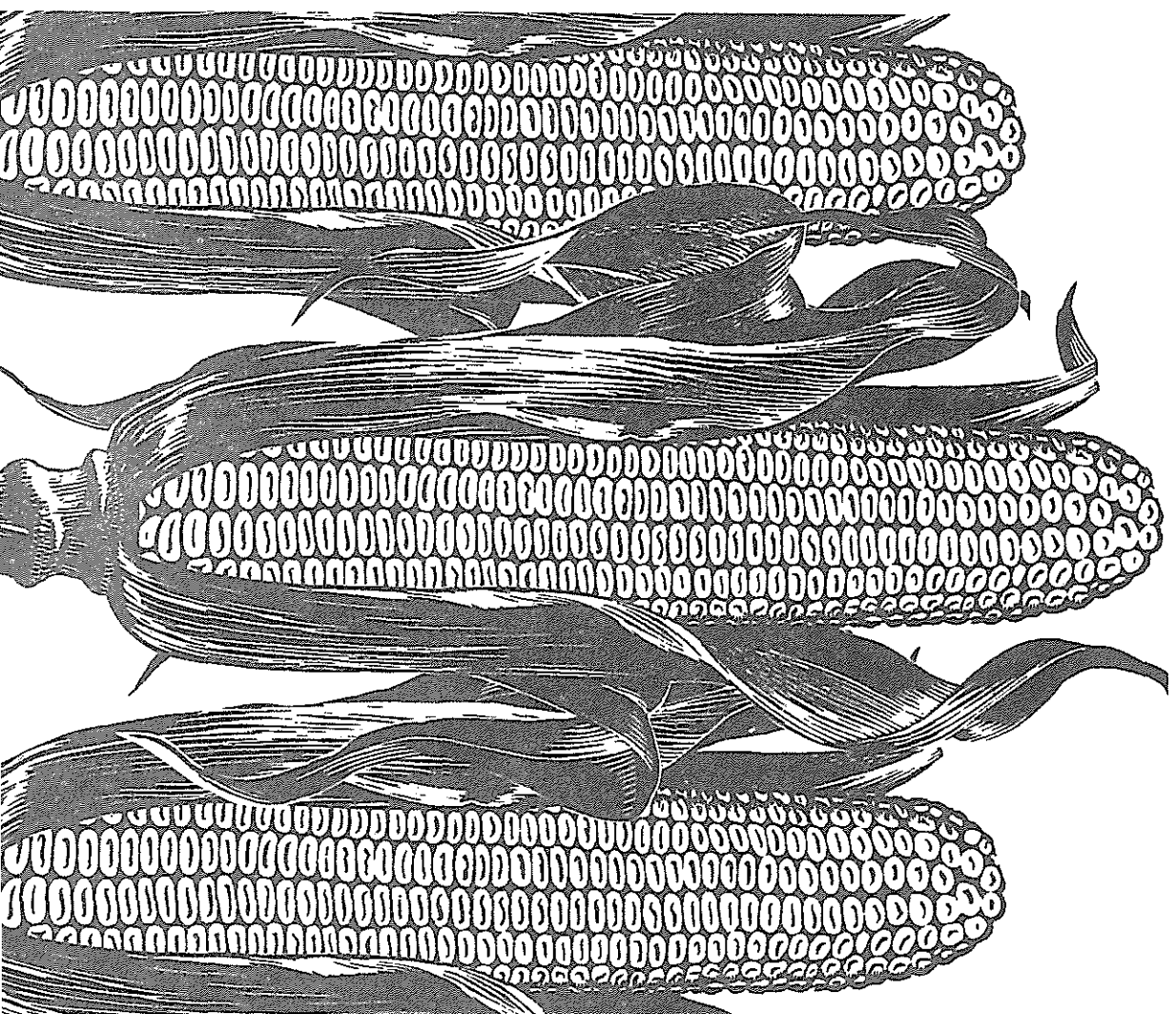


KENTUCKY HYBRID CORN PERFORMANCE TEST-1979

C. G. PONELEIT and K. O. EVANS • PROGRESS REPORT 245

UNIVERSITY OF KENTUCKY • COLLEGE OF AGRICULTURE
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TABLE 13.—CORN VIRUS TEST, HENDERSON, KY., 1979

VARIETY	YIELD BU/AC 77-79	YIELD BU/AC 78-79	YIELD BU/AC 1979	AVG % MOIST 1979	AVG % STAND 1979	TOTAL % LODGED 1979	VIRUS RATING 1979
YELLOW HYBRIDS							
DEKALB XL394	99.1	94.9	135.7	20.9	89.0	13.4	2.3
BO-JAC XHR32			115.7	19.5	71.4	26.2	3.7
GOLDEN HARV. H2745			125.1	20.7	81.4	9.9	3.7
AGRI-CHEM. USS 2461			106.2	18.3	78.1	10.8	4.0
AGRI-GOLD XA-706			111.9	17.4	86.7	8.1	4.0
PIIONEER BRAND 3147	113.6	105.7	142.0	22.9	82.9	9.3	4.0
ZIMMERMAN 730Y			123.8	17.2	80.0	8.1	4.0
ADLER'S 753			103.4	19.3	77.1	4.3	4.3
CARGILL 951			104.3	18.1	84.3	7.8	4.3
PIONEER BRAND 3179	105.8	111.3	147.0	20.5	82.4	6.5	4.3
RUFF'S R-434	74.0	70.0	98.6	16.5	73.3	4.6	4.3
SO. STATES 85710			130.5	16.2	89.5	8.0	4.3
SO. STATES 12956			129.9	20.7	83.8	23.9	4.3
TROJAN MDM-116	80.6	81.9	117.5	19.5	82.9	4.2	4.3
GOLDEN AC. T-E 6947	81.6	82.2	101.3	20.5	82.4	20.9	4.7
HCCURDY 7878			93.3	20.5	80.5	5.9	4.7
PIONEER BRAND X4506			141.2	23.0	89.5	3.3	4.7
PIONEER BRAND X5505		107.7	135.1	20.9	86.2	10.6	4.7
RUFF'S R444			103.3	17.5	80.5	5.3	4.7
SELECT SEED MDM75			108.8	19.9	75.7	12.7	4.7
ADLER'S 73X			96.5	19.6	71.9	16.8	5.0
ASGRHW R9115A	91.5	83.1	95.2	18.3	85.2	5.5	5.0
ASGRHW R1114			129.3	18.9	85.2	3.0	5.0
FUNK'S 64740			133.7	20.6	87.1	12.7	5.0
FUNK'S 64848	100.5	96.5	120.6	23.6	71.0	2.7	5.0
HCCURDY 77-60		101.1	127.9	19.7	89.5	16.9	5.0
DEKALB XL728	90.1	100.2	126.9	18.7	79.0	4.4	5.0
NORTHRUP-KING PX79			85.1	10.5	80.5	5.3	5.3
P.A.G. SX17A	81.7	86.2	106.1	17.9	73.8	10.9	5.3
P.A.G. 266010			129.9	18.2	83.3	6.2	5.3
ACCO UC9792	91.8	98.0	130.5	20.5	84.8	17.3	5.7
ADLER'S 63X			104.2	18.8	76.7	7.6	5.7
AGRI-GOLD XA-705			117.5	17.1	81.4	6.8	5.7
GOLDEN AC. T-E 6945		91.2	128.7	17.7	85.2	6.6	5.7
P.A.G. SX346		83.6	110.7	16.1	79.0	8.1	5.7
PIONEER BRAND 3364	88.7	85.1	112.7	19.9	87.6	4.9	5.7
JACQUES JX250			127.6	21.1	76.2	7.2	6.0
KY. YEL. VIR. SYN.	72.0		92.9	19.5	81.4	11.5	6.0
O'S GOLD SX5353		92.6	131.5	17.4	88.6	3.4	6.0
BO-JAC XHR31			128.6	17.7	78.6	5.1	6.3
DENNIS M-19			135.4	21.9	83.3	2.9	6.3
MIGRA EXP9578			132.6	21.8	76.7	33.1	6.3
NORTHRUP-KING PX95	96.9	100.7	131.1	21.8	79.5	47.3	6.3
O'S GOLD SX5255			118.9	17.4	79.5	4.0	6.3
BALDRIDGE RX335			114.1	19.4	75.2	6.9	6.7
RING AROUND RA2601	86.3	95.3	123.6	22.2	70.0	24.6	6.7
CK	91.1	103.5	141.0	18.0	81.4	6.3	6.8
BO-JAC 83	95.9	98.5	154.1	19.5	91.4	2.6	7.0
O'S GOLD SX3344		106.5	127.5	17.3	85.2	1.1	7.0
ZIMMERMAN Z24Y			150.6	20.2	93.3	3.6	7.0
JACQUES JX247			134.4	18.1	85.2	5.6	7.3
ALDEYS 66X		80.6	119.2	16.6	82.4	3.4	7.7
YELLOW AVERAGE	90.7	93.5	121.3	19.3	81.7	9.9	5.3
WHITE HYBRIDS							
FUNK'S 64787W			125.1	22.6	88.6	15.8	4.0
KY. WH. VIR. SYN.	68.7		97.1	20.4	83.3	23.3	4.3
MCMATR X233W			148.2	21.4	86.7	11.4	4.3
ZIMMERMAN Z11W	95.6	88.1	127.6	23.3	81.9	6.5	4.3
RING AROUND RA2602W	88.9	92.0	117.3	21.2	81.0	14.2	5.0
CK			143.7	21.0	87.1	19.5	5.7
COKER 6104W			130.3	19.9	87.1	22.8	5.7
PRINCETON SX910W	95.7		131.7	22.2	84.3	16.6	5.7
ZIMMERMAN Z52W	85.2	89.3	133.8	21.7	81.9	18.2	6.0
WHITE AVERAGE	86.8	89.8	127.9	21.5	84.7	15.5	5.0
GRAND AVERAGE	89.8	93.1	122.3	19.7	82.1	10.7	5.2
LSD (.05)*			22.4	1.7	12.0	11.9	1.7
C.V.			10.8	5.0	8.7	66.7	19.1

* For the differences between two means to be significant at the 5% level the observed differences must exceed the LSD.

Kentucky Hybrid Corn Performance Test 1979

C. G. Poneleit and K. O. Evans

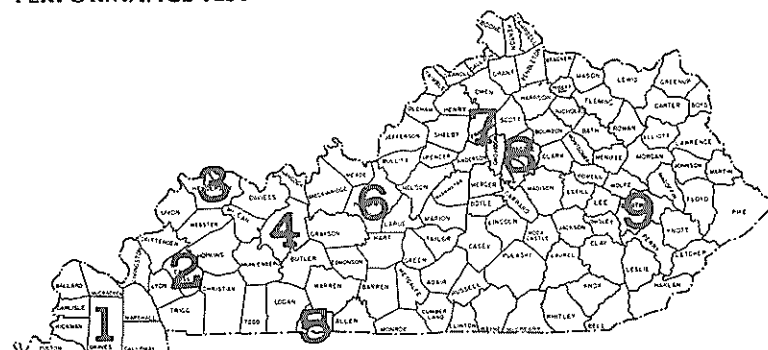
The objective of the Kentucky Hybrid Corn Performance Test is to provide unbiased performance estimates of hybrid seed corn sold in Kentucky. Every effort has been made to conduct the test in an unbiased manner according to accepted agronomic practices.

PRESENTATION OF DATA

Complete 1979 data are presented for the tests at each location. Two-year and three-year averages for yield are included in each of the single-location tables. Readers are encouraged to consider these multiple year averages and the averages over locations (Tables 10, 11, and 12) since these are better estimates of a hybrid's relative yield ability than data gathered at one location in one year.

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 do not provide a suitable comparison between a hybrid grown at one location and population with another hybrid grown at a different location and population.

LOCATIONS OF THE 1979 KENTUCKY HYBRID CORN PERFORMANCE TEST



TESTING PROCEDURE

SELECTION OF HYBRIDS

The hybrids chosen for testing are those most likely to be available for sale in 1980. Seed of each commercial hybrid (Table 1) was obtained from the sponsoring company.

Those hybrids grown in the corn virus tests are indicated in column 2 of Table 1. The hybrid corn companies were asked to nominate those hybrids known to have virus resistance for inclusion in the virus test.

LOCATION OF TESTS

The map on page 3 shows the location for each test. The non-virus test sites were selected to represent different agro-climatic areas of the state where corn is a major crop commodity. The Henderson and Frankfort sites are specifically for the presence of corn virus in diverse areas of the state and should represent differences in virus populations.

CULTURAL PRACTICES

The seedbed at each location except Elizabethtown was prepared by conventional tillage methods. Fertilizer was applied as indicated by soil tests. The test at Elizabethtown was planted in a soybean residue using recommended no-tillage practices. All test areas were treated with herbicide and supplemented by post-emergence cultivation when necessary. Except for the virus tests, Furadan was applied in the row at planting. Table 2 shows the specific cultural treatment for each location.

EXPERIMENTAL DESIGN

Each hybrid was grown in three separate plots at each location to sample uncontrollable variability of soil types, fertility, and other factors. Annual mean yields presented in Tables 3 through 13 are the average of three replications at that test site while 2-year and 3-year means are averages of six and nine replications, respectively. An 11 x 11 lattice design was used at each non-virus location, and an 8 x 8 lattice design was used at the virus locations.

TABLE 12.—THREE-YEAR SUMMARY,
ALL NON-VIRUS LOCATIONS, 1977-1979

VARIETY	YIELD BU/AC 77-79	AVG % MOIST 77-79	AVG % STAND 77-79	TOTAL % LOADED 77-79
YELLOW HYBRIDS				
PIONEER BRAND 3184	148.7	21.3	89.8	12.4
PIONEER BRAND 3369A	148.4	20.0	86.2	18.3
ZIMMERMAN 220Y	144.7	21.2	90.2	21.6
80-JAC 923	144.6	21.2	86.9	17.3
HOBLIT XR441A	144.1	20.9	83.1	13.7
STEWART SX77	143.8	20.7	81.8	12.2
SELECT SEED 5100	143.3	20.0	85.4	17.3
ZIMMERMAN 224Y	141.5	20.3	87.4	14.4
COLBERT 310	140.9	19.7	87.4	19.6
MIGRO M-7072	140.5	20.4	86.2	15.9
80-JAC 87	140.0	20.4	83.4	16.6
ACCO UC8951	139.3	21.3	85.8	18.1
SELECT SEED 86	139.3	20.3	86.3	15.6
COKER 22	138.8	21.3	86.4	15.5
RUFF'S R334A	138.6	20.5	85.4	19.4
RING AROUND RA1502	137.3	20.7	81.7	14.1
SELECT SEED 6400	136.8	19.7	83.0	14.5
GOLD TAG 3020	136.4	20.1	83.8	19.3
P.A.G. SX17A	135.6	19.7	84.5	25.1
NORTHROP-KING PX74	135.6	19.8	84.5	20.7
DENNIS DS-37	135.3	19.9	81.9	14.7
FUNK'S G4507	134.7	20.2	83.8	21.4
COKER 16	134.5	20.2	87.1	13.2
GOLDFN AC. T-E 6995	134.0	19.6	83.9	19.5
TROJAN TXS-114	133.5	20.0	85.8	19.3
VORIS SEEDS V2532	132.9	19.8	85.5	19.6
ADLERS 62X	132.8	20.0	87.4	19.9
DEKALB XL72AA	131.8	19.9	83.6	18.8
NORTHROP-KING PX79	131.0	19.5	85.3	16.5
GUTHFIN 86	130.5	19.9	85.1	18.7
ADLEPS 87X	130.3	20.7	83.7	20.7
PRINCETON SX 840	129.8	21.5	84.6	11.2
ASGROW RX90	129.4	19.7	83.4	21.0
GUTWEIN 72	129.1	20.1	81.4	14.0
SO. STATES SS730	128.4	20.2	83.5	18.9
GOLDFN HARV. H2666	128.3	20.6	80.0	19.5
SO. STATES SS775	128.2	20.4	87.5	14.0
DEKALB XL72B	128.2	20.0	79.5	13.4
TROJAN TXS-119	128.0	21.3	80.9	19.0
MCNATR X194	127.7	20.5	82.5	19.3
ACCO UC9792	127.0	21.8	81.9	14.7
RING AROUND RA1501	126.3	19.7	82.9	17.7
PREMIER SX633	125.7	20.1	82.1	18.4
O'S GOLD SX5500	125.3	20.7	83.2	23.1
SUPER CRST 6800	124.5	20.4	80.4	22.4
YELLOW AVERAGE	134.8	20.4	84.4	17.7
WHITE HYBRIDS				
ZIMMERMAN Z52N	137.8	22.4	85.8	21.3
SO. STATES SS950W	132.6	22.2	83.7	19.1
ZIMMERMAN 711W	131.7	22.7	85.4	23.3
FUNK'S G4747W	130.4	22.7	84.3	23.9
PRINCETON SX910W	128.6	22.5	85.8	26.0
GOLDFN HARV. H2660W	124.3	22.5	75.3	21.7
WHITE AVERAGE	130.9	22.5	83.4	22.5
GRAND AVERAGE	134.3	20.6	84.3	18.3

**TABLE 11.—TWO-YEAR SUMMARY,
ALL NON-VIRUS LOCATIONS, 1978-1979**

VARIETY	YIELD BU/AC 78-79	AVG % MOIST 78-79	AVG % STAND 78-79	TOTAL % LODGED 78-79
YELLOW HYBRIDS				
COLBERT 345	153.0	22.8	85.9	10.5
PIONEER BRAND 3311	149.0	22.0	86.0	7.7
NORTHROP-KING PX95	149.3	24.3	83.8	7.4
BO-JAC 923	148.2	22.3	86.0	10.6
PIONEER BRAND 3369A	147.8	21.0	85.7	12.2
PIONEER BRAND 3188	147.3	22.3	89.2	8.9
ZIMMERMAN Z20Y	147.2	22.4	86.1	12.7
MIGRO M-0707	146.7	22.1	86.2	7.3
STEWART 6973	144.3	22.4	86.5	8.4
SELECT SEED 5100	143.7	21.2	85.7	9.1
RUFF'S R334A	142.7	21.7	85.0	12.2
O'S GOLD SX5509	142.4	22.5	85.3	8.1
BO-JAC 83	142.2	21.5	83.7	11.4
HOBLETT XR441A	142.2	22.0	80.6	6.8
ZIMMERMAN Z24Y	141.8	21.3	85.3	11.6
ZIMMERMAN Z22Y	141.6	22.4	83.7	6.5
PIONEER BRAND 3183	141.1	21.8	81.7	7.4
ACCO UC8951	140.7	22.5	84.6	7.9
MIGRO M-7072	140.6	21.7	87.2	9.3
SELECT SEED 86	140.3	21.4	87.0	5.3
NORTHROP-KING PX87	139.6	23.1	82.0	6.5
GOLD TAG 3020	139.1	21.1	83.2	11.5
VORIS SEEDS V2601	138.9	20.9	85.1	13.0
STEWART SX77	138.7	21.9	78.2	5.7
P.A.C. SX17A	138.6	20.6	84.6	12.8
FUNK'S G4507	138.3	21.2	81.6	9.2
NORTHROP-KING PX74	138.2	20.7	82.9	9.0
GOLDEN AC. T-E 6995A	138.0	21.1	82.8	10.5
PREMIER SX639	137.8	22.6	82.8	10.8
MCCURDY H8X84	137.7	21.1	86.6	10.4
STEWART 6573	137.1	22.8	84.2	11.6
COLBERT 310	137.1	20.6	87.1	10.6
P.A.C. SX333	136.8	20.7	82.5	9.0
COKE 22	136.2	22.6	84.0	11.0
DEKALB XL72AA	136.0	20.8	82.5	8.6
RING AROUND RA1502	135.7	21.8	79.9	5.6
GOLDEN AC. T-E 6995	134.8	20.7	82.6	11.6
ASGRON RX98	134.7	20.7	83.1	11.5
TROJAN TXS-114	134.6	21.0	85.4	10.8
SELECT SEED 6400	134.3	20.8	83.5	10.2
GUTWAIN 86	134.2	21.1	83.6	13.1
RING AROUND RA2501	133.5	21.7	83.6	13.0
VORIS SEEDS V2532	133.3	20.8	84.1	7.6
BO-JAC 568	133.0	21.3	80.5	7.5
RING AROUND RA2502	133.0	23.3	83.3	11.3
COKE 16	132.8	21.3	86.9	9.4
DENNIS DS-37	132.8	21.0	79.5	10.8
SO. STATES SS730	132.2	21.4	83.0	10.2
ADLERS 62X	131.8	21.0	85.7	12.6
ASGRON RX90	131.2	20.7	82.0	10.4
PRINCETON SX 840	130.6	23.0	83.5	8.1
PREMIER SX633	130.4	21.2	82.3	10.0
RING AROUND RA1501	130.1	20.7	81.7	9.5
NORTHROP-KING PX79	129.6	20.5	83.3	7.8
GOLDFN HARV. H2666	129.3	21.7	78.0	11.5
DEKALB XL72B	128.3	21.2	80.3	9.4
MCHAIR X198	128.2	21.7	83.7	12.3
O'S GOLD SX5500	127.7	21.9	82.8	16.3
ADLERS 87X	127.6	21.8	82.2	15.5
PIONEER BRAND 3535	127.4	19.5	83.4	5.3
SO. STATES SS775	126.8	21.6	86.8	9.0
GUTWAIN 72	126.2	21.0	78.0	6.8
TROJAN TXS-119	123.6	22.5	79.1	11.3
ACCO UC9792	121.4	23.2	79.5	8.0
SUPER CROST 6800	119.6	21.7	77.9	15.1
YELLOW AVERAGE	136.4	21.6	83.4	9.9
WHITE HYBRIDS				
ZIMMERMAN Z52W	137.3	23.9	84.5	13.7
FUNK'S G4747W	136.0	24.2	83.6	16.0
SO. STATES SS950W	135.8	23.9	83.9	11.2
ZIMMERMAN Z11W	134.1	24.2	84.0	13.4
PRINCETON SX910W	130.0	24.0	85.3	10.0
GOLDFN HARV. H2660W	126.3	24.1	77.6	15.2
WHITE AVERAGE	133.2	24.0	83.2	14.4
GRAND AVERAGE	136.2	21.8	83.4	10.3

Small differences in yield are usually of little importance. The yield of two varieties at a single location may differ because of chance factors (difference in soil characteristics, fertility, or availability of moisture) even though the inherent yielding ability is the same. To decide if an observed yield difference is real, use the LSD (least significant difference) quoted at the bottom of the tables. If the difference in yield is greater than the LSD value, you may be reasonably certain that the entries actually do differ in yielding ability. "N.S." in the tables indicates that no statistically significant differences were determined.

PLANTING

All plots were planted with a two-row, no-till planter modified for small plot work. The planter boxes were replaced by special planting cones which allowed planting of a specified number of kernels per plot. Each plot consisted of two rows 38 inches apart and 22 feet long. Each normal population, conventional tillage test was planted at the rate of 22,000 kernels per acre. The normal population, no-till test was planted at 25,000 kernels per acre. Final stands were expected to be between 19,000 and 20,000 plants per acre if average stand losses occurred.

HARVESTING

All plots were harvested with a modified two-row self-propelled corn combine. Both rows of each two-row plot were picked and 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. Yields were calculated and adjusted to No. 2 corn at 15.5% moisture. Dropped ears were not gleaned from the plots. The total number of plants and lodged plants were recorded immediately prior to harvest.

CORN VIRUS

Two corn virus diseases occur in Kentucky; maize dwarf mosaic virus (MDM) and maize chlorotic dwarf virus (MCD). Both overwinter in Johnsongrass and are usually present as a virus complex. During the growing season, symptoms of MDM and MCD appeared on plants at the Frankfort location, but few plants had virus symptoms at the Henderson location. A late season flood destroyed the Frankfort plots

so that the only data collected from this location were the virus ratings. No virus ratings were obtained at Henderson because of the low incidence of infestation.

The ratings of virus symptoms from the Frankfort location are included with the yield and other data in Table 13. Even though the virus did little apparent damage to the hybrids at the Henderson location the yield data may be used to evaluate the relative yields of these potentially virus-resistant hybrids under low-level virus conditions.

The virus ratings in Table 13 are on a 0 to 9 scale. A rating of 0 means that the plants showed no virus symptoms while a rating of 9 means that nearly all plants had very severe symptoms and would likely produce no grain. Intermediate values represent degrees of virus resistance or susceptibility.

Five virus-susceptible check hybrids were included in the virus tests. Their average performance is listed in Table 13 as Susceptible Checks.

NOTES ABOUT THE GROWING SEASON

MAYFIELD

The Mayfield test was planted on May 18 and harvested October 18-20. Precipitation was heavy the last few days of May with 2.4 inches falling on May 19. Recorded precipitation amounts from May 19 through September were 4.19, 1.74, 7.23, 0.40, and 2.68 inches, respectively. Weed control was fair and disease and insect problems were minimal.

PRINCETON

The Princeton test was planted on May 16 and harvested on October 17 and 18. Precipitation amounts recorded from May 16 through October 16 were 3.82, 3.17, 4.92, 5.99, 9.12, and 1.03 inches, respectively. Weed control was excellent and disease and insect problems were minimal.

TABLE 10.—(continued)

VARIETY	YIELD	AVG %	AVG %	TOTAL %
	BU/AC	MOIST	STAND	LOGGERS
	1979	1979	1979	1979
YELLOW HYBRIDS				
PREMIER SX633	146.4	20.8	80.7	10.4
STEWART 6573	146.1	22.3	82.4	11.4
ASGRON RX90	147.6	20.5	82.4	13.3
P.A.G. SX368A	147.4	20.5	84.3	14.2
GOLDFN AC. T-E 6995	146.7	20.5	78.7	10.4
SO. STATES SS730	146.3	21.2	83.6	14.8
ASGRON RX909	145.9	22.7	83.0	12.4
SUPER CRST 79023	145.4	21.4	86.6	9.8
VORIS SEEDS V2532	145.3	20.7	84.9	10.1
RING AROUND RA1501	145.1	20.9	84.0	13.1
STEWART SX77	144.5	21.9	83.1	7.9
SO. STATES SS775	143.4	21.3	87.3	4.2
PRINCETON SX 840	143.6	22.7	82.8	6.7
BALDRIDGE RX77	143.0	21.7	83.0	16.1
ADLERS 62X	142.7	20.7	84.0	10.3
ADLERS 86X	142.5	21.0	82.3	19.3
ASGRON RX98	141.9	20.9	83.7	12.4
MIGRO M-SPX49	141.4	19.6	89.3	14.9
RUFF'S R292	141.3	20.2	83.5	5.0
GOLDFN HARV. H2666	140.9	21.8	77.0	16.1
PIONEER BRAND 3382	140.9	20.5	81.4	2.9
GOLDFN HARV. H2677	140.6	23.5	73.8	7.4
DEWIS OS-37	140.1	20.9	77.7	14.2
GUTHFIN 72	139.7	21.3	81.1	4.3
DEKALB XL728	138.5	21.0	80.6	11.8
MCHAIR X194	138.4	21.6	83.7	15.0
O'S GOLD SX5500	138.4	21.4	85.2	24.3
AGRI-CHEM. USS 1010	138.1	20.9	76.4	10.4
ACCO UC9792	138.0	23.1	84.0	7.9
ADLERS 87X	137.9	22.3	85.4	23.5
PIONEER BRAND 3535	136.7	19.5	83.1	6.2
JACQUES JX180	136.0	20.9	76.6	9.4
RING AROUND RA2502	135.1	23.2	81.6	16.0
NORTHRIP-KING PX79	133.8	20.6	81.5	4.1
DEWIS OX-19	133.1	20.3	69.4	4.2
MIGRO H-HP61	133.1	21.2	77.6	12.2
TROJAN TXS-119	132.4	22.2	79.8	16.9
AGRI-CHEM. USS 2010	131.9	21.3	79.8	25.6
TROJAN T1109	128.7	21.7	81.1	12.5
AD1577	127.8	21.7	82.5	8.6
GOLDFN HARV. HP606	126.2	20.9	73.3	9.8
RUFF'S R150	125.7	21.0	78.0	6.6
BALDRIDGE RX24	123.5	20.2	76.3	17.3
SUPER CRST 6800	117.3	21.7	75.5	23.2
YELLOW AVERAGE	150.2	21.4	83.7	11.8
WHITE HYBRIDS				
DEKALB XL190B	166.1	22.7	82.2	15.8
SO. STATES SS950W	159.3	23.8	83.8	12.5
ZIMMERMAN Z52W	149.7	23.7	84.0	16.5
FUNK'S G474W	148.5	23.9	80.9	19.1
ASGRON RX962W	147.5	23.7	80.8	20.5
PRINCETON SX910W	145.7	23.9	86.5	27.8
MCHAIR X233W	144.7	23.7	71.4	17.7
GOLDFN HARV. H2660W	144.5	23.7	78.4	16.8
CUKER 6104W	143.9	23.7	88.2	19.3
ZIMMERMAN Z11W	143.1	23.6	81.4	17.0
AGRI-GOLD A-6950W	138.8	23.5	83.1	12.5
WHITE AVERAGE	148.4	23.6	81.9	17.8
GRAND AVERAGE	150.0	21.6	83.5	12.4

**TABLE 10.—ANNUAL SUMMARY,
ALL NON-VIRUS LOCATIONS**

VARIETY	YIELD	AVG %	AVG %	AVG %
	BU/AC	MOIST	STAND	LODGED
	1979	1979	1979	1979
YELLOW HYBRIDS				
HO-JAC 923	172.1	22.1	88.5	11.3
MCCURDY 78-50	171.9	22.1	87.4	10.7
ADLER'S BRX	171.5	22.0	85.1	12.0
COLBFRT 345	169.6	22.6	83.9	10.8
CARGILL 967	169.4	20.6	89.7	13.1
DH9113	167.2	22.1	87.2	10.3
COLBFRT 340	167.1	21.6	88.3	7.3
PIONEER BRAND 3311	167.0	21.5	89.2	7.9
AGRI-GOLD A-6900	165.9	22.4	83.6	10.0
SUPER CROST 79014	165.9	21.7	84.5	10.7
PRINCETON SX870	165.5	21.5	82.6	13.4
GUTWEIN 2910	164.9	22.0	80.6	9.9
PIONEER BRAND 3369A	164.6	21.0	86.9	13.0
JACOUES JX247	164.5	22.1	83.9	10.7
NORTHROP-KING PX95	164.3	24.4	83.2	6.7
ZIMMERMAN Z20Y	164.2	21.8	89.1	10.7
SELECT SEED 9300	164.1	21.6	85.7	13.9
MCCURDY MSX80AA	163.5	22.3	84.5	9.6
SELECT SEED 8400	163.3	20.6	88.0	18.2
P.A.G. SX373	161.9	23.1	83.1	9.2
STEWART 6973	161.8	22.1	82.4	8.4
MIGRO M-0707	161.3	21.6	89.3	8.1
VORIS SEEDS V2651	161.2	21.8	86.6	12.5
AD1707	160.8	22.0	84.8	10.7
HORLIT XR441A	160.7	21.9	84.6	7.4
O'S ROLD SX5509	160.4	22.0	84.4	8.0
PIONEER BRAND 3184	160.2	21.7	89.7	11.6
PIONEER BRAND 3183	159.8	21.6	87.1	9.6
SELECT SEED 5100	158.8	20.7	88.4	10.0
PREMIER SX636	157.0	22.4	85.2	7.6
DEKALB XL71	156.9	21.5	85.1	6.4
P.A.G. SX333	156.3	20.8	83.8	13.4
DEKALB XL8P	155.7	22.7	85.4	13.5
ZIMMERMAN Z22Y	155.6	21.5	83.2	7.1
NORTHROP-KING PX74	155.2	20.5	83.9	11.2
DH7175	154.9	20.7	84.6	11.8
GUTWEIN 86	154.9	20.7	84.7	14.3
DEKALB XL72AA	154.8	20.5	85.9	9.7
ACCO UC8951	154.4	22.0	86.4	8.2
MCCURDY MSX84	153.3	20.7	89.0	15.2
SO. STATES SS915	153.1	22.1	88.0	15.3
TROJAN TX3-114	153.1	20.6	87.8	11.1
FUNK'S G4606	153.0	20.8	83.4	8.1
RING AROUND RA1502	152.9	21.3	82.8	7.7
CULBERT 310	152.8	20.8	87.5	12.8
HO-JAC 965	152.8	21.3	86.3	8.9
MIGRO M-7072	152.7	21.7	86.4	11.5
GOLD TAG 3020	152.4	20.7	82.6	15.9
COKEY 22	152.3	22.4	82.7	11.4
BO-JAC 83	152.2	21.5	85.2	15.3
NORTHROP-KING PX87	151.8	23.0	82.9	7.2
COKEY 19	151.8	21.0	84.2	11.8
GOLDEN AC. T-E 6995A	151.7	21.0	83.2	11.4
P.A.G. SX17A	151.5	20.4	84.4	15.1
SELECT SEED 86	151.5	21.3	87.1	12.0
ZIMMERMAN Z24Y	151.2	21.2	85.2	16.2
PREMIER SX639	151.0	22.0	81.8	11.3
ADLER'S 61X	150.8	20.5	83.6	13.0
FUNK'S G4740	150.8	23.3	84.9	23.7
COKEY 16	150.0	21.3	87.0	9.6
HORLIT XR454	149.7	22.2	81.4	10.9
RING AROUND RA2501	149.7	21.6	85.4	19.8
SELECT SEED 8400	149.1	20.3	90.0	13.7
FUNK'S G4507	149.1	21.3	81.3	13.5
RUFF'S R334A	148.7	21.4	83.2	17.9
VORIS SEEDS V2601	148.6	20.6	85.0	16.4

HARTFORD

The Hartford test was planted on May 16 and harvested on October 15 and 16. Precipitation amounts recorded from May 16 through October 14 were 2.21, 3.50, 9.73, 4.63, 9.90, and 1.26 inches, respectively. Early infestation by the black cutworm reduced stands on one replication of the test. The plots were flooded with 3.0 feet of water in September but damage was not serious. Insect and disease problems were minimal.

HENDERSON

The Henderson test was planted on May 22 and harvested on October 23. precipitation amounts were not recorded at this test site. The site was estimated to have had more than 30 inches of rainfall during the season. Flood waters covered the plots during September but damage was minimal.

ELIZABETHTOWN

The Elizabethtown test was planted no-till, in soybean residue, on April 30 and harvested October 2-5. Precipitation amounts recorded for May through September were 3.01, 5.37, 6.59, 5.85 and 8.94 inches, respectively. Weed control was fair and there were no apparent disease or insect problems.

FRANKLIN

The Franklin test was planted on May 1 and harvested September 26-27 and October 1. Recorded precipitation amounts from May through September were 4.43, 2.36, 11.04, 2.74, and 10.60 inches, respectively. High winds during September caused extensive plant lodging. Weed control was good. There was some damage from the European Corn Borer.

QUICKSAND

The Quicksand test was planted on May 10 and harvested on October 29 and 30. Precipitation amounts recorded from May 10 through October 30 were 3.40, 3.74, 5.78, 5.79, 4.07, and 2.98 inches, respectively. Weed problems were minor. Some MDM may have been present on plants around a few areas of Johnsongrass. Other disease and insect problems were minimal.

FRANKFORT

The Frankfort test was planted on May 29. The test was not harvested for yield. Limited precipitation data are available. Precipitation amounts of 3.15, 2.51, and 2.55 inches were recorded for June, July, and August, respectively. Precipitation data are not available for September and October; however, flood water covered the plot during September and caused serious damage. The incidence of virus diseases was very high.

LEXINGTON

The Lexington test was planted May 9 and harvested on October 26 and 27. Precipitation amounts recorded for May through October were 2.77, 2.97, 7.00, 4.28, 10.11, and 2.65 inches, respectively. A few problem weeds were present. There were no excessive insect or disease problems.

TABLE 9.—(continued)

VARIETY	YIELD BU/AC 78-79	YIELD BU/AC 1979	AVG % MOIST	AVG % STAND	TOTAL % LODGED 1979
YELLOW HYBRIDS					
DENNIS DS-37	154.6	138.6	20.1	79.5	2.4
STEWART 6973	151.1	139.9	22.5	79.5	4.8
BALDRIDGE RX77		138.4	21.3	83.3	9.4
ADLERS 61X		138.3	18.9	86.2	7.2
O'S GOLD SX5509	130.6	138.3	21.1	79.5	6.4
PREMIER SX636		137.0	21.9	89.0	4.8
AGRI-CHEM. USS 1010		136.9	21.3	81.9	1.6
RUFF'S R334A	141.6	136.2	22.5	94.3	10.8
VORIS SEEDS V2532	142.6	135.6	19.3	86.7	10.5
PRINCETON SX 840	137.2	135.4	22.1	86.7	4.9
STEWART 6573	148.2	135.2	22.3	84.3	6.5
NORTHROP-KING PX87	140.4	134.2	22.5	81.4	3.6
TROJAN TXS-114	138.6	133.7	20.6	86.2	7.2
RUFF'S R292		133.1	20.1	82.4	2.2
JACQUES JX180		132.0	20.5	76.7	8.1
SO. STATES SS775	129.4	131.9	22.0	90.0	5.4
SUPER CROST 79023		131.4	22.2	92.9	5.1
VORIS SEEDS V2601	137.8	131.1	19.7	91.9	5.6
MCNAIR X194	131.0	129.6	21.0	86.2	8.3
ADLERS 86X		127.0	21.1	90.0	15.9
ACCO UC9792	124.9	126.1	22.2	85.2	3.4
P.A.G. SX368A		125.4	20.4	86.4	5.5
DENNIS DX-19		124.8	20.9	73.3	2.8
STEWART SX77	139.8	124.0	22.5	83.1	6.5
TROJAN T1189		124.2	20.8	99.5	7.2
GOLDFN HARV. H2606		122.3	19.9	73.8	3.9
HIGRO H-SPX49		122.1	19.7	91.8	8.1
PIONEER BRAND 33A2		122.0	20.1	85.2	6.2
O'S GOLD SX5500	108.2	121.3	20.7	87.1	55.1
NORTHROP-KING PX79	140.7	118.8	21.1	86.7	2.2
BALDRIDGE RX24		118.7	20.0	78.1	14.0
ASGROW RX909		118.5	23.5	84.3	8.4
HOBLIT XR454		118.4	22.4	79.0	6.7
SO. STATES SS915		115.1	20.3	90.0	31.1
GOLDFN HARV. H2666	131.4	114.5	22.3	78.6	16.6
TROJAN TXS-119	111.3	114.3	21.5	83.3	30.9
GUTHFIN 72	126.3	110.3	20.9	72.9	7.7
SELECT SEED 6400	133.8	110.2	20.6	83.8	13.2
AD1677		107.6	22.5	87.1	5.5
SUPER CROST 6800	112.3	104.3	19.7	77.1	36.7
RUFF'S R150		102.5	21.2	81.9	10.0
ASGROW RX98	110.2	101.8	19.6	85.7	14.8
ADLERS 87X	117.4	100.0	21.6	90.0	29.6
AGRI-CHEM. USS 2010		93.3	20.8	81.0	41.2
YELLOW AVERAGE	143.1	142.7	21.2	86.3	8.3
WHITE HYBRIDS					
DEKALB XL3908		162.2	22.3	87.1	6.0
MCNAIR X233W		170.8	23.1	81.9	8.0
PRINCETON SX910W	165.9	162.8	24.1	95.7	12.4
ZIMMERMAN Z11W	158.5	162.2	23.0	93.3	5.1
SO. STATES SS950W	140.8	161.2	23.2	91.0	4.7
GOLDFN HARV. H2660W	146.9	150.0	24.2	82.4	7.5
COKEY 6104W		144.8	23.4	94.3	8.1
ZIMMERMAN Z52W	145.8	141.7	23.1	93.3	7.8
ASGROW RX962W		139.9	24.3	90.5	3.1
FURK'S 64747W	147.8	137.6	23.1	86.7	16.9
AGRI-GOLD A-6950W		129.7	23.6	89.0	8.5
WHITE AVERAGE	152.5	153.0	23.4	89.6	8.0
GRAND AVERAGE	143.9	143.7	21.4	86.6	8.3
LSD (.05)*		33.8	2.2	10.3	15.4
C.V.		13.9	6.0	7.1	83.4

* For the differences between two means to be significant at the 5% level the observed differences must exceed the LSD.

**TABLE 9.—ANNUAL SUMMARY,
QUICKSAND, KY.**

VARIETY	YIELD BU/AC 78-79	YIELD BU/AC 1979	AVG. X MOIST 1979	AVG. TOTAL X	
				1979	1979
YELLOW HYBRIDS					
ADLER'S 68X	160.7	22.9	90.5	4.2	
HCCUDY 78-50	177.4	22.1	91.0	6.3	
DH913	174.9	19.5	94.8	4.6	
CARGILL 967	172.4	19.8	93.3	7.9	
BO-JAC 923	155.3	21.7	87.6	3.8	
PIONEER BRAND 3311	163.4	17.1	88.5	4.7	
GUTWEIN 2910	170.4	20.9	95.2	4.5	
PIONEER BRAND 3369A	158.4	17.0	94.3	2.0	
COLBERT 340	170.2	22.0	93.3	3.0	
P.A.C. 5X353	150.7	16.8	86.6	3.3	
RO-JAC 85	185.8	16.8	87.8	3.7	
DEKALB XL82	185.8	16.8	87.8	3.7	
AUTUMN XL724A	162.4	16.8	91.4	3.1	
GENI TAG 1020	160.0	16.8	88.6	2.0	
PIONEER BRAND 3184	156.7	20.7	86.2	2.2	
AGRI-GOLD A-6900	165.0	22.9	91.0	7.9	
P.A.C. 5X17A	144.9	16.1	89.0	8.5	
DEKALB XL71	161.6	19.6	89.0	9.2	
ASGROW RX90	161.4	20.7	87.1	3.9	
FUNK'S 64507	160.4	19.8	82.4	5.2	
HIGRO H-0707	160.8	20.2	82.4	2.2	
SELECT SEED 8400	150.4	16.0	90.5	5.2	
SELECT SEED 8400	150.4	16.0	90.5	5.2	
DH1175	166.2	21.9	91.9	13.3	
SELECT SEED 9300	159.8	19.9	89.5	4.8	
JACOBS JX247	159.5	22.9	92.4	2.6	
ZIMMERMAN 222Y	158.4	22.4	87.6	5.5	
SUPER CROST 79014	151.8	15.9	82.6	3.1	
PIONEER BRAND 3183	150.5	15.3	89.5	6.1	
GOLDEN AC. T-E 6995A	157.7	21.1	88.1	5.9	
NORTHERN-KING PX78	154.0	12.6	86.7	3.3	
PIONEER BRAND 3535	154.6	15.9	88.1	7.7	
RING AROUND RA1501	152.9	15.0	85.2	5.1	
PREMIER SX63	152.9	15.0	85.2	5.1	
DEKALB XL72A	152.9	15.0	85.2	5.1	
HOBLETT 4841A	152.9	15.0	85.2	5.1	
SELECT SEED 5100	148.4	15.4	87.6	2.2	
RING AROUND RA2501	147.1	15.3	89.2	1.6	
ZIMMERMAN 222Y	143.7	15.1	84.2	7.8	
PIONEER BRAND 3535	142.6	15.2	85.2	6.5	
RING AROUND RA1501	142.6	15.2	85.2	6.5	
CROST 19	142.6	15.2	85.2	6.5	
ACCOCUCR951	142.6	15.2	85.2	6.5	
GOLDEN HARV. H2677	142.6	15.2	85.2	6.5	
PREMIER SX633	142.6	15.2	85.2	6.5	
P.A.C. 5X373	142.6	15.2	85.2	6.5	
GOLDEN AC. T-E 6995	142.6	15.2	85.2	6.5	
MIGRO H-7072	142.6	15.2	85.2	6.5	
VORIS SEEDS V2651	142.6	15.2	85.2	6.5	
HCCUDY H5X88	142.6	15.2	85.2	6.5	
FUNK'S 64606	151.0	14.7	85.7	10.9	
RING AROUND RA1502	143.0	14.7	85.7	9.8	
COLBERT 310	143.0	14.7	85.7	3.2	
DEKALB XL72B	143.0	14.7	85.7	3.2	
ADLER'S 62X	139.3	14.6	85.7	2.1	
ADLER'S 62X	148.6	20.6	86.7	9.3	
SELECT SEED 86	146.0	20.5	85.7	10.0	
FUNK'S 64749730	145.9	19.2	85.7	12.9	
PIONEER BRAND 3184	145.9	19.2	85.7	12.9	
RING AROUND RA2502	142.6	18.5	85.2	10.0	
CARGILL 967	131.3	14.2	85.2	7.4	
RO-JAC 82	132.2	14.1	85.2	13.6	
GUTWEIN 86	141.7	14.7	80.0	10.9	
CROST 16	138.2	14.1	84.6	10.9	
HCCUDY H5X88A	140.9	14.6	81.0	3.6	
BO-JAC 583	136.6	14.0	81.0	8.3	
MIGRO H-HP61	139.2	19.5	83.3	3.0	
ZIMMERMAN 220Y	156.0	21.9	90.0	5.9	

TABLE 1.—HYBRIDS TESTED IN 1979

HYBRID	TEST*	COLOR	CROSS**	SOURCE OF HYBRID
A.C.C.O.	UC 8951 UC 9792	A AB	2X 2X	A.C.C.O. Seed, 515 River Avenue, North, Belmont, IA 50421
A.D.I. Dist.	A.D.I. 677 707	A A	2X 2X	A.D.I. Dist., Inc. P.O. Box 643 Carmel, IN 46032
Adler's	61X 62X 63X 66X 73X 86X 87X 88X 753	A A B B B A A A B	2X 2X 2X 2X (Mod) 2X 2X (Mod) 2X 2X 3X	Adler's Seeds Inc. Route #1 Sharpesville, IN 46068
Agri-Chem	U.S.S. 1010 U.S.S. 2010 U.S.S. 2461	A A B	2X 2X 3X	U.S.S. Agri-Chemicals Div. of United State Steel Corp., P.O. Box 1685, Atlanta, GA 30301
Agri-Gold	XA 705 XA 706 A-6900 A-6950W	B B A A	2X 2X 2X 2X	Agri-Gold Seed 8888 Woodland Drive Newburg, IN 47630
Asgrow	RX90 RX98 RX114 RX115A RX909 RX962W	A A B B A A	2X 2X 3X 2X 2X 2X	Asgrow Seed Co. P.O. Box 1059 9001 Hickman Rd. Des Moines, IA 50053
Baldrige	RX24 RX77 RX335	A A B	3X (Mod) 3X (Mod) 3X	Baldrige Seed Co. P.O. Box 82 Cherry Fork, OH 45618
Bo-Jac	583 83 XM 831 XM 832 923	A AB B B A	2X 2X (Mod) 2X 2X 2X	Bo-Jac Hybrid Corn Co. R.R. #2 Mount Pulaski, IL 62548
Cargill	967 951	A B	2X 2X	Cargill Seeds P.O. Box 9480, Dept. 16 Minneapolis, MN 55440

*A = Performance Test - Normal Population, B = Virus Test - Normal Population.

** 2X = Single Cross, 2X (Mod) = Modified Single Cross, 3X = Three-Way Cross, 4X = Double Cross. Sp X = Special Cross.

TABLE 1.—(continued)

HYBRID	TEST*	COLOR	CROSS**	SOURCE OF HYBRID
Coker	16 19 22 6104W	A A A AB	2X (Mod) 2X 3X 3X	Coker's Padigreed Seed Co. P.O. Box 340, Hartsville, SC 29550
Colbert	310 340 345	A A A	2X 2X 2X	Colbert Farms R.R. #2 Washington, IN 47501
D & H	DH 7175 DH 9113	A A	2X 2X	D. & H. Inc. P.O. Box 623 Robinson, IL 62454
DeKaib	XL71 XL72AA XL72B XL82 XL390B XL394	A A AB A A B	2X 2X 2X 3X 3X 3X	DeKaib Ag. Research 1536 Dunwoody, Village Park Suite 240 Atlanta, GA 30338
Dennis	M-19 DX-19 DS-37	B A A	2X 2X 2X	Dennis Hybrid Co. P.O. Box 487 Windfall, IN 46076
Funk's	G4507 G4606 G4740 G4747W G4787W G4848	A A AB A B B	2X 2X (Mod) 2X (Mod) Sp X 2X (Mod) 2X	Funk's Seeds International 1300 Washington Street Bloomington, IL 61701
Golden Acres	T-E 6945 T-E 6947 T-E 6995 T-E 6995A	B B A A	2X (Mod) 2X (Mod) 2X 2X	Taylor-Evans Seed Co. P.O. Box 68 Tullia, TX 79088
Golden Harvest	H2606 H2660W H2666 H2677 H2745	A A A A B	2X 2X 2X 2X 3X	Columbianna Seed Co. Eldred, IL 62027
Gold Tag	3020	A	2X	Ferry Morse Seeds P.O. Box 24 Geneseo, IL 61254
Gutwein	72 86 2910	A A A	2X 2X 2X	Fred Gutwein & Sons, Inc. RR #1, Box 40 Francesville, IN 47946
Hoblett	XR441A XR454	A A	2X 2X	Hoblett Seed Co. Atlanta, IL 61723

TABLE 8.—ANNUAL SUMMARY, LEXINGTON, KY.

VARIETY	YIELD		YIELD		YIELD		AVE. Y. AUG. TOTAL	
	BU/AC	77-79	BU/AC	78-79	BU/AC	1979	MOIST STAND	LOADED
YELLOW HYBRIDS								
AGRI-GOLD A-6900								
PIIONEER BRAND 3311		162.1		192.1		21.6	90.0	2.1
ADLER'S 88X				189.3		21.2	92.9	1.6
FUNK'S 64606				184.3		22.2	91.0	2.6
NORTHUP-KING PX95		150.3		180.3		21.4	93.3	3.6
SELECT SEED 9300				179.8		25.6	86.2	3.9
JACQUES JX247				179.1		21.1	93.8	4.3
PRINCETON SX870				177.9		21.5	93.3	7.3
HCCURDY NSX844A				176.8		20.1	88.6	7.0
O'S GOLD SX5509				176.7		21.6	94.3	2.4
PIIONEER BRAND 3184		157.1		175.0		22.0	93.8	2.5
CARBELL 967				174.6		23.4	92.9	2.4
ZIMMERMAN 220Y		143.0		173.0		21.4	90.5	19.3
80-JAC 923		149.3		172.7		20.6	87.1	10.8
30. STATES 83915		142.6		172.0		22.6	97.1	4.5
PIIONEER BRAND 3183				171.8		22.1	89.0	4.2
CONKROD-KING PX87				171.4		21.6	92.9	1.1
SUPER CROST 79014				170.8		22.5	90.2	5.0
DN9113				170.4		22.0	88.2	4.3
CHUBERT 345				170.1		23.2	89.6	3.9
PIIONEER BRAND 3369A		149.2		168.7		23.2	94.3	2.0
P.A.C. 83373				168.1		23.4	88.8	4.0
RING AROUND RA1502		137.2		167.4		23.2	98.6	4.3
HOBLIT X8454				167.4		21.3	89.5	3.0
SELECT SEED 8400				166.9		20.6	93.8	3.0
HCCURDY 78-50				166.4		22.8	93.8	1.5
ASGROW RX94		143.2		166.4		21.1	89.0	3.6
GUTWEIN 2910				165.9		21.8	88.6	3.2
FUNK'S 64740				164.6		24.9	85.2	10.8
SUPER CROST 79023				164.4		20.8	91.0	0.5
P.A.C. 93365A				164.2		20.4	91.9	6.2
AD1707				163.4		22.2	85.2	13.4
GUTWEIN 86		137.9		163.0		21.2	95.2	2.4
VORIS SEEDS V2651				162.6		21.5	90.0	5.8
CONKER 22		136.6		162.0		20.7	88.1	10.5
PRINCETON 3X 840		130.1		162.0		23.7	88.0	3.2
COLBERT 340				161.7		22.3	92.7	5.0
ADLER'S 88X		133.1		161.2		20.9	87.1	4.4
STENART 8903				159.7		22.3	81.9	5.6
HOBLIT X8454				159.4		22.3	91.4	3.7
ZIMMERMAN 222Y		138.6		159.4		22.1	89.5	10.3
DEKALB X1A32EY				158.7		21.9	92.9	2.5
SELECT SEED 6400		135.0		158.6		21.7	91.8	1.6
VORIS SEEDS V2601				158.9		20.8	88.0	4.3
DEKALB X171				158.9		20.7	90.5	7.4
50. STATES 83730		133.0		158.7		20.4	93.3	1.4
HIGHN H-8PK49				155.8		22.8	88.0	5.9
RING AROUND RA2501				155.7		21.2	87.6	2.2
PREMIER SX633		126.1		155.6		21.2	87.6	5.3
RUF'S R334A		137.2		155.4		22.2	89.5	5.3
ZIMMERMAN 224Y		136.7		155.2		20.6	91.9	2.1
PREMIER SX639				154.9		22.7	91.0	3.2
O'S GOLD SX5500		129.6		154.4		22.0	94.8	5.1
GOLDEN AC. T-E 6995A				154.2		19.6	90.8	2.6
HCCURDY H3X84				154.0		19.3	93.2	7.0
ADLER'S 81X		135.4		153.9		20.7	93.3	4.1
ROJAN 17S-114				152.5		21.5	91.0	3.5
GOLDEN HARY. H2677				152.4		21.0	88.7	4.9
50. STATES 83775		136.3		152.4		21.0	90.3	1.0
ACD 008951		134.1		152.3		22.4	91.9	2.1
COLBERT 310		130.2		152.0		20.2	88.6	1.0
ADLER'S 81X		135.8		151.9		23.6	89.0	1.2
P.A.C. 8117A		126.5		151.1		21.2	89.0	8.5
PREMIER SX636				150.5		22.6	91.4	4.8

TABLE 2.—AGRONOMIC INFORMATION PERTAINING TO 1979 TEST LOCATIONS

Location and Cooperator	Soil Type	Fertilizer lb/A	Herbicide	Insecticide	Planting Date	Harvest Date
(1) Mayfield, KY Berthal Johnson	Collins Silt Loam	N -150 P ₂ O ₅ - 92 K ₂ O - 60	Aatrex and Dual	Furadan 18 lb/A	May 18	October 18,19 & 20
(2) Princeton, KY Western KY. Substation	Huntington and Lindside Silt Loam	N -180 P ₂ O ₅ -None K ₂ O - 75 Lime-2 ton	Eradicane and Bladex	Furadan 18 lb/A	May 16	October 16 & 17
(3) Henderson, KY James Buley Reid, KY	Huntington Sandy Loam	N -86 P ₂ O ₅ -None K ₂ O -None	Sutan+ and Aatrex	None Applied	May 22	October 23
(4) Hartford, KY Dane Milligan	Melvin Silt Loam	N -200 P ₂ O ₅ - 92 K ₂ O -120	Eradicane and Aatrex	Furadan 18 lb/A	May 16	October 14 & 15
(5) Franklin, KY Harold Konow	Pembroke Silt Loam	N -165 P ₂ O ₅ -100 K ₂ O -100	Aatrex	Furadan 18 lb/A	May 1	September 26 & 27 October 1 & 2
(6) Elizabethtown, KY A.C. and Alan Summers	Crider Silt Loam	N -132 P ₂ O ₅ - 40 K ₂ O - 40 Lime-2 ton	Aatrex, Dual, and Paraquat	Furadan 18 lb/A	April 30	October 3 & 5
(7) Frankfort, KY Mason and Ralph Bates	Armour Silt Loam	N -100 P ₂ O ₅ -None K ₂ O -None	Eradicane and Aatrex	None Applied	May 30	Not Harvested
(8) Lexington, KY K.A.E.S. Spindletop Farm	Lanton Silt Loam	N -150 P ₂ O ₅ -None K ₂ O - 60	Eradicane and Aatrex	Furadan 18 lb/A	May 9	October 26 & 27
(9) Quicksand, KY Robinson Substa.	Philo Silt Loam	N -180 P ₂ O ₅ - 72 K ₂ O - 72	Eradicane, Aatrex, and Lasso	Furadan 18 lb/A	May 14	October 29 & 30

TABLE 5.—ANNUAL SUMMARY, HARTFORD, KY.

VARIETY	YIELD BU/AC 77-79	YIELD BU/AC 78-79	YIELD BU/AC 1979	MOIST WT/ST	AVG % LONGED	STAND	LONGED	1979	1979
YELLOW HYBRIDS									
80-JAC 823	155.5	150.9	172.6	23.7	23.7	95.0	12.7		
PRINCETON SX870			172.3	21.4	21.4	76.4	7.4		
ZIMMERMAN 220Y	171.1	175.9	170.7	22.0	22.0	84.3	4.9		
SELFCIT SEED 8400			168.1	21.7	21.7	80.0	0.9		
SO. STATES S8915			166.8	20.4	20.4	85.3	5.6		
SELECT SEED 6400			165.6	22.9	22.9	85.7	0.7		
COLUMBIAN 340	146.5	158.8	166.4	24.8	24.8	78.6	1.8		
HCCURRY 7A-50			165.1	23.4	23.4	82.0	5.1		
SUPER CROST 79014			163.0	23.0	23.0	83.4	9.5		
DN9113			162.7	23.8	23.8	80.7	2.5		
SUPER CROST 79023			161.4	23.8	23.8	87.9	4.3		
NORTHROP-KING PK87			161.4	23.8	23.8	87.9	4.3		
AGRI-GOLD 4-6940			151.0	24.3	24.3	78.0	7.6		
JACQUES J1247	163.0	164.8	158.3	25.2	25.2	81.1	0.6		
ZIMMERMAN 228Y			157.2	22.7	22.7	80.3	2.6		
WOLF 4-6707	157.9	156.5	157.2	22.7	22.7	80.3	2.6		
ACCO UC9957			156.4	23.0	23.0	80.7	1.6		
OKLAIB XL174	146.7	146.7	156.4	23.0	23.0	80.7	1.6		
P.A.C. 8X133			155.7	23.6	23.6	87.4	7.9		
ADLEPS 68X			155.7	23.6	23.6	87.4	7.9		
COLUMBIAN 340	161.1	157.4	155.6	22.7	22.7	80.7	7.9		
PIOMFER BRAND 3369A			153.5	21.3	21.3	77.4	5.5		
VORTS SEEDS V2572	154.8	155.0	153.3	21.9	21.9	85.7	7.5		
SELECT SEED 5100	154.4	155.6	152.6	22.1	22.1	84.3	2.4		
GUTHWIN 72	143.0	144.1	152.4	20.2	20.2	87.0	4.3		
PRINCETON SX 840	143.0	149.0	151.0	23.2	23.2	82.1	4.3		
GUTHWIN 86	150.5	151.3	150.8	23.0	23.0	77.9	10.2		
ZIMMERMAN 228Y			150.6	22.1	22.1	73.6	0.0		
HCCURRY 4X368AA			150.5	22.7	22.7	81.4	4.4		
STEWART 6973	151.4	150.4	150.5	22.7	22.7	79.3	2.7		
HCCURRY 4X368	145.0	150.2	150.2	21.6	21.6	82.1	7.9		
PREMIER 5X676			149.6	22.8	22.8	81.0	1.7		
COKER 19			149.3	22.0	22.0	81.0	5.2		
NORTHROP-KING PK74	144.0	141.6	149.0	21.0	21.0	82.9	6.6		
CARGILL 967			148.7	21.9	21.9	81.4	7.1		
HORTHROP-KING PK95			148.5	24.5	24.5	79.3	6.0		
COKER 16	151.9	149.7	148.3	23.4	23.4	88.4	3.3		
PIOMFER BRAND 3183			133.0	18.3	18.3	77.4	1.0		
PIOMFER BRAND 3311			136.2	17.4	17.4	79.4	2.7		
WOLFF 4X174	156.9	134.5	147.3	23.1	23.1	87.1	9.0		
O'S GOLD SYSS99			149.0	23.4	23.4	70.9	0.7		
PIOMFER BRAND 3184			146.0	18.5	18.5	78.1	2.5		
80-JAC 83	140.7	138.8	145.3	23.7	23.7	86.4	1.3		
COLORFEST 110	155.9	141.3	145.3	23.7	23.7	86.4	1.3		
SELFCIT SEED 86	147.7	143.6	145.2	21.5	21.5	76.4	2.7		
ASSROW PK909	144.8	151.2	145.2	22.5	22.5	76.4	0.0		
SELFCIT SEED 9100			143.7	23.3	23.3	79.3	8.1		
GOLD TAG 3020	144.9	152.3	142.6	22.5	22.5	82.9	2.6		
GOLDEN HARV. H2666	145.7	140.0	142.3	22.1	22.1	80.0	5.3		
DH7175			141.4	21.4	21.4	77.9	2.5		
RTING AROUND RA1501	146.8	148.1	141.8	22.1	22.1	88.4	3.1		
GUTHWIN 2910			141.1	23.8	23.8	71.4	14.0		
P.A.C. 8X174	155.0	149.6	141.1	22.5	22.5	84.3	27.0		
AGRI-CHEF. USS 1010			141.0	20.7	20.7	69.3	5.1		
P.A.C. 8X368A	153.9	150.1	140.4	22.1	22.1	75.0	2.9		
FUNK'S 64606			140.7	20.1	20.1	74.3	10.3		
ASSROW PK98			139.7	20.4	20.4	79.3	3.9		
PIOMFER BRAND 32501			145.4	139.7	139.7	21.0	74.3	5.5	
ADLEPS 68X	143.7	139.6	143.7	22.8	22.8	79.3	4.5		
ADLEPS 61X	144.0	139.4	144.0	23.1	23.1	78.6	3.7		
ADLEPS 61X	139.3	139.3	139.3	21.8	21.8	79.3	17.0		
ADLEPS 61X	139.1	139.1	139.1	23.1	23.1	80.7	3.0		
ADLEPS 61X	138.2	138.2	138.2	22.7	22.7	79.7	0.0		

* For the differences between two means to be significant at the 5% level the observed differences must exceed the LSD.

TABLE 5.—(continued)

VARIETY	YIELD BU/AC 77-79	YIELD BU/AC 78-79	YIELD BU/AC 1979	MOIST WT/ST	AVG % LONGED	STAND	LONGED	1979	1979
WHITE HYBRIDS									
ZIMMERMAN 252W	164.6	167.5	170.0	24.4	24.4	74.3	6.0		
DEKALB XL390B			163.5	24.0	24.0	64.6	6.7		
PRINCETON SX910M	162.5	155.2	159.0	24.4	24.4	78.0	7.4		
SOCIETYS S8910M	151.9	151.3	158.3	23.2	23.2	70.7	7.0		
ASSROW PK922H	144.0	144.4	150.5	24.0	24.0	75.0	19.5		
GOKER 61049			136.3	25.0	25.0	82.9	5.2		
AGRI-GOLD 4-6950W			138.0	24.5	24.5	75.0	4.2		
GOLDEN HARV. H2660M	137.6	132.3	134.0	24.6	24.6	68.4	4.3		
ZIMMERMAN 211W	151.6	140.2	132.5	24.0	24.0	70.0	4.0		
MCHAIR 2233W			129.3	24.6	24.6	59.3	5.8		
WHITE AVERAGE	153.7	151.8	147.9	24.5	24.5	72.5	6.5		
GRAND AVERAGE									
	149.9	147.4	141.9	22.4	22.4	77.9	6.9		
LSD (.05)*			30.1	2.1	2.1	15.8	N.S.		
C.V.			10.3	4.4	4.4	9.8	115.9		

* For the differences between two means to be significant at the 5% level the observed differences must exceed the LSD.