0
Dekalb XL66	115.6	19.2	2.2	3.6	91.5
S.S. 820S	112.8	19.3	14.6	3.8	89.4
Schenk SS-77A	97.6	19.3	5.4	8.8	87.1
T-E VR-20-Y	110.9	19.4	3.3	3.5	85.7
Funk's G-4595	107.4	19.5	7.2	3.6	86.7
Princeton SX-803	121.0	19.5	1.8	3.6	87.2
Schenk SS-75A	104.4	19.5	1.8	9.5	85.1
Stull's 707	111.2	19.6	4.7	3.6	87.5
S.S. 860	111.6	19.8	10.8	8.1	79.9
Ky 105	97.8	19.8	1.4	9.4	73.2
Stull's 807A	116.4	20.0	3.3	4.8	89.7
Pioneer 3306	111.9	20.1	2.0	4.5	83.0
Pioneer 3369A	133.6	20.1	1.8	3.5	82.6
Funk's G-4697	104.0	20.2	3.2	3.6	79.6
Crib Filler 123	110.8	20.3	7.8	6.4	82.6
Meacham's MX-10Y	117.4	20.3	5.7	4.8	92.3
T-E E-20-Y-A	109.6	20.3	4.0	6.4	82.7
Pioneer 3196	129.2	20.3	0.4	6.1	88.5

(continued)

Table 3. Agronomic Information Pertaining to 1968 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-194 P- 53 K- 62 lbs/A lbs/A lbs/A	Atrazine Broadcast	May 4	Oct 4	
(2) Princeton, Ky. Western Ky. Substation	Huntington & Lindsde Silt Loam	N-133 P- None K-149 lbs/A lbs/A lbs/A	Atrazine Broadcast	May 2 and May 3	Oct 2 and Oct 8	
(3) Henderson, Ky. James McConathy	Vakeland Silt Loam	N-150 P- 44 K- 49 lbs/A lbs/A lbs/A	Atrazine Broadcast	May 7	Oct 11	Severe Leaf Blight
(4) Hartford, Ky. Walter and Earl Campbell	Stendal Silt Loam	N-180 P- None K- None lbs/A lbs/A lbs/A	Atrazine Broadcast	June 8	Oct 28 and Oct 29	
(5) Franklin, Ky. Robert Wade	Pembroke Silt Loam	N-178 P- 96 K- 17 lbs/A lbs/A lbs/A	Atrazine Broadcast	May 1	Oct 1	
(6) Lexington, Ky. Ky. A.E.S.	Maury Silt Loam	N-150 P- None K- 49 lbs/A lbs/A lbs/A	Atrazine Broadcast	May 17	Oct 21 and Oct 22	
(7) Frankfort, Ky. Mason and Ralph Bates	Armour Silt Loam	N-133 P- None K- 49 lbs/A lbs/A lbs/A	None	May 16	---	M.D.M. Virus
(8) Quicksand, Ky. Robinson Substation	Philo Silt Loam	N-153 P- 44 K- 83 lbs/A lbs/A lbs/A	Atrazine Broadcast	May 21	Oct 24 and Oct 25	Mild M.D.M. Virus

Table 8. Annual Summary, Normal Population
Henderson, Ky.

Hybrid	Yield Bu/A	% Moist at Harv	% Lodging		
			Root	Stalk	Stand
Yellow					
Stewart Card.S-845	65.8	16.2	0.0	22.8	71.9
P.A.G. SX48	40.6	16.2	0.0	58.0	71.9
P.A.G. SX17	80.6	16.6	0.0	0.0	52.1
P.A.G. SX31	99.4	16.7	1.4	5.2	65.6
Stewart Card.SX39	76.3	16.7	0.0	9.9	82.3
Stull's 727	91.9	16.8	0.0	19.9	56.2
P.A.G. SX52	86.2	16.9	0.0	11.5	82.3
Funk's G-4384	115.6	17.2	0.0	4.1	77.1
Pioneer 3564	101.5	17.4	0.0	0.0	79.2
P.A.G. SX29	109.4	17.5	0.0	9.3	81.2
Dekalb XL45	79.0	17.6	0.0	11.7	79.2
Pioneer 3542	97.1	17.8	0.0	2.7	74.0
Dekalb XL342	84.8	17.8	0.0	8.5	64.6
S.S. 720	117.0	18.0	0.0	19.6	94.8
Dekalb XL346	60.9	18.0	0.0	8.7	51.0
Ky 105	98.1	18.4	0.0	14.3	70.8
Stewart Card.SX47	114.5	18.4	1.4	1.4	61.5
T-E Bonusmaker-S	106.6	18.5	0.0	1.5	69.8
Princeton SX-803	109.9	18.7	0.0	2.9	74.0
Dekalb XL66	118.8	18.7	0.0	0.0	80.2
Schenk SS-77A	95.8	18.7	0.0	6.0	72.9
S.S. 820S	110.2	18.8	0.0	1.2	76.0
S.S. 860	115.8	18.8	0.0	9.5	85.4
Schenk SS-75A	105.8	18.8	0.0	9.0	79.2
Stull's 707	95.0	18.9	0.0	1.2	72.9
Funk's G-4595	114.8	19.3	0.0	0.0	82.3
T-E VR-20-Y	110.0	19.4	0.0	1.3	70.8
Funk's G-4697	84.3	19.6	0.0	3.5	56.2
Stull's 807A	119.9	19.8	0.0	1.4	78.1
Pioneer 3306	111.1	19.9	0.0	0.0	64.6
Pioneer 3369A	128.3	20.0	0.0	0.0	84.4
Crib Filler 66	109.8	20.1	0.0	3.2	72.9
Meacham's MX-10Y	109.3	20.2	0.0	3.9	82.3
Stull's 720	105.7	20.2	0.0	0.0	68.8
Pioneer 3308	125.6	20.3	0.0	0.0	66.7

(continued)

Table 12. (continued)

Hybrid	Yield Bu/A	% Moist at Harv	% Lodged		% Stand
			Root	Stalk	
Yellow					
Crib Filler 105	125.6	18.6	0.0	3.4	85.4
Pioneer 3369A	135.2	18.6	0.0	3.0	70.8
Funk's G-5757	109.9	18.8	1.3	3.6	88.5
Stull's 720	113.1	18.8	0.0	4.0	86.5
Dekalb XL85	119.1	18.8	2.5	2.5	78.1
Princeton SX-804	116.2	18.9	4.2	1.2	80.2
Pioneer 3308	127.3	18.9	0.0	0.0	74.0
Ky 6514	126.3	19.1	2.2	12.7	90.6
Crib Filler 66	122.2	19.6	0.0	4.6	88.5
Funk's G-4761	117.8	19.7	2.2	3.3	94.8
P.A.G. SX99	106.7	21.0	0.0	5.2	69.8
Yellow Average	113.8	17.2	1.2	4.5	82.3
White					
P.A.G. SX80W	115.9	16.2	2.2	6.8	92.7
Ky 5921W	132.4	17.5	2.8	5.6	87.5
Stull's 500W	125.9	17.8	0.0	7.1	88.5
T-E M-20W	109.2	17.9	1.3	12.1	90.6
Crib Filler 183W	114.5	18.1	4.4	8.4	77.1
W.O.King & Son K60	129.3	18.1	1.1	8.8	83.3
S.S. 935W	107.4	18.2	0.0	3.3	87.5
Dekalb 999W	106.3	18.2	1.3	2.8	67.7
Princeton 990-B	102.2	18.2	5.4	14.0	77.1
Princeton 920-A	114.8	18.5	2.6	5.9	75.0
Schenk S-96W	99.5	18.7	0.0	11.2	75.0
Pioneer 511A	104.6	19.0	5.4	5.8	77.1
Meacham's MX-75W	107.3	19.0	0.0	4.6	90.6
Funk's G-4831	89.3	19.1	2.7	8.9	67.7
Stull's 800W	91.1	19.2	3.6	6.2	83.3
Funk's G-5830W	105.8	19.3	1.2	3.8	83.3
Dekalb XL390W	121.4	19.9	3.6	9.9	83.3
Meacham's MX-50W	108.6	20.4	4.2	4.2	78.1
White Average	110.3	18.5	2.3	7.2	81.4
GRAND AVERAGE	112.8	17.6	1.5	5.3	82.0

Table 12. Annual Summary, Normal Population
Franklin, Ky.

