

South Dakota State University
**Open PRAIRIE: Open Public Research Access Institutional
Repository and Information Exchange**

Agricultural Experiment Station Circulars

SDSU Agricultural Experiment Station

11-1993

1993 South Dakota Corn Performance Trials

R. G. Hall

South Dakota State University, robert.hall@sdstate.edu

Follow this and additional works at: http://openprairie.sdstate.edu/agexperimentsta_circ

Recommended Citation

Hall, R. G., "1993 South Dakota Corn Performance Trials" (1993). *Agricultural Experiment Station Circulars*. Paper 292.
http://openprairie.sdstate.edu/agexperimentsta_circ/292

This Circular is brought to you for free and open access by the SDSU Agricultural Experiment Station at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Agricultural Experiment Station Circulars by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.

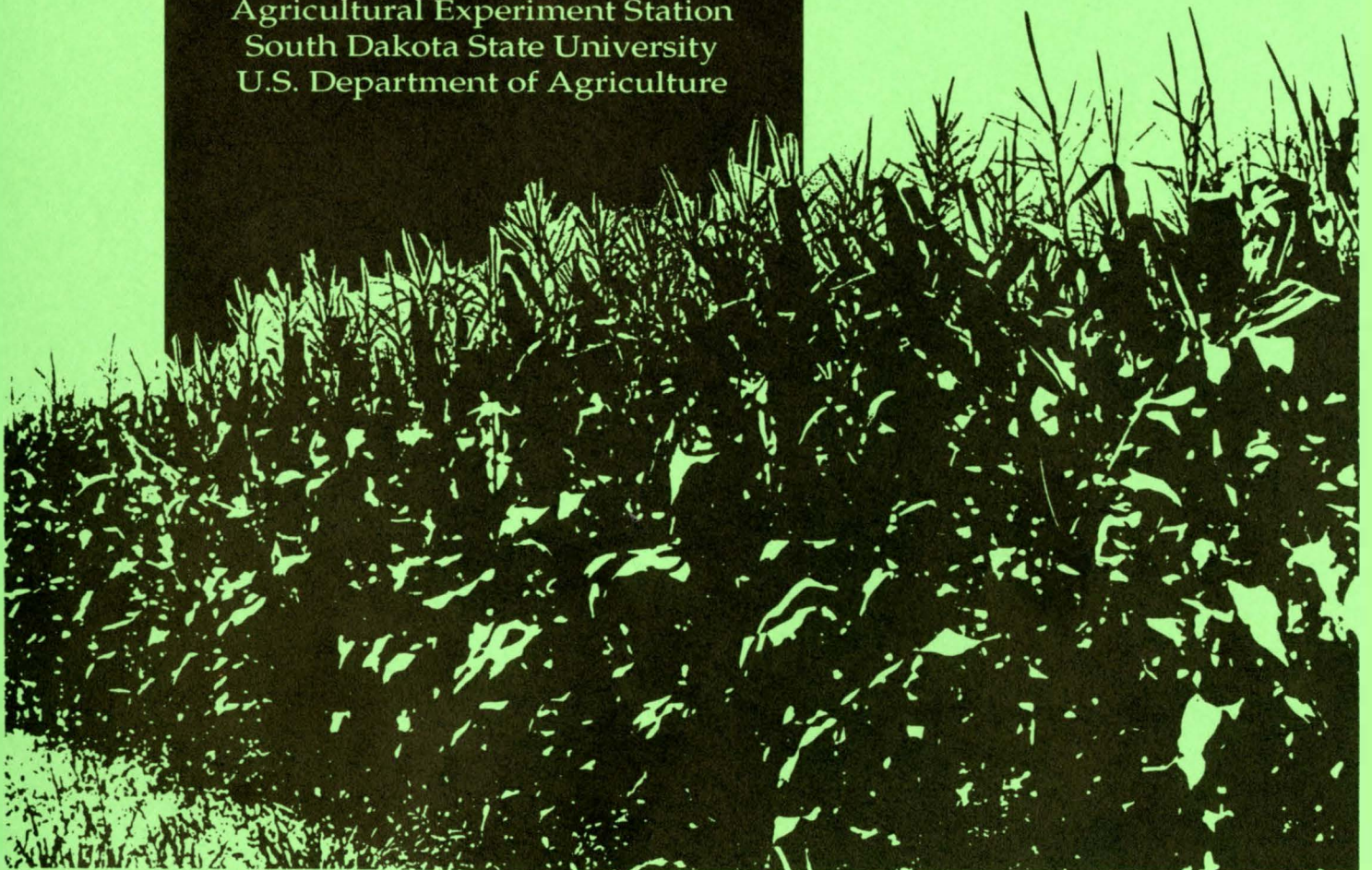
C 253
(revised annually)

1 9 9 3
South Dakota

CORN

PERFORMANCE TRIALS

Agricultural Experiment Station
South Dakota State University
U.S. Department of Agriculture



Contents

Table 1. Test trial locations, seeding dates, and harvest dates	4
Table 2. Temperature and precipitation data	4
Table 3. Soil classification, fertilizer applied, land preparation, and previous crops	4
Table 4. Watertown, NE Research Farm, early maturity (95 days or less)	5
Table 5. Watertown, NE Research Farm, late maturity (96 days or more)	6
Table 6. No-till: Frankfort, Steve Masat farm, early maturity (100 days or less)	7
Table 7. No-till: Frankfort, Steve Masat farm, late maturity (101 days or more)	8
Table 8. Brookings, SDSU Agronomy Farm, early maturity (100 days or less)	9
Table 9. Brookings, SDSU Agronomy Farm, late maturity (101 days or more)	10
Table 10. Sioux Falls, Tom Wintersteen farm, early maturity (105 days or less)	11
Table 11. Sioux Falls, Tom Wintersteen farm, late maturity (106 days or more)	12
Table 12. Irrigated, no-till: Pierre, Dakota Lakes Research Farm, early maturity (100 days or less)	13
Table 13. Irrigated, no-till: Pierre, Dakota Lakes Research Farm, late maturity (101 days or more)	14
Table 14. Armour, Robert Clark farm, early maturity (110 days or less)	15
Table 15. Armour, Robert Clark farm, late maturity (111 days or more)	16
Table 16. Beresford, SE Research Farm, early maturity (110 days or less)	17
Table 17. Beresford, SE Research Farm, late maturity (111 days or more)	19
Entries in the 1993 South Dakota corn performance trials	21

Published in accordance with an act passed in 1881 by the 14th Legislative Assembly, Dakota Territory, establishing the Dakota Agricultural College and with the act of re-organization passed in 1887 by the 17th Legislative Assembly, which established the Agricultural Experiment Station at South Dakota State University. Educational programs and materials offered without regard to age, race, color, religion, sex, handicap, or national origin. An Equal Opportunity Employer.

1 9 9 3
South Dakota

CORN

PERFORMANCE TRIALS

Robert G. Hall
Associate Professor/Extension Agronomist
Manager, Crop Performance Testing

Plant Science Department
Agricultural Experiment Station
South Dakota State University
Brookings, SD 57007-1096

The relative performance of corn hybrids grown under similar environmental conditions in 1993 is evaluated in this report.

Information in the tables includes both 1993 and 1992-93 grain yields in bushels per acre (bu/acre); and 1993 test weight, moisture percentages of shelled corn at harvest, final plant populations per acre, and stalk lodging percentages. The test trials reported in this publication were conducted by the Plant Science Department Crop Performance Testing Program, Agricultural Experiment Station.

The assistance of the following individuals is appreciated: Dwayne Beck, Loyal Evjen, Delbert Robbins, and Bob Berg of the research farms; technicians Kevin Kirby and Darin Huber; and Robert Clark, Tom Wintersteen, and Steve Masat, farmer-cooperators.

Location of the 1993 Trials

Test trial locations and seeding and harvest dates are given in Table 1. Seeding started on May 3 and was completed by May 8.

Trial results at Armour, Sioux Falls, Spink County, and Pierre were relatively good this year because of timely planting, adequate moisture, and adequate temperatures.

Test trial results at other locations were below average because of excessive moisture and/or cool temperatures during the summer which caused depressed yields or test weights or high moisture levels at harvest.

Weather and Climatic Conditions

Climatic data (Table 2) for the 1993 corn growing season, April-

September, are based upon U.S. Monthly Climatological Data (NOAA) recorded at a weather station reasonably near each trial site. The Watertown, Pierre, and Sioux Falls airport data are used for the NE Research Farm, Dakota Lakes Research Farm, and Tom Wintersteen farm trials, respectively. Stations are located at or near the other trial sites.

Precipitation quantities may differ between the actual test site and the recording station; but temperatures are generally similar over a much wider area and are considered applicable to the trial area.

April and May temperatures (Table 2) were normal to 3 degrees below normal. However, temperatures dropped 4.4 degrees below normal in June and July, 1.2 degrees below normal in August, and about 5 degrees below normal in September.

Monthly precipitation totals at Armour, Centerville (SE Farm), Sioux Falls, and Brookings were high for May, June, and July. Monthly precipitation totals at Watertown, Redfield, and Pierre were highest in June and July.

Cool temperatures in June and July slowed growth to the extent that 50% of the state corn crop silked on about August 13, which is about 2 weeks later than the normal silk date of July 30. In August, temperatures increased somewhat, which helped to bring the crop along. However, higher temperatures in August could not compensate for the lower temperatures of June and July, and the corn crop continued to mature behind schedule. Consequently, with the lower temperatures in August, much of the crop did not reach full maturity. As a result, yields or test weights were low in the Beresford, Brookings, and Watertown areas.

Hybrid Entry Procedure

Participating companies designated the test locations where their entries were to be grown. Entries were placed into early or late trials based upon maturity information supplied by the company. The arbitrary breaks at each site were 95 days for Watertown; 100 days for Frankfort, Brookings, and Pierre; 105 days for Sioux Falls; and 110 days for Beresford and Armour. A fee was charged for every entry at each location. A listing of the participating firms and hybrids entered is given on the last pages of this circular.

Experimental Procedure

Entries included in each trial were seeded in three replications. Plots of individual hybrids were located at random within each replication. Each plot consisted of two 30-inch rows, 26 feet long. The target seeding population per acre for each location was:

Location	Seeds per Acre
Watertown	22,100
Frankfort	20,800
Brookings	22,100
Sioux Falls	22,800
Beresford	24,100
Armour	20,100
Pierre - irrigated	33,500

Soil types, starter fertilizers, land preparation, and previous crop at each test trial site are outlined in Table 3. No insecticides were used for corn rootworm control this year. A recommended short-residue preemergence herbicide was banded over the row at seeding at most sites.

A 31-cell cone drill seeder was used for all plots. Cone units were mounted above commercial maxi-merge units. Seeding rate was 15% more than the desired number of plants harvested per plot. Seedbed preparation was good at

all locations. Final stands in all trials were near desired levels, except for Legend LS7393 in the early test at Pierre.

Measurements of Performance

Yield. Yields in all trials are averaged from three replications (except SE Farm) and expressed as bushels per acre at 15.5% moisture and a bushel weight of 56 lb.

Only two replications were harvested at the SE Farm. The third was flooded out. Both 1993 and 1992-93 yields were calculated using two replications.

Hybrids of equal potential may yield differently because of variations in slope, soil fertility, and stand. Statistical tests were conducted to determine whether these differences were caused by variations in environment or were true varietal differences.

The coefficient of variation (CV) for yield was greater than desired for the early test at the NE Farm at Watertown (Table 4). Ideally, the CV value, which is a measure of experimental error, should not exceed 16%. **If the CV value exceeds 16%, the data should not be used to make hybrid comparisons because of the high degree of experimental error measured in the test trial.**

Experimental error may be the result of several factors, including test methods; or of environmental factors, such as moisture, temperature, and soil variations; or of agronomic factors, like seeding date, reseeding, or seed quality factors. All of these factors may or may not be controllable in a given year. In 1993 the yield data in Table 4 should not be used to make hybrid comparisons due to the high level of experimental error.

The high CV value at Watertown was due to high winds on the night of July 31 which caused many tassels to snap off. Commonly called "green snap," this condition occurs when high winds break the tassel off at the node just below the tassel.

Although it would appear that green snap is hybrid dependent, it really is not. All hybrids appear to be very prone to having a weak node below the tassel shortly after the tasseling stage. Green snap occurs when high winds hit the corn crop shortly after tasseling. Researchers have observed this for years but as yet have no explanation for it. They believe this vulnerability only lasts for a few days and then disappears.

To convert data in these tables to the metric system use the factor 1.121 to convert lb/acre to kilograms/hectare. For example, a yield of 55 bu/acre from the yield tables would be converted to kilograms/hectare by:
 $55 \text{ bu/acre} \times 1.121 = 61.7 \text{ kilograms/hectare}$

Moisture Content. This is expressed for each entry as the percentage of moisture in the shelled corn at the time of harvest. Moisture content is inversely related to maturity. Because maturity is a prime concern in South Dakota, moisture figures are of considerable importance in the evaluation of the trial entries. Hybrids that provide satisfactory yields and can be stored without additional drying are desirable.

Use of tables. First, check for the "least significant difference" (LSD) value at the bottom of each column of data averages. The LSD value indicates how much a variable such as yield must differ between two hybrids for there to be a real yield difference.

An LSD value is given at the bottom of every column where there is

significant difference among the averages within that column. If there is no real difference among the averages within a given column a "nonsignificant" (NS) difference is indicated.

The LSD value for a variable can be used in two ways. First, it compares whether two hybrids really differ in yield.

For example, the yield difference between any two hybrids in the late trial at Watertown (Table 5) must be more than 9 bu/acre. If it isn't, there is no real yield difference between the two hybrids.

Second, the same LSD value can identify which hybrids are the best yielders at a given location.

Again in the late maturity test trial at Watertown, the highest yield was 72.6 bu/acre for Cargill 4327. To find out if Cargill 3427 is the only top yielder at Watertown we must use the LSD value of 9.0 bu/acre at the bottom of the 1993 yield column. For hybrids to

be in the best yield group they must yield within 9.0 bu/acre of Cargill 4327 (72.6 - 9.0) or they must yield more than 63.6 bu/acre. Therefore, any hybrid yielding 63.7 bu/acre or higher is in the top yielding group; or we can say 63.7 bu/acre is the minimum best value for top yielding late hybrids at Watertown in 1993.

In this case, the hybrids Cargill 4327 down through and including Ciba 4303 are in the best yield group because they all yielded more than 63.7 bu/acre. Likewise, the best minimum value for bushel weight is 44.7 lb.

Except for one entry in the early test at Pierre, all final stand populations were similar at a given test location. In the early test at Pierre there was a significant final stand effect. The test LSD (5%) for final stand was 1,571. The highest population at Pierre was 33,500. For any population to be significantly lower than 33,500, the lower population had to be (33,500 - 1,571) or 31,929 plants per acre or less.

In this case, it would be unfair to compare the yield of Legend LS7393 with the other hybrids because its final stand of 29,815 is not within one LSD (5%) value (1,571) of any of the other hybrids in this test.

For harvest moisture content and stalk lodging percentages, look for the maximum best value at the bottom of those table columns. The appropriate LSD values are added to the lowest numerical value within a column to obtain the maximum best values.

In the late test at Watertown (Table 5), the best harvest moisture percentages within the harvest moisture column are 21.9% or less. Likewise, the best stalk lodging percentages within the stalk lodge column are 3% or less.

In summary, the best hybrids in the late maturity test at Watertown (Table 5) would yield more than 63.7 bu/acre in 1993, have test weights of at least 44.7 lb/bu or higher, contain 21.9% moisture or less, and have 3% or less lodged stalks.

Table 1. Test trial locations, seeding dates, and harvest dates.

LOCATION	COUNTY	POST OFFICE	DATE SEEDED	DATE HARVESTED
N. E. RESEARCH FARM, 15N*	CODINGTON	WATERTOWN	MAY 11	NOV. 9
TOM WINTERSTEEN FARM, 1S,1W,3S	MINNEHAHA	CROOKS	MAY 4	NOV. 8
STEVE MASAT FARM, 6S,2W	SPINK	FRANKFORT	MAY 12	OCT. 28
SDSU AGRONOMY FARM, 2NE	BROOKINGS	BROOKINGS	MAY 4	NOV. 1
S. E. RESEARCH FARM, 7W,3S	UNION	BERESFORD	MAY 20	NOV. 2
ROBERT CLARK FARM, 4W,1S	DOUGLAS	ARMOUR	MAY 5	NOV. 3
DAKOTA LAKES RESEARCH FARM, 17E	HUGHES	PIERRE	MAY 3	NOV. 4

* MILEAGE AND DIRECTIONS FROM NEAREST POST OFFICE.

Table 2. Temperature and precipitation data, 1993 South Dakota corn performance trials.

LOCATION	TYPE OF DATA	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	TOTAL
WATERTOWN (N. E. FARM) AIRPORT	PRECIPITATION*	2.01	2.33	5.53	5.01	2.42	3.36	20.66
	AVER. TEMP.**	40.5	54.5	60.8	67.4	68.0	53.9	
	TEMP. DIFF.	-0.7	-2.6	-6.0	-5.1	-2.3	-5.7	
SIOUX FALLS AIRPORT	PRECIPITATION	2.61	8.26	6.43	7.86	3.10	1.88	30.14
	AVER. TEMP.	44.1	57.1	65.1	71.4	71.4	56.8	
	TEMP. DIFF.	-2.8	-1.3	-3.2	-2.9	0.0	-4.1	
REDFIELD (SPINK CO.) 2 NE	PRECIPITATION	2.95	2.26	5.81	9.20	1.91	1.23	23.36
	AVER. TEMP.	43.0	56.1	62.0	67.4	68.8	54.3	
	TEMP. DIFF.	-2.0	-0.9	-4.9	-5.9	-1.9	-5.6	
BROOKINGS 2 NE	PRECIPITATION	1.96	4.32	8.69	5.18	2.27	2.12	24.54
	AVER. TEMP.	39.9	54.4	61.6	67.8	68.0	52.9	
	TEMP. DIFF.	-0.1	-1.5	-4.0	-2.9	0.0	-5.3	
CENTERVILLE (S. E. FARM) 6 SE	PRECIPITATION	2.51	5.38	5.67	7.12	4.40	1.76	26.84
	AVER. TEMP.	44.1	56.9	65.3	70.5	70.3	55.7	
	TEMP. DIFF.	-3.4	-2.4	-3.7	-3.3	-0.5	-5.4	
ARMOUR (DOUGLAS CO.)	PRECIPITATION	2.70	5.87	3.70	6.65	3.46	1.13	23.51
	AVER. TEMP.	46.9	59.7	66.4	71.5	72.0	59.2	
	TEMP. DIFF.	-2.1	-0.3	-3.6	-4.4	-1.5	-4.0	
PIERRE (DLR FARM) AIRPORT	PRECIPITATION	2.33	1.79	3.07	3.80	0.52	1.66	13.17
	AVER. TEMP.	44.8	58.3	63.5	70.0	71.3	57.9	
	TEMP. DIFF.	-2.3	0.0	-5.2	-6.0	-2.6	-4.5	

*PRECIPITATION = INCHES, TEMPERATURE = DEGREES FAHRENHIET.

Table 3. Soil classification, fertilizer applied, land preparation, and previous crops.

LOCATION	SOIL TYPE	STARTER FERTILIZER 2 X 2 APPLICATION (LBS PER ACRE)	LAND PREPARATION, PREVIOUS CROP
BROOKINGS	VIENNA LOAM	37 - 18 - 00	CONV., SPRING WHEAT
WATERTOWN	BROOKINGS SIL. CL. LOAM	37 - 18 - 00	CONV., FLAX
FRANKFORT	BEOTIA SILT LOAM	37 - 18 - 00	NO-TILL, MILLET STUBBLE
BERESFORD	TRENT SILTY LOAM	37 - 18 - 00	CONV., SOYBEAN
ARMOUR	EAKIN-ETHAN COMPLEX	37 - 18 - 00	NO-TILL, WHEAT STUBBLE
PIERRE	CANNING LOAM	37 - 18 - 00	NO-TILL, SOYBEAN STUBBLE
SIOUX FALLS	MOODY-NORA SILTY LOAM	37 - 18 - 00	CONV., SOYBEAN

SIL.= SILT, CL.= CLAY, CONV. = CONVENTIONAL.

**Table 4. 1993 corn hybrid performance trial results:
Watertown, SD, NE Research Farm, early maturity (95 days or less).**

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
DEKALB DK 462	55.0	63.4	31.6	36.2	22110	2
PIONEER 3861	54.6	61.8	25.7	37.7	22110	0
KALTENBERG K4400	52.1	.	23.0	39.8	22110	0
TOP FARM SX1193	50.0	.	25.4	40.8	22110	0
TOP FARM SX2195	49.7	.	24.6	38.3	22110	0
DYNA-GRO 15095	49.6	.	26.8	37.9	21998	0
ASGROW RX433	48.9	.	28.8	40.9	21440	1
DAIRYLAND ST-1195	48.8	.	25.7	38.8	22110	1
CUSTOM FARM CFS W2457	47.2	.	28.2	40.3	22110	1
G. HARVEST H-2292	46.8	.	23.6	40.2	22110	1
DEKALB DK 381	45.9	53.5	21.4	40.0	21887	2
N. KING N-2409	44.5	.	22.7	45.5	22110	0
CARGILL 2927	43.1	49.0	31.3	35.2	22110	1
G. HARVEST H-2295	41.4	.	27.2	40.6	22110	1
KALTENBERG K3909	40.5	.	25.6	39.9	21998	1
STINE 930	39.8	.	22.9	42.9	22110	3
CARGILL 3427	39.0	56.4	29.0	36.3	22110	0
CIBA 4183	38.3	.	25.4	36.7	22110	0
CENEX/LOL 375	37.9	.	28.9	36.8	22110	0
SIGCO 1489	37.5	.	22.2	41.8	21440	0
DEKALB DK 401	36.5	53.9	22.7	40.6	21998	3
G. VALLEY GVS282	36.4	.	23.9	41.4	22110	1
CIBA 4172	35.4	45.8	28.3	33.9	22110	0
PAYCO 413	34.8	.	27.6	35.5	22110	0
KALTENBERG K4800	31.9	.	31.2	36.2	21998	2
SEXAUER SX450	31.2	48.8	30.9	34.7	22110	1
AGRIGENE AG3500	29.2	47.5	30.3	34.7	22110	0
DAHLGREN D5962	25.1	46.0	29.3	35.8	22110	0
N. KING N-2933	24.4	.	26.1	38.1	21998	1
SEXAUER SX420	23.5	.	25.8	39.9	21998	1
DAIRYLAND ST-1294	22.7	.	28.2	34.2	22110	0
PIONEER 3907	22.0	.	24.2	39.8	22110	0
PAYCO 402	20.5	37.7	29.9	32.8	22110	0
ASGROW RX350	18.6	.	23.3	41.2	21887	2
TOP FARM SX2190	16.6	.	25.9	35.8	21328	1
KALTENBERG K4500	15.1	.	21.9	34.7	21775	0
ICI 8883	7.9	29.4	25.9	29.1	22110	0
TEST AVERAGE:	36.3	49.4	26.4	38.0	22013	1
TEST LSD (5%) VALUE:	.	NS*	2.3	4.2	NS	NS
MINIMUM BEST VALUE:	.	.	.	41.4	.	.
MAXIMUM BEST VALUE:	.	.	23.6	.	.	.
TEST C.V.#:	17.9##	13.5	.	.	.	.

*NS - INDICATES HYBRID DIFFERENCES WITHIN A COLUMN ARE NOT SIGNIFICANT.
#COEF. OF VARIATION - A MEASURE OF EXPERIMENTAL ERROR; IF VALUE EXCEEDS 16.0% DATA SHOULD NOT BE USED TO MAKE HYBRID COMPARISONS.
##DUE TO THE HIGH C.V. THE YIELDS IN THIS COLUMN SHOULD NOT BE USED TO MAKE HYBRID COMPARISONS. THE HIGH C.V. WAS PARTLY DUE TO "GREEN SNAP" OF THE TASSELS WHICH OCCURRED ON JULY 31 AS A RESULT OF HIGH WINDS. GREEN SNAP PERCENTAGES RANGED FROM 0 TO 95%.

**Table 5. 1993 corn hybrid performance trial results:
Watertown, SD, NE Research Farm, late maturity (96 days or more).**

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
CARGILL 4327	72.6	67.4	19.6	40.4	22110	1
SIGCO 1301	66.8	63.5	31.1	39.9	22110	5
DEKALB DK 471	66.2	.	31.6	37.5	22110	0
G. HARVEST H-2404	65.9	65.3	31.3	41.5	21998	7
G. HARVEST H-2390	64.4	62.1	31.8	36.9	22110	1
CIBA 4303	63.8	.	29.8	42.8	22110	4
SIGCO 1497	59.7	.	26.5	46.4	22110	4
JACQUES 5270	58.8	64.1	30.7	39.1	21887	3
CARGILL 4277	57.0	.	24.1	37.2	22110	0
SIGCO 1200	55.0	59.6	30.9	38.7	22110	2
DEKALB DK 512	54.5	.	32.4	37.9	21887	0
CUSTOM FARM CFS W3851	53.4	.	32.5	37.2	22110	1
DAHLGREN D5002	53.1	58.3	29.1	39.6	22110	0
DEKALB DK 485	52.9	63.8	32.2	36.9	22110	0
STINE 1122X	50.9	.	30.0	39.1	21998	2
PAYCO 531	50.7	56.3	29.8	36.5	22110	0
AGRIGENE AG3965	50.4	.	29.2	35.2	22110	0
TOP FARM SX1097A	48.2	56.7	30.5	38.9	22110	1
KAYSTAR KX-610	47.5	58.5	30.1	38.5	21998	0
CUSTOM FARM CFS 4227	47.3	.	31.7	38.0	22110	1
MYCOGEN 5440	47.3	.	19.7	38.9	22110	1
PAYCO 4421	47.3	.	31.2	38.1	22110	2
KAYSTAR KX-615	47.2	.	31.5	39.3	22110	1
KALTENBERG K4805	46.3	.	30.2	37.0	22110	0
PIONEER 3769	43.9	.	30.1	39.3	22110	1
PIONEER 3739	42.9	.	30.6	36.8	22110	0
AGRIGENE AG3920	41.2	.	30.7	40.3	22110	1
N. KING N-4242	40.9	.	31.3	38.3	22110	1
CIBA 4273	39.1	.	32.2	39.1	22110	0
CENEX/LOL 424	38.1	.	30.2	38.0	22110	1
G. VALLEY GVS298	37.9	.	30.3	40.7	22110	2
ICI 8777	37.4	.	32.4	37.4	22110	0
STINE 992	36.6	57.1	31.6	38.4	22110	0
KRUGER K9500	36.1	.	29.9	38.8	22110	1
SEXAUER SX430	30.4	.	25.4	40.2	22110	0
TOP FARM SX2102	22.1	.	30.5	41.2	22110	0
CARGILL 3777	15.3	.	30.9	40.6	22110	0
TEST AVERAGE:	48.4	61.1	29.8	38.9	22089	1
TEST LSD (5%) VALUE:	9.0	NS*	2.4	1.8	NS	3
MINIMUM BEST VALUE:	63.7	.	.	44.7	.	.
MAXIMUM BEST VALUE:	.	.	21.9	.	.	3
TEST C.V.#:	11.4	10.2	.	.	.	.

*NS - INDICATES HYBRID DIFFERENCES WITHIN A COLUMN ARE NOT SIGNIFICANT.
#COEF. OF VARIATION - A MEASURE OF EXPERIMENTAL ERROR; IF VALUE EXCEEDS
16.0% DATA SHOULD NOT BE USED TO MAKE HYBRID COMPARISONS.

**Table 6. 1993 corn hybrid performance trial results (no-till):
Frankfort, SD, Steve Masat farm, early maturity (100 days or less).**

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
PIONEER 3733	151.1	120.3	22.3	53.0	20100	2
DEKALB DK 471	150.5	.	20.7	48.2	20100	3
N. KING N-4242	142.8	.	21.7	50.2	20100	0
SIGCO 1200	141.9	117.5	22.7	50.4	20100	8
DEKALB DK 462	141.6	122.9	21.8	47.4	20100	0
PIONEER 3769	141.3	.	25.1	49.5	20100	1
PAYCO 4421	141.2	.	20.8	50.1	20100	1
SIGCO 1497	141.2	.	20.5	52.9	20100	3
LEGEND LS7196	141.2	.	22.4	47.6	20100	2
G. HARVEST H-2295	139.6	.	21.3	52.8	20100	2
PAYCO 531	138.1	117.3	21.5	49.6	20100	1
ASGROW RX433	137.7	.	20.3	51.8	20100	5
G. HARVEST H-2322	135.6	113.9	20.9	47.8	20100	2
CIBA 4273	135.1	.	22.0	51.2	20100	1
ICI 8777	134.1	.	22.9	45.9	20100	1
G. HARVEST H-2292	133.1	.	19.8	51.2	20100	0
SEXAUER SX450	132.6	.	22.1	46.6	20100	0
DYNA-GRO 5100	132.3	.	21.2	51.2	20100	7
CIBA 4183	132.0	.	20.4	49.0	20100	0
DEKALB DK 485	131.4	115.6	22.2	46.3	20100	1
CARGILL 3477	130.6	112.7	21.1	53.1	20100	0
SIGCO 1301	129.9	113.1	21.3	51.4	20100	6
CARGILL 3427	129.2	110.2	22.5	48.1	20100	0
LEGEND LS8301	128.5	108.7	21.0	50.6	20100	0
TOP FARM SX2195	127.9	.	19.5	51.1	20100	2
DAIRYLAND ST-1198	127.8	108.4	22.3	48.4	20100	1
CARGILL 3777	127.3	.	21.6	52.2	20100	1
KALTENBERG K4805	127.1	.	21.1	48.9	20100	0
LEGEND LS7398	126.5	.	21.7	51.1	20100	1
KAYSTAR KX-610	123.8	107.8	20.7	50.1	20100	0
HORIZON 5055	123.5	.	20.9	49.4	20100	0
AGRIGENE AG3920	122.9	.	19.9	54.3	20100	1
KAYSTAR KX-615	122.7	.	21.1	50.4	20100	1
DAIRYLAND ST-1202	122.3	.	20.7	49.4	20100	2
HORIZON 4545	120.1	.	18.7	56.5	20100	1
DAHLGREN D5002	118.5	.	20.8	50.4	20100	1
TOP FARM SX1097A	117.5	.	20.4	52.8	20100	0
TOP FARM SX2102	114.2	.	20.6	50.0	20100	1
TEST AVERAGE:	132.0	114.0	21.3	50.3	20100	1
TEST LSD (5%) VALUE:	9.5	NS*	1.0	1.9	NS	3
MINIMUM BEST VALUE:	141.6			54.7		
MAXIMUM BEST VALUE:			19.6			3
TEST C.V.#:	4.4	6.1				

*NS - INDICATES HYBRID DIFFERENCES WITHIN A COLUMN ARE NOT SIGNIFICANT.
#COEF. OF VARIATION - A MEASURE OF EXPERIMENTAL ERROR; IF VALUE EXCEEDS
16.0% DATA SHOULD NOT BE USED TO MAKE HYBRID COMPARISONS.

**Table 7. 1993 corn hybrid performance trial results (no-till):
Frankfort, SD, Steve Masat farm, late maturity (101 days or more).**

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
DAHLGREN D5073	141.5	.	23.9	46.8	20100	1
DYNA-GRO 5102	138.3	.	23.3	47.7	20100	15
G. HARVEST H-2390	138.0	111.0	25.5	47.7	20100	0
KAYSTAR KX-667	136.7	.	23.7	46.8	20100	2
LEGEND LS8406	136.0	.	24.1	45.9	20100	3
SIGCO 1307	135.6	.	24.9	47.5	20100	7
DEKALB DK 493	135.1	.	22.6	46.9	20100	3
PAYCO 633	134.9	.	21.7	48.5	20100	1
TOP FARM SX1104A	134.3	109.2	24.4	48.0	20100	4
G. HARVEST H-2404	132.5	109.5	24.8	49.3	20100	2
PIONEER 3514	132.0	.	26.5	47.6	20100	0
CARGILL 4327	131.7	112.1	26.7	46.1	20100	2
PIONEER 3655	130.8	.	24.0	50.6	20100	2
KALTENBERG K5200	130.8	.	23.8	48.9	20100	6
AGRIGENE AG5480	130.4	.	23.4	49.5	20100	2
DEKALB DK 512	130.3	114.2	24.7	45.3	20100	2
PAYCO 711	127.9	107.4	27.2	46.5	20100	4
SEXAUER SX540	127.5	.	22.2	48.4	20100	0
KALTENBERG K5600	127.5	.	25.0	48.1	20100	5
PIONEER 3547	126.8	.	25.1	49.8	20100	1
DYNA-GRO 5313IPRO	126.0	.	24.6	49.5	20100	4
ICI 8692	125.4	.	21.8	49.8	20100	2
LEGEND LS9112	123.8	.	27.2	46.5	20100	2
LEGEND LS8409	123.2	.	27.2	43.8	20100	0
CIBA 4394	120.2	.	25.4	47.8	20100	2
N. KING N-5220	120.0	.	24.4	47.7	20100	1
KALTENBERG K5305	117.4	.	20.9	49.4	20100	2
CIBA 4372	117.1	97.3	25.1	46.5	20100	0
KAYSTAR KX-655	116.7	.	25.0	47.1	20100	1
CARGILL 6677	111.3	.	28.1	43.6	20100	3
TEST AVERAGE:	128.7	108.7	24.6	47.6	20100	3
TEST LSD (5%) VALUE:	10.6	NS*	1.1	2.2	NS	4
MINIMUM BEST VALUE:	131.0			48.5		
MAXIMUM BEST VALUE:			21.9			4
TEST C.V.#:	5.0	4.9				

*NS - INDICATES HYBRID DIFFERENCES WITHIN A COLUMN ARE NOT SIGNIFICANT.
#COEF. OF VARIATION - A MEASURE OF EXPERIMENTAL ERROR; IF VALUE EXCEEDS
16.0% DATA SHOULD NOT BE USED TO MAKE HYBRID COMPARISONS.

**Table 8. 1993 corn hybrid performance trial results:
Brookings, SD, SDSU Agronomy Farm, early maturity (100 days or less).**

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
PIONEER 3769	89.3	.	20.2	51.3	22110	1
DEKALB DK 462	88.7	98.4	19.7	49.4	22110	1
N. KING N-4242	86.6	.	16.8	53.9	22110	1
SANDS SOI9991	85.2	88.6	18.0	50.5	22110	2
SANDS SOI9031	85.2	.	20.0	51.6	22110	1
SIGCO 1497	84.3	.	18.8	54.6	21998	1
N. KING N-3808	83.8	82.1	17.4	52.4	22110	2
CROW'S 375	83.7	.	22.0	51.3	22110	3
PIONEER 3739	82.9	.	17.7	52.5	22110	1
PAYCO 531	81.7	89.4	17.8	51.2	21887	0
DAIRYLAND ST-1202	80.8	.	19.8	50.2	22110	0
SIGCO 1301	79.5	82.3	20.4	51.0	22110	1
SIGCO 1200	79.5	88.5	19.7	51.5	22110	2
CARGILL 3477	79.4	.	21.6	50.1	22110	2
DYNA-GRO 5100	78.7	.	20.1	51.8	21998	2
DEKALB DK 401	78.3	.	17.1	54.4	22110	1
CIBA 4172	78.2	.	16.8	51.8	22110	2
STINE 1122X	78.1	.	17.8	50.2	21998	1
DEKALB DK 471	77.8	.	17.3	51.0	22110	1
EPLEY EX 1201	77.7	.	18.2	52.9	22110	0
DAIRYLAND ST-1198	77.5	84.3	18.2	50.8	22110	0
TOP FARM SX1193	77.4	.	17.9	53.3	22110	1
G. HARVEST H-2295	77.2	.	19.5	53.6	21998	2
G. VALLEY GVS282	77.1	.	17.4	54.6	22110	2
CENEX/LOL 424	76.4	.	19.1	48.8	22110	0
TOP FARM SX2195	76.4	.	17.5	50.7	20770	1
G. VALLEY GVS298	76.3	.	19.4	55.7	21998	2
TOP FARM SX1097A	75.8	.	19.4	49.7	21887	1
JACQUES 5170	75.7	.	19.1	54.6	22110	1
ASGROW RX497	75.5	78.6	20.8	48.3	22110	0
ICI 8777	75.4	82.0	19.0	48.5	22110	2
CIBA 4273	75.4	.	20.2	53.8	22110	0
DAHLGREN D5962	75.4	.	18.8	49.9	22110	1
SEXAUER SX510	75.3	.	17.9	50.1	22110	2
AGRIGENE AG3920	75.3	86.1	18.7	53.7	21998	1
CUSTOM FARM CFS 3818	75.1	.	19.0	51.6	22110	1
STINE 992	74.9	.	18.7	49.5	21998	1
CUSTOM FARM CFS W3851	74.6	.	18.4	49.9	22110	1
G. HARVEST H-2322	74.6	84.2	18.4	48.0	22110	2
AGRIPRO 194	74.4	.	18.9	49.0	22110	2
AGRIGENE AG3965	72.0	.	16.3	48.5	21552	0
PAYCO 4421	70.7	.	17.9	51.4	22110	3
TERRA TR1020	69.2	.	20.7	51.4	21998	1
AGRIPRO 328	66.4	.	19.7	48.4	22110	1
TOP FARM SX2102	65.0	.	17.9	50.8	21998	0
TERRA TR910	60.1	77.8	18.5	51.7	21887	1
TEST AVERAGE:	77.4	85.2	18.8	51.3	22032	1
TEST LSD (5%) VALUE:	11.2	NS*	1.0	2.4	NS	2
MINIMUM BEST VