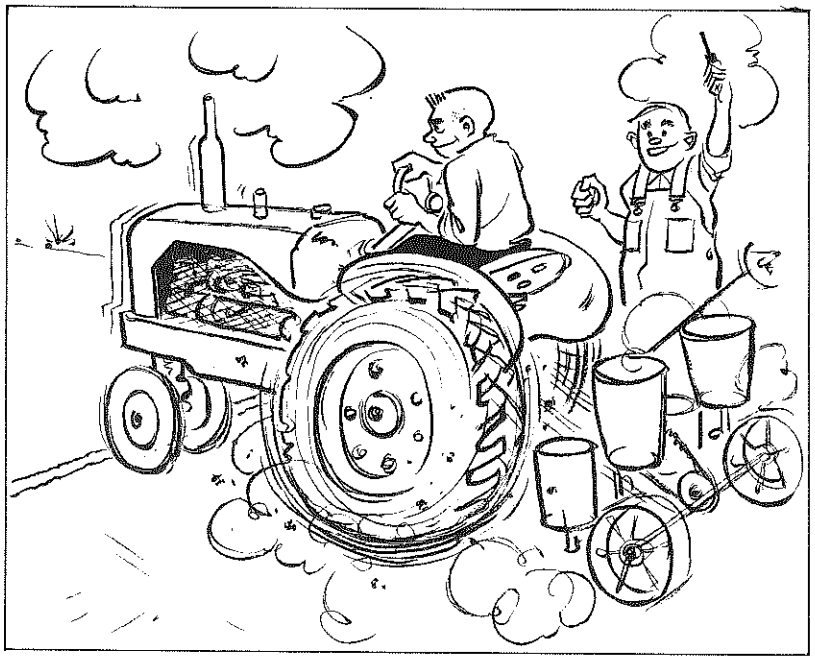
PLANT ON TIME



Research work conducted at the University of Kentucky Agricultural Experiment Station has shown the value of timely planting. If weather permits seedbed preparation, the best time to plant corn is from April 15 to May 15. Southern and southwestern areas may plant during April to an advantage. Late planting results in low yields.

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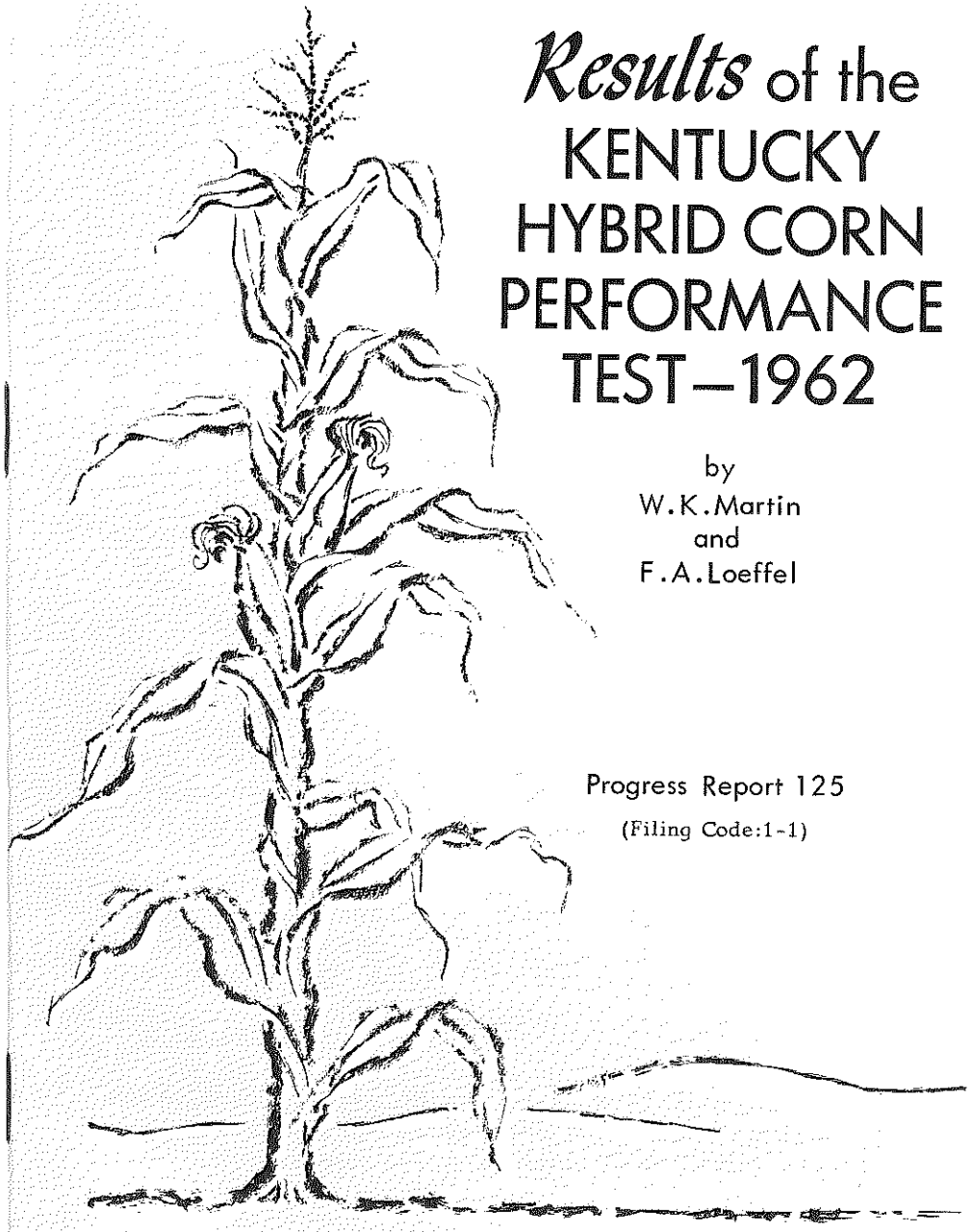

Results of the KENTUCKY HYBRID CORN PERFORMANCE TEST—1962

by
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Progress Report 125
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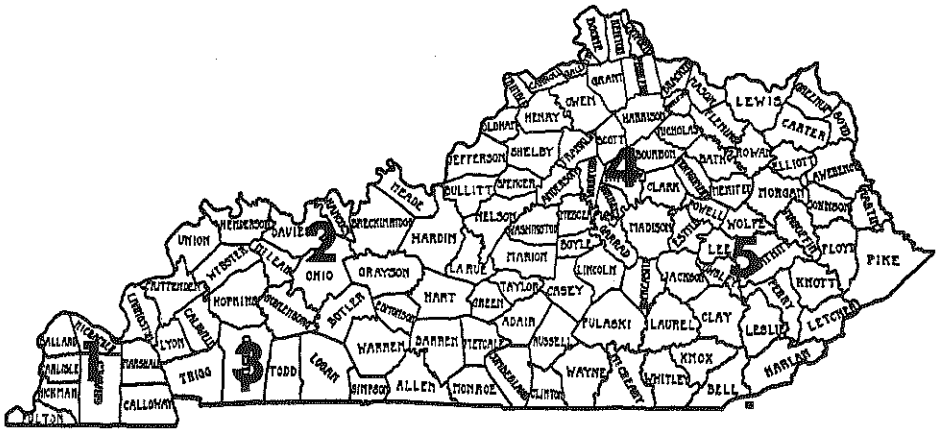
UNIVERSITY OF KENTUCKY
AGRICULTURAL EXPERIMENT STATION
LEXINGTON

TESTING LOCATIONS OF

THE KENTUCKY HYBRID CORN PERFORMANCE TEST



Area		Location	Cooperator
Western	1.	Wickliffe	James Wilson
	2.	Owensboro	Beverly Gregory
	3.	Hopkinsville	Graham Duncan
Eastern	4.	Lexington	Ky. Agr. Exp. Sta.
	5.	Quicksand	Robinson Agr. Exp. Substation, Charles M. Derrickson

Acknowledgment is made to the University of Kentucky Computing Center for assistance in summarizing the results reported in this progress report.

RESULTS OF THE KENTUCKY HYBRID CORN PERFORMANCE TEST IN 1962

W. K. Martin and F. A. Loeffel

The objective of the Kentucky Hybrid Corn Performance Test is to provide an unbiased estimate of the relative performance of corn hybrids being sold in Kentucky. This information may then be used by farmers, seedsmen,and research and extension personnel in determining which hybrid most nearly possesses the characteristics which are desired or required for a specific situation. The need for the University of Kentucky Agricultural Experiment Station to obtain this information is indicated by the continuing shift to hybrids by the farmers of Kentucky. Over 97 percent of the Kentucky corn acreage was planted to hybrids in 1962.

Corn was planted about 10 days earlier than normal and made excellent progress under extremely favorable growing conditions of late April through early July. Lack of moisture in certain areas of western Kentucky during the latter part of July and continuing through August reduced the yields greatly. In spite of this, Kentucky established a new production record for the second consecutive year. A record 58 bushels per acre was produced in 1962, exceeding the previous record of 55 bushels per acre established in 1961.

The estimated corn production for Kentucky in 1962 is 64.7 million bushels. This is an increase of 3.3 million bushels,or a 5 percent increase,over the 1961 production. The 1962 production is 7 percent below the 10-year production level. The acreage harvested for grain totaled 1.1 million acres, the same as in 1961 but 37 percent below the 10-year average.

Unseasonably warm weather during the last week in April and early May greatly facilitated seedbed preparation and planting in most parts of Kentucky. Seven percent of the state's corn acreage was planted by May 1. This was well ahead of the previous year when only 3 percent was planted by May 9. By May 15 50 percent of the corn was planted compared with 5 percent in 1961 and 60 percent in 1959. Some counties in western and southern Kentucky had three-fourths or more of their acreage planted by this date. About 90 percent of the corn was planted by June 5, the largest on record for this date and 3 weeks earlier than the 1961 crop.

The growth rate of early planted corn was very rapid due to high temperatures and favorable moisture during the early part of the season. Lack of moisture in western Kentucky during late July and August caused some damage. This injury was minimized however due to the advanced stage of development of much of the corn crop. The value of early planting was clearly demonstrated. Approximately two-thirds of the corn was harvested by November 1.

Prior to 1960, disease ratings for Northern and Southern corn leaf blights were taken on each of the experiments when natural infection created a measurable differential. This procedure was not entirely satisfactory since meaningful ratings on disease were possible only on a few of the experiments in which the disease was severe.

Since 1960, ratings for these diseases were taken only at Lexington in a special planting which had been artifically inoculated with the disease. Severe disease epidemics have been present each year to assure effective evaluation of the hybrids being tested.

The average yield for all hybrids grown at 5 locations in 1962 was 103.6 bushels. The highest test average was 140.7 bushels grown at Quicksand. The lowest test average was 79.6 bushels for the Owensboro test.

EXPERIMENTAL METHODS

The performance test was conducted at five locations which represent corn-producing areas typical of the state. These locations together with the name of the cooperator are listed on the inside of the front cover. These testing sites were grouped by geographical location into a western and eastern area for convenience in presenting the results. Yields from Wickliffe, Owensboro, and Hopkinsville were averaged for the western area. Similarly the yields from Lexington and Quicksand were averaged for the eastern Kentucky area.

Sixty-four hybrids which are available to the farmers of Kentucky through commercial trade channels were compared. These hybrids, developed by state and federal research agencies and by private seed companies, are listed in Table 1. Information concerning the seed source of the hybrid, the kernel color and the type of cross are presented. The type of hybrid is designated as follows: double cross, 4X; three-way crosses, 3X; and a single cross as 2X. Seed of a single cross hybrid sells at a premium due to increased costs of producing seed. The following material was evaluated in 1962; 58 double crosses, 2 three-way crosses and 4 single crosses.

The pedigrees of hybrids developed by state and federal agencies are listed in Table 2. Agronomic information pertaining to the testing locations is

presented in Table 3. Results of the Kentucky Hybrid Corn Performance Test are summarized for periods of 3 years, 2 years and 1 year and are presented in Tables 4-6 respectively. The hybrids are grouped in the tables on the basis of kernel color. Within groups the hybrids are listed in order of increasing moisture content. The reactions of the hybrids to Northern and Southern leaf blight are summarized in Table 7. The hybrids in Table 7 are listed in alphabetical order.

Field Design.

Each hybrid was planted in 4 plots at each of the 5 locations with individual plots being 2 hills wide and 5 hills long. These plots were located in different parts of the testing field to minimize cultural and soil differences. All tests were planted at the rate of 6 kernels per hill and the resulting plants thinned to 4 per hill, except at Owensboro where they were thinned to 3 per hill.

Yield.

The corn from each plot was harvested and weighed individually. The yield of the hybrids was determined and is reported on the basis of bushels of shelled corn per acre with a moisture content of 15.5 percent. Adjustments were made for missing hills but not for other variation in stand. Therefore, the yields at each location reported in this progress report constitute an average yield of the 4 plots after all adjustments were made.

Moisture.

The moisture content at harvest is the best measure of relative maturity of hybrids which is available. A hybrid may be considered to be earlier than a second hybrid if its moisture content at harvest is consistently lower. Maturity thus determined is not absolute but is relative to the hybrids being compared.

Two moisture samples were taken for each hybrid by taking two samples from replication 1 and 2, and from replication 3 and 4. The moisture content in the grain was determined at harvest by removing 2 rows of kernels from each of 10 ears selected at random from each of two replications. The grain from the 20 ears was thoroughly mixed and the moisture content of a 100-gram sample was determined with a Steinlite moisture meter.

Erect Plants.

The percent erect plants is considered to be an estimate of the resistance of a hybrid to the total insect and disease complex affecting standing ability. This value is obtained by counting plants with stalks broken between the ear-bearing node and ground level and those which lean from the base at an angle of more than 30 degrees from the vertical. This sum is subtracted from the plants present and the difference divided by the total plants present to give the percent erect plants.

Ear Height.

Ear height, distance from the base of the plant to the point of attachment of the upper ear, was measured visually using a scale with one-foot intervals. Visual ratings were taken on four plots of each hybrid at each location.

Disease.

Visual ratings of hybrid reaction to Northern and Southern corn leaf blight disease were taken on an artifically inoculated planting of the hybrids at Lexington. Each hybrid was planted in a 1 x 5 hill plot replicated three times. A five class rating scale was used: excellent, very good, good, fair and poor.

INTERPRETATION

The performance of hybrids varies with weather conditions which change from season to season and from testing location to testing location in the same season. Since the weather conditions cannot be predicted at the time of planting, a farmer should plant a hybrid which has a good performance in an "average" season. The best estimate of hybrid performance for an "average" season is obtained by combining the results obtained from a large number of experiments grown in different years at a number of locations.

The information presented in Table 4 is the average of 16 individual experiments in 1960, 1961, and 1962. In Table 5 are summarized the results obtained from 10 experiments in 1961 and 1962. Table 6 contains information obtained from five experiments in 1962 at different locations in the state. For this reason, the information contained in Table 4 is the best estimate available for comparing the performance of corn hybrids for average growing conditions in Kentucky.

MAKE YOUR CHOICE BASED ON YOUR OWN NEEDS

Improvements in corn hybrids are constantly being made. An efficient corn producer will want to keep informed on these improvements and to determine if they will produce well on his farm. For this reason, it is suggested that new hybrids be grown frequently on a trial basis in comparison with the hybrid or hybrids presently grown. A farmer often changes his entire corn acreage to a different hybrid. He then compares his old hybrid grown the previous year with the new hybrid grown the current year. Since the two hybrids were grown under different weather conditions, this comparison is not valid and often leads to incorrect decisions.

Hybrids being compared should be grown in the same field, using identical management practices. A good way to do this is to plant one-half bushel or one bushel of seed of the new hybrid in the center of a field being sure to mark it at planting time. It is important to observe the hybrids frequently during the growing season. At harvest, yield should be determined and other observational notes recorded. Consult your county agent for procedure. If this suggestion is followed, a corn grower will be able to select hybrids which more nearly fit his production practices and personal preferences.

Strip tests can also be used by individual farmers to determine the value of other factors contributing to production efficiency, such as fertilizer and number of plants per acre. It is important for a farmer to have an unfertilized check strip and a strip receiving twice the quantity of fertilizer that the remainder of the field received. This enables him to determine if his investment in fertilizer was profitable and whether he used too little or too much fertilizer. The number of corn plants per acre in Kentucky is generally too low for top production. It would be well worth the time and effort to change the setting on the drill and compare yields at different rates of planting. It should be kept in mind, however, that plant population and fertility level must be kept in balance for efficient production. Consideration should also be given to the use of chemical weed killers, soil insecticides and some method of minimum tillage for preparation of land.

DO YOUR PART TO CONTRIBUTE TOWARD A 65-BUSHEL AVERAGE CORN YIELD IN KENTUCKY IN 1963

Table 1. Hybrids tested in 1962.

Hybrid	Color	Cross	Source of Hybrids
AES 805	Y	4X	Agricultural Experiment
AES 809	Y	4X	Station (North Central)
Crib Filler 66	Y	2X	Mitchell Farms
116	Y	4X	Windfall, Indiana
123	Y	4X	
134	Y	4X	
183W	W	4X	
Dekalb 633	Y	4X	Dekalb Agricultural
803	Y	3X	Association, Dekalb,
805	Y	2X	Illinois
925	W	4X	
925A	W	4X	
1003	Y	4X	
1006	Y	4X	
Dixie's 110Y	Y	4X	Dixie Stock Farm Sonora, Kentucky
Hagan H-2	W	4X	R. M. Hagan, Route 4
H-9	Y	4X	Owensboro, Kentucky
Hilligoss 84	Y	4X	Shamrock Seed Farms McCordsville, Indiana
Kamp 913BRK	W	4X	Kamp's Farm Seed, Route 2, Evansville, Indiana
Ken-Bred E-20Y	Y	4X	George Patmor, Marion;
E-20YA	Y	4X	Clyde Jackson, Danville;
M-20W	W	4X	Louisville Seed Co., Louisville, Ky. - Distributors
Ky 105	Y	4X	University of Kentucky
204	W	4X	Agricultural Experiment
5708R	Y	4X	Station, Lexington
5901W	W	4X	
5902W	W	4X	
5905W	W	4X	
5921W	W	4X	
5924	Y	4X	
Meacham M-5	W	4X	Meacham's Koreandale
M-33YB	Y	4X	Farm, Morganfield, Ky.

Table 1. Continued.

Hybrid	Color	Cross	Source of Hybrids
P.A.G. 434	Y	4X	Pfister Associated Growers,
436	Y	3X	Inc., Aurora, Illinois
633W	W	4X	and Huntsville, Alabama
SX19	Y	2X	
Pioneer 309A	Y	4X	Pioneer Corn Company
312A	Y	4X	Tipton, Indiana
345A	Y	4X	
509W	W	4X	
3166	Y	4X	
Princeton 8-A	Y	4X	Princeton Farms
840-A	Y	4X	Princeton, Indiana
890-A	Y	4X	
990	W	4X	
990-A	W	4X	
Schenk S-86	Y	4X	Charles H. Schenk
S-99AW	W	4X	and Son, Inc. Route 4 Vincennes, Indiana
Southern States			
D1115	Y	4X	Southern States Coop.,
Catawba	Y	4X	Inc. Division of Seed
Cherokee	Y	4X	and Farm Supply, Richmond
Matoaka	Y	4X	20, Virginia
Munsee	Y	4X	
Pocahontas	Y	4X	
Stull 100Y	Y	4X	Stull Brothers, Inc.
100YA	Y	4X	Sebree, Kentucky
101Y	Y	4X	
101YA	Y	4X	
107Y	Y	2X	
108Y	Y	4X	
400WC	W	4X	
500W	W	4X	
US 13	Y	4X	Experiment Station
US 523W	W	4X	(U.S.D.A.)

Table 2. Pedigrees of Experiment Station and U.S. hybrids tested in 1962.

Hybrid	Pedigree
AES 805	(WF9 x 38-11)(C103 x Oh 45)
AES 809	(WF9 x P8)(Oh 43 x C103)
Ky 105	(T8 x CI21E)(38-11 x Oh 7B)
Ky 204	(K64 x 33-16)(K55 x Ky 201)
Ky 5708R	(H49 x CI38B)(CI21E x C103)
Ky 5901W	(Ky 211 tms x 33-16)(K55 x CI64)
Ky 5902W	(Ky 211 tms x 33-16)(K55 x K64)
Ky 5905W	(K55 x CI64)(Ky 201 x CI49B)
Ky 5921W	(CI64 x 33-16)(CI66 x Ky 201)
Ky 5924	(H49 x CI38B)(Ky 36-11 x C103)
US 13	(WF9 x 38-11)(Hy x L317)
US 523W	(K55 x K64)(Ky 27 x Ky 49)

Table 3. Agronomic information pertaining to testing locations in 1962.

Location	Fertilizer applied	Plants per acre	Date planted	Date harvested	Experiment average Yield	Moisture
1. Wickliffe	500# 14-14-14	15,590	May 17	Oct. 19	96.4	20.1
2. Owensboro	175# Am. Nitrate 250# 6-24-24	12,970	May 4	Sept. 27	79.6	19.7
3. Hopkinsville	200# 18-46-0 140# Anhydrous NH_3 (pre-plant)	15,390	April 24	Oct. 10	85.6	13.5
4. Lexington	500# 12-12-12	16,760	April 26	Oct. 4	115.6	20.8
5. Quicksand	300# 0-30-30 200# Am. Nitrate 100# Am. Nitrate (side dressed)	17,940	April 28	Oct. 20	140.7	14.3

Table 4. Three-year summary of hybrids grown in 1960, 1961 and 1962.

Hybrid	Average Yield Bu./Acre			Maturity		
	State	Western Wickliffe Owensboro Hopkinsville	Eastern Campbellsville* Lexington Quicksand	Harvest Ear Moisture %	Erect Plants %	Ear Height ft.
YELLOW						
Crib Filler 116	110.3	97.9	126.1	18.3	86.1	3.4
Dekalb 805	114.0	103.5	128.3	18.7	84.3	3.2
Ken-Bred E-20Y	103.6	93.1	117.7	18.7	85.1	3.1
AES 805	100.5	92.6	104.7	19.1	81.8	3.3
Crib Filler 123	109.2	95.9	127.2	19.1	87.5	3.4
Stull 100Y	113.1	101.8	128.2	19.2	78.0	3.8
Dekalb 633	106.7	96.0	120.8	19.3	86.6	3.2
Stull 100YA	113.7	101.9	129.7	19.6	86.2	4.0
AES 809	103.9	91.7	119.7	19.7	85.7	3.0
US 13	99.5	90.3	111.2	19.7	79.0	3.7
Meacham M-33YB	117.7	105.3	133.7	19.8	85.6	3.9
P.A.G. 434	109.1	97.6	124.1	19.8	85.0	3.4
Hagan H-9	116.0	104.7	130.5	19.9	82.3	4.0
Stull 101Y	114.3	101.1	131.7	19.9	84.4	3.6
Dekalb 803	105.0	96.5	116.9	20.1	85.8	3.5
Stull 101YA	112.1	99.8	127.7	20.3	78.9	3.8
Ky 105	115.5	102.8	131.9	20.4	88.0	4.3
Pioneer 312A	110.4	97.6	127.0	20.8	86.9	3.3
Pioneer 309A	112.5	99.7	128.5	22.6	91.5	4.0
Yellow Average	109.8	98.4	124.5	19.7	84.7	3.6
WHITE						
Ky 5902W	106.7	96.9	119.5	19.7	79.2	3.6
Stull 400WC	109.6	96.7	126.5	19.8	76.5	4.0
Ky 5901W	105.9	95.4	119.3	19.9	79.5	3.4
Meacham M-5	110.5	99.4	124.9	20.4	77.5	3.7
Ky 204	102.3	91.0	116.6	20.9	86.1	3.3
Ky 5921W	110.6	99.0	126.7	20.9	84.1	3.6
US 523W	106.9	95.3	122.4	20.9	80.3	3.6
Hagan H-2	106.8	95.0	122.0	21.0	86.8	3.6
Dekalb 925	109.7	99.9	122.1	21.2	80.6	3.8
P.A.G. 633W	110.0	98.5	125.2	21.2	83.9	4.0
Stull 500W	110.6	98.0	127.6	21.3	80.8	3.8
White Average	108.1	96.8	123.0	20.7	81.4	3.7
GRAND AVERAGE	109.2	97.8	123.9	20.1	83.4	3.6

* 1960 only.

MAKE YOUR CHOICE BASED ON YOUR OWN NEEDS. SEE PAGE 8

Table 5. Two-year summary of hybrids grown in 1961 and 1962.

Hybrid	Average Yield Bu./Acre			Maturity		
	State	Western	Eastern	Harvest Ear Moisture %	Erect Plants %	Ear Height Ft.
YELLOW						
S.S. Pocahontas	100.5	89.3	117.2	17.3	79.1	3.2
Crib Filler 116	112.5	97.5	135.1	18.4	85.2	3.4
Dekalb 805	112.5	99.6	131.7	18.6	83.5	3.2
Stull 107Y	106.3	92.2	127.6	18.6	82.3	3.2
Ken-Bred E-20Y	104.2	90.8	124.3	18.7	86.8	3.1
P.A.G. SX 19	120.2	108.3	138.1	19.0	84.0	3.7
Princeton 840-A	104.4	89.5	126.8	19.1	85.2	3.1
AES 805	100.9	89.8	117.4	19.4	80.4	3.4
Crib Filler 66	108.8	97.2	126.1	19.5	81.0	3.4
Dekalb 633	107.5	92.6	129.9	19.5	86.0	3.2
Crib Filler 123	107.8	92.1	131.5	19.6	86.6	3.4
Stull 100Y	111.7	98.5	131.5	19.6	76.3	3.7
Princeton 890-A	101.5	90.0	118.8	19.7	84.1	3.1
S.S. Matoaka	104.4	90.4	125.5	19.7	80.3	3.3
Ken-Bred E-20YA	113.3	96.8	137.9	19.7	85.2	4.0
Dixie's 110Y	110.8	96.5	132.3	19.8	80.3	3.8
AES 809	104.9	90.0	127.2	19.9	85.2	3.1
US 13	101.2	88.4	120.4	19.9	78.3	3.8
Hagan H-9	115.3	100.4	137.6	20.1	79.6	3.9
P.A.G. 434	111.0	94.8	135.3	20.1	84.2	3.3
Princeton 8-A	101.6	89.4	120.0	20.1	88.8	3.2
S.S. Munsee	104.9	90.1	127.1	20.1	84.1	3.2
Dekalb 803	99.9	90.0	114.7	20.2	84.0	3.5
S.S. Cherokee	103.8	88.7	126.5	20.2	81.5	3.4
Stull 100YA	112.3	95.0	138.4	20.3	84.1	3.9
Meacham M-33YB	115.9	100.7	138.7	20.4	84.5	3.9
Hilligoss 84	104.9	89.7	127.6	20.5	80.0	3.7
Stull 101Y	113.1	96.8	137.5	20.5	83.5	3.8
P.A.G. 436	107.1	91.9	130.0	20.6	83.7	3.4
Stull 101YA	114.9	96.9	142.0	20.7	75.7	3.8
Ky 105	115.6	97.4	143.0	20.7	88.8	4.3
S.S. Catawba	110.4	93.2	136.2	20.9	80.5	3.3
Pioneer 312A	110.1	95.7	131.7	21.4	86.8	3.3
Ky 5924	112.9	98.0	135.2	21.4	81.6	3.8
Pioneer 309A	114.1	99.5	136.0	23.2	92.4	4.0
Yellow Average	108.6	94.2	130.2	19.9	83.3	3.5
WHITE						
Ky 5901W	106.1	92.0	127.4	19.9	78.8	3.4
Ky 5902W	108.7	93.7	131.2	20.0	76.9	3.6
Stull 400WC	109.3	93.0	133.8	20.3	76.0	4.0
Princeton 990	115.2	98.5	140.2	20.5	77.7	3.9
Ken-Bred M-20W	109.5	95.0	131.3	20.6	82.3	3.5
Meacham M-5	113.6	96.7	139.0	20.8	77.6	3.6
US 523W	105.4	89.4	129.4	21.1	80.4	3.5
Ky 5921W	109.1	93.7	132.2	21.2	83.3	3.6
Hagan H-2	107.8	94.1	128.5	21.3	87.2	3.6
Ky 204	103.1	87.0	127.1	21.5	85.0	3.2
P.A.G. 633W	110.6	94.4	134.8	21.5	83.1	3.9
Stull 500W	111.8	93.7	138.9	21.5	79.9	3.8
Dekalb 925	111.0	96.2	133.2	21.9	80.5	3.8
Princeton 990-A	109.8	92.3	136.2	22.1	86.7	3.6
White Average	109.4	93.6	133.1	21.0	81.1	3.6
GRAND AVERAGE	108.8	94.0	131.0	20.2	82.6	3.5

Table 6. Annual summary of hybrids grown in 1962.

Hybrid	Average Yield Bu./Acre			Maturity		
	State	Western	Eastern	Harvest Ear Moisture %	Erect Plants %	Ear Height Ft.
YELLOW						
Stull 107Y	107.6	86.9	138.6	16.2	73.9	3.4
S.S. Pocahontas	93.2	78.9	114.7	16.2	71.4	3.4
Pioneer 345A	102.0	86.3	125.6	16.3	72.8	3.5
Ken-Bred E-20Y	97.4	78.1	126.4	16.4	79.3	3.2
Princeton 840-A	97.1	76.6	127.9	16.6	81.2	3.2
Crib Filler 116	104.3	86.4	131.2	16.6	79.1	3.5
Dekalb 805	106.4	89.9	131.2	16.8	72.6	3.3
US 13	92.9	79.0	113.8	16.8	75.0	4.0
P.A.G. SX 19	111.2	97.4	131.8	16.8	81.5	3.9
AES 805	94.8	83.3	112.0	16.9	78.2	3.5
Crib Filler 123	102.5	84.6	129.3	16.9	79.5	3.5
Princeton 890-A	91.1	77.8	111.1	17.0	74.5	3.2
Crib Filler 134	103.2	83.6	132.7	17.0	70.3	3.6
Stull 100YA	104.5	84.5	134.6	17.1	80.7	4.1
Dixie's 110Y	99.8	83.2	124.6	17.1	74.3	3.8
Stull 100Y	103.5	86.7	128.7	17.2	64.4	3.8
Schenk S-86	106.3	87.3	134.9	17.2	72.7	3.9
AES 809	98.5	82.0	123.2	17.2	79.8	3.4
S.S. D1115	109.7	96.2	130.0	17.3	70.8	4.3
Pioneer 3166	99.1	85.8	119.1	17.3	81.6	3.3
S. S. Matoaka	92.1	78.4	112.7	17.3	69.0	3.5
Stull 101Y	103.7	85.3	131.3	17.4	79.3	4.2
Princeton 8-A	99.5	82.7	124.6	17.4	84.1	3.4
S. S. Munsee	97.7	79.4	125.1	17.5	79.7	3.3
P.A.G. 434	105.7	86.2	135.0	17.5	77.9	3.4
Dekalb 633	100.0	80.3	129.6	17.5	79.3	3.4
Ken-Bred E-20YA	110.9	91.9	139.4	17.5	81.1	4.0
Hilligoss 84	100.6	84.6	124.5	17.7	74.3	3.9
Meacham M-33YB	105.8	91.4	127.4	17.8	81.2	3.9
S. S. Catawba	102.1	83.3	130.3	17.8	72.6	3.5
Dekalb 803	92.6	81.6	109.0	17.9	79.3	3.7
Hagan H-9	103.8	88.4	126.9	17.9	73.8	4.0
P.A.G. 436	105.8	86.1	135.3	17.9	76.6	3.6
Crib Filler 66	109.7	92.8	135.0	17.9	73.9	3.5
Ky 105	103.9	86.3	130.4	17.9	88.6	4.4
Stull 108Y	111.8	96.6	134.6	18.0	84.7	4.6
S. S. Cherokee	93.2	77.8	116.4	18.0	74.6	3.4
Pioneer 312A	105.1	89.1	129.0	18.0	80.6	3.5
Dekalb 1003	97.3	87.3	112.3	18.1	73.6	3.9
Stull 101YA	108.2	89.1	136.9	18.2	70.9	3.6
Ky 5924	105.6	88.2	131.8	18.4	78.8	3.8
Ky 5708R	106.7	91.8	129.0	18.7	77.4	4.0
Dekalb 1006	115.8	98.5	141.7	19.5	83.7	4.6
Pioneer 309A	111.0	98.8	129.2	19.6	90.3	4.0
Yellow Average	102.6	86.1	127.2	17.5	77.2	3.7

Continued on next page.

Table 6. Continued.

Hybrid	Average Yield Bu./Acre State	Western	Eastern	Maturity Harvest Ear Moisture %	Erect Plants %	Ear Height Ft.
WHITE						
Ky 5902W	101.7	83.6	128.8	17.4	66.0	3.7
Princeton 990	111.1	90.6	141.9	17.7	72.1	4.0
Ken-Bred M-20W	108.9	93.5	132.0	17.8	74.6	3.7
Stull 400WC	102.5	84.4	129.6	17.9	68.6	4.2
Dekalb 925	102.9	90.0	122.2	17.9	77.0	3.9
P.A.G. 633W	109.3	93.6	132.9	18.0	77.4	4.0
Ky 5901W	96.7	82.9	117.4	18.0	67.3	3.5
Pioneer 509W	109.8	94.4	133.0	18.1	74.9	3.9
Ky 204	91.8	74.7	117.4	18.1	77.9	3.3
Ky 5921W	108.9	91.1	135.6	18.1	80.6	3.8
US 523W	96.8	78.7	123.9	18.2	69.7	3.3
Meacham M-5	108.4	88.5	138.2	18.3	69.3	3.7
Crib Filler 183W	113.1	98.4	135.1	18.5	79.5	3.7
Princeton 990-A	103.5	86.5	129.1	18.5	80.3	3.6
Hagan H-2	102.9	88.1	125.1	18.6	79.0	3.8
Ky 5905W	110.3	96.3	131.2	18.6	79.7	3.6
Kamps 913BRK	104.4	92.4	122.3	18.6	76.4	4.1
Dekalb 925A	106.4	97.2	120.1	18.9	59.7	4.1
Stull 500W	107.7	83.9	143.4	18.9	75.2	3.8
Schenk S-99AW	113.2	94.7	141.0	19.5	75.0	3.7
White Average	105.5	89.2	130.0	18.3	74.0	3.8
GRAND AVERAGE	103.6	87.2	128.2	17.7	76.2	3.7

Table 7. Reaction of hybrids to leaf blight diseases [1/]

Hybrids	Leaf Blight Resistance-1962 Southern	Northern	Leaf Blight Resistance 1960-62 Southern	Northern
WHITE				
Crib Filler 183W	Good	Good		
Dekalb 925	Good	Poor	Fair	Poor
Dekalb 925A	Good	Poor		
Hagan H-2	Good	Good	Good	Very Good
Kamp 913BRK	Good	Good		
Ken-Bred M-20W	Good	Fair		
Ky 204	Fair	Poor	Poor	Poor
Ky 5901W	Good	Fair	Poor	Good
Ky 5902W	Good	Poor	Poor	Poor
Ky 5905W	Fair	Good		
Ky 5921W	Fair	Fair	Fair	Very Good
Meacham M-5	Good	Good	Good	Good
P.A.G. 633W	Fair	Poor	Poor	Poor
Pioneer 509W	Good	Fair		
Princeton 990	Good	Fair		
Princeton 990-A	Good	Good		
Schenk S-99AW	Excellent	Very Good		
Stull 400WC	Very Good	Fair	Very Good	Fair
Stull 500W	Good	Fair	Very Good	Very Good
US 523W	Fair	Good	Fair	Fair

Continued on next page

Table 7. Continued.

Hybrids	Leaf Blight Resistance-1962 Southern	Leaf Blight Resistance-1962 Northern	Leaf Blight Resistance 1960-62 Southern	Leaf Blight Resistance 1960-62 Northern
YELLOW				
AES 805	Good	Good	Good	Very Good
AES 809	Very Good	Fair	Very Good	Very Good
Crib Filler 66	Good	Good		
Crib Filler 116	Fair	Good	Fair	Good
Crib Filler 123	Good	Fair	Very Good	Very Good
Crib Filler 134	Fair	Fair		
Dekalb 633	Fair	Good	Poor	Very Good
Dekalb 803	Good	Fair	Good	Very Good
Dekalb 805	Good	Very Good	Good	Excellent
Dekalb 1003	Good	Poor		
Dekalb 1006	Very Good	Very Good		
Dixie's 110Y	Good	Poor		
Hagan H-9	Good	Fair	Good	Poor
Hilligoss 84	Good	Fair		
Ken-Bred E-20Y	Good	Fair	Good	Good
Ken-Bred E-20YA	Good	Very Good		
Ky 105	Good	Fair	Good	Poor
Ky 5708R	Very Good	Very Good		
Ky 5924	Very Good	Good		
Meacham M-33YB	Good	Poor	Good	Poor
P.A.G. 434	Poor	Good	Poor	Good
P.A.G. 436	Very Good	Fair		
P.A.G. SX19	Good	Good		
Pioneer 309A	Very Good	Fair	Very Good	Very Good
Pioneer 312A	Good	Good	Very Good	Very Good
Pioneer 345A	Good	Fair		
Pioneer 3166	Good	Poor		
Princeton 8-A	Fair	Good		
Princeton 840-A	Good	Fair		
Princeton 890-A	Good	Fair		
Schenk S-86	Fair	Fair		
S.S. D1115	Good	Poor		
S.S. Catawba	Good	Poor		
S.S. Cherokee	Good	Poor		
S.S. Matoaka	Good	Poor		
S.S. Munsee	Good	Fair		
S.S. Pocahontas	Fair	Poor		
Stull 100Y	Fair	Fair	Poor	Very Good
Stull 100YA	Good	Fair	Good	Fair
Stull 101Y	Good	Good	Very Good	Very Good
Stull 101YA	Very Good	Fair	Very Good	Very Good
Stull 107Y	Very Good	Very Good		
Stull 108Y	Good	Poor		
US 13	Poor	Fair	Poor	Fair

1/ Resistance rating scale, excellent, very good, good, fair, and poor.