Hybrid	Yield Bu/A	% Moist at Harv	% Lodging		% Stand
			Root	Stalk	
<u>Yellow</u>					
P.A.G. SX48	102.6	14.1	1.1	2.2	88.5
Funk's G-4384	105.1	14.6	0.0	3.8	74.0
P.A.G. SX31	115.6	14.7	1.3	2.9	77.1
Pioneer 3542	115.4	15.2	0.0	4.4	71.9
Stewart Card. S-845	91.1	15.2	2.5	3.6	87.5
Dekalb XL342	106.7	15.4	1.1	4.9	86.5
Stewart Card. SX39	93.4	15.6	1.2	3.7	87.5
T-E Bonusmaker-S	93.2	15.7	3.5	5.1	81.2
P.A.G. SX52	106.7	15.8	0.0	6.0	77.1
Pioneer 3564	115.2	15.8	0.0	1.4	75.0
Dekalb XL66	131.3	15.9	0.0	1.2	89.6
Dekalb XL45	121.3	16.0	0.0	3.4	88.5
P.A.G. SX17	129.6	16.1	0.0	12.2	85.4
Dekalb XL346	79.7	16.2	1.8	6.9	68.8
Funk's G-4595	105.7	16.3	2.8	1.2	79.2
S.S. 720	116.9	16.6	3.7	8.4	84.4
T-E VR-20-Y	102.0	16.6	0.0	4.2	76.0
Princeton SX-803	133.8	16.9	0.0	2.3	82.3
P.A.G. SX29	106.9	16.9	0.0	5.0	83.3
Stewart Card. SX47	142.8	17.2	0.0	1.1	90.6
Pioneer 3306	103.9	17.2	0.0	2.3	88.5
Ky 105	89.0	17.3	0.0	10.5	69.8
Stull's 707	106.5	17.3	2.2	2.2	90.6
Stull's 727	99.4	17.4	0.0	3.4	67.7
Schenk SS-75A	126.6	17.5	0.0	6.3	84.4
Pioneer 3196	118.0	17.5	0.0	10.8	86.5
Meacham's MX-10Y	139.9	17.6	2.2	5.5	95.8
S.S. 860	101.9	17.6	2.9	8.0	69.8
T-E E-20-Y-A	109.6	17.8	1.4	6.8	84.4
Schenk SS-77A	98.2	17.8	3.6	6.0	88.5
Crib Filler 123	109.6	17.8	4.0	0.0	78.1
Funk's G-4697	114.9	17.9	0.0	2.6	81.2
S.S. 866	116.9	18.0	2.3	8.8	83.3
Stull's 807A	145.3	18.3	0.0	2.2	87.5
S.S. 820S	118.5	18.4	3.4	5.8	86.5

(continued)

Table 8. (continued)

Hybrid	Yield Bu/A	% Moist at Harv	% Lodging Root	% Lodging Stalk	% Stand
Ky 6514	129.7	20.3	1.3	4.0	79.2
Crib Filler 123	130.2	20.4	0.0	3.5	71.9
Crib Filler 105	106.2	20.4	0.0	2.5	75.0
Princeton SX-804	128.2	20.5	0.0	3.1	61.5
S.S. 866	103.3	20.5	1.2	3.3	71.9
Funk's G-5757	104.5	20.7	0.0	3.3	80.2
Pioneer 3196	145.0	20.7	0.0	0.0	79.2
Dekalb XL85	120.9	20.8	0.0	1.4	68.7
T-E E-20-Y-A	112.7	21.3	0.0	2.5	77.1
P.A.G. SX99	101.1	21.9	0.0	4.0	78.1
Funk's G-4761	109.8	22.0	0.0	0.0	87.5
Yellow Average	104.1	19.0	0.12	6.1	73.6
<u>White</u>					
S.S. 935W	128.9	19.3	0.0	6.9	78.1
Schenk S-96W	138.5	19.5	0.0	4.7	87.5
Crib Filler 183W	115.4	19.8	0.0	5.8	70.8
T-E M-20W	132.5	19.9	0.0	7.8	83.3
Princeton 920-A	117.6	20.1	0.0	1.3	72.9
Stull's 500WC	123.2	20.3	0.0	4.2	70.8
W.O.King & Son K60	118.0	20.4	0.0	8.0	65.6
Ky 5921W	111.3	20.5	0.0	3.7	65.6
P.A.G. SX80W	117.9	20.6	0.0	9.0	77.1
Princeton 990-B	125.0	20.8	0.0	7.3	86.5
Meacham's MX-50W	116.3	20.9	0.0	3.6	84.4
Meacham's MX-75W	111.3	21.3	0.0	0.0	92.7
Dekalb 999W	107.6	21.4	0.0	5.1	71.9
Pioneer 511A	120.2	21.6	0.0	4.6	67.7
Dekalb XL 390W	130.5	21.6	0.0	4.7	86.5
Funk's G-5830W	98.1	21.8	0.0	9.4	69.8
Stull's 800W	101.5	21.9	0.0	0.0	62.5
Funk's G-4831	100.9	22.6	0.0	6.8	50.0
White Average	117.5	20.8	0.0	5.2	74.7
GRAND AVERAGE	107.8	19.5	0.08	5.8	73.9

Table 9. Annual Summary, Normal Population,
Hartford, Ky.

Hybrid	Yield Bu/A	% Moist At Harv	% Lodged Root	% Stalk	% Stand
<u>Yellow</u>					
P.A.G. SX48	84.2	15.4	1.3	16.3	88.5
Stew.Card. S-845	80.3	17.9	0.0	10.2	92.7
P.A.G. SX31	119.6	18.4	2.4	3.5	87.5
Stew.Card. SX39	85.3	18.9	1.2	10.9	87.5
P.A.G. SX17	128.7	20.1	0.0	5.5	90.6
Funk's G-4384	130.2	20.1	1.1	2.2	94.8
Pioneer 3564	113.8	20.2	0.0	6.6	92.7
P.A.G. SX29	123.1	20.3	0.0	6.9	90.6
Stull's 727	115.3	20.4	0.0	2.5	82.3
P.A.G. SX52	106.2	20.6	21.2	0.0	86.5
Pioneer 3542	118.7	20.8	0.0	0.0	85.4
Schenk SS-77A	113.2	20.8	1.2	15.8	90.6
S.S. 720	117.9	20.9	0.0	10.9	96.9
S.S. 820S	131.3	21.2	0.0	4.7	90.6
Crib Filler 105	138.1	21.2	1.3	0.0	91.7
Dekalb XL45	129.0	21.3	0.0	2.2	95.8
Stew.Card. SX47	132.4	21.3	0.0	3.5	90.6
Crib Filler 66	133.7	21.3	0.0	10.3	92.7
Princeton SX-803	112.5	21.4	0.0	3.5	88.5
T-E Bonusmaker-S	130.3	21.5	8.0	1.2	86.5
Stull's 807A	119.6	21.5	0.0	5.4	90.6
Schenk SS-75A	124.0	21.6	0.0	3.5	88.5
T-E VR-20-Y	125.7	21.6	2.2	3.5	91.7
S.S. 860	114.3	21.8	4.3	8.3	81.2
Dekalb XL66	121.9	21.8	0.0	2.2	99.0
Dekalb XL346	91.9	21.9	0.0	9.3	75.0
T-E E-20-Y-A	127.5	21.9	1.1	4.8	90.6
Pioneer 3369A	165.2	22.0	0.0	0.0	90.6
Dekalb XL342	121.2	22.1	0.0	2.2	91.7
Crib Filler 123	107.8	22.1	0.0	4.4	84.4
Stull's 720	148.5	22.1	1.2	2.4	87.5
Funk's G-4595	129.0	22.3	0.0	2.3	94.8
Meacham's MX-10Y	132.1	22.3	0.0	4.3	96.9
S.S. 866	131.5	22.4	0.0	2.9	76.0

Table 10. Two-Year Summary, Normal Population
Hartford, Ky 1967-68

Hybrid	Yield Bu/A	% Moist At Harv	% Lodged Root	% Stalk	% Stand
<u>Yellow</u>					
T-E Bonusmaker-S	120.6	20.4	3.4	7.8	91.6
T-E VR-20-Y	118.6	20.7	1.0	3.8	89.3
S.S. 860	102.6	20.7	1.8	8.5	82.8
Stew.Card. SX47	115.6	21.2	0.0	7.2	84.5
Princeton SX-803	100.7	21.5	0.0	13.0	87.2
S.S. 820S	119.4	21.7	0.0	4.9	90.4
Crib Filler 105	117.3	21.8	0.6	4.4	86.9
Schenk SS-77A	103.2	21.8	0.5	13.6	91.2
Crib Filler 66	122.0	22.2	0.0	7.7	93.7
Ky 105	116.5	22.4	0.5	4.0	84.6
T-E E-20-Y-A	122.2	22.5	0.5	7.9	92.8
Pioneer 3306	124.1	22.6	0.0	1.8	92.8
Stull's 807A	125.0	22.6	0.0	7.8	90.0
Pioneer 3196	136.8	22.6	0.0	2.3	91.6
S.S. 866	123.7	23.0	0.0	7.5	84.2
Princeton SX-804	124.6	23.6	3.3	5.2	89.8
Crib Filler 123	109.5	23.6	0.0	5.2	90.1
Yellow Average	117.8	22.0	0.7	6.6	89.0
<u>White</u>					
T-E M-20W	131.3	22.6	5.5	10.3	93.5
Schenk S-96W	117.0	22.9	0.0	8.0	94.4
S.S. 935W	127.2	23.1	1.5	9.6	83.6
Ky 5921W	124.7	23.5	3.2	5.0	91.9
Crib Filler 183W	115.8	24.7	1.7	6.7	88.6
Princeton 920-A	119.2	24.7	0.0	6.2	89.2
Meacham's MX-75W	108.1	24.8	0.5	2.8	93.4
Stull's 800W	118.2	26.4	5.8	3.4	81.8
White Average	120.2	24.1	2.3	6.5	89.6
GRAND AVERAGE	118.6	22.7	1.2	6.6	89.1

Ky 105	128.9	22.5	0.0	6.5	81.2
Pioneer 3196	143.9	22.6	0.0	2.2	89.6
Pioneer 3308	135.0	22.7	0.0	4.4	92.7
Funk's G-4697	106.1	22.7	3.7	6.5	80.2
Princeton SX-804	131.3	22.8	7.8	1.2	94.8
Pioneer 3306	128.6	22.9	0.0	1.3	86.5
Stull's 707	119.7	23.0	2.5	1.1	89.6
Funk's G-5757	122.4	23.2	1.1	1.1	90.6
Ky 6514	132.0	23.6	2.2	3.6	90.6
Dekalb XL85	155.6	24.2	0.0	2.2	91.7
Funk's G-4761	140.8	24.7	1.1	2.2	91.7
P.A.G. SX99	126.3	25.3	5.5	0.0	95.8
Yellow Average	123.4	21.6	1.5	4.4	89.5
<u>White</u>					
Crib Filler 183W	129.1	22.1	4.0	9.4	86.5
Stull's 500WC	140.0	22.1	18.7	7.9	96.9
Dekalb 999W	119.9	22.2	0.0	5.8	86.5
S.S. 935W	134.1	22.5	3.4	3.6	88.5
Meacham's MX-50W	113.7	22.5	10.0	11.6	87.5
Schenk S-96W	130.3	22.5	0.0	3.9	85.4
T-E M-20W	140.0	22.5	12.9	8.6	96.9
Ky 5921W	124.4	22.8	7.4	3.7	87.5
Princeton 920-A	123.7	23.4	0.0	6.2	82.3
King & Son K60	148.6	23.4	3.6	1.2	83.3
Dekalb XL390W	139.0	23.5	9.7	3.5	85.4
Princeton 990-B	124.2	23.7	14.5	6.4	80.2
Stull's 800W	128.9	24.6	13.5	0.0	85.4
Funk's G-5830W	133.2	24.7	6.2	2.2	89.6
Meacham's MX-75W	115.8	24.8	1.1	2.2	94.8
Pioneer 511A	123.8	25.5	1.2	3.7	82.3
P.A.G. SX80	129.2	25.6	0.0	4.4	78.1
Funk's G-4831	112.9	26.5	0.0	3.6	58.3
White Average	128.4	23.6	5.9	4.9	85.3
GRAND AVERAGE	124.8	22.1	2.8	4.6	88.3

Table 11. Three-Year Summary, Normal Population
Hartford, Ky. 1966-67-68

Hybrid	Yield Bu/A	% Moist At Harv	% Lodged Root	% Stalk	% Stand
<u>Yellow</u>					
S.S. 820S	110.9	20.9	0.3	3.8	95.2
S.S. 860	94.0	21.4	3.4	6.2	89.6
Crib Filler 66	116.6	22.0	2.2	7.1	94.0
T-E E-20-Y-A	114.9	22.2	1.3	7.1	95.3
Princeton SX-803	99.9	22.3	0.3	6.8	93.2
S.S. 866	120.0	22.3	1.0	6.2	91.4
Princeton SX-804	119.7	22.6	6.2	4.3	94.2
Ky 105	109.7	22.8	8.6	2.0	92.0
Yellow Average	110.7	22.1	2.9	5.4	93.1
<u>White</u>					
T-E M-20W	119.2	21.8	6.0	9.4	94.8
Schenk S-96W	115.6	22.3	3.1	8.2	96.8
Ky. 5921W	110.8	22.4	3.7	6.3	95.9
Crib Filler 183W	111.5	24.1	1.9	6.5	92.9
Princeton 920-A	109.0	24.3	1.0	7.3	94.5
Stull's 800W	111.7	25.7	7.5	3.1	90.2
White Average	113.0	23.4	3.9	6.8	94.2
GRAND AVERAGE	111.7	22.6	3.3	6.0	93.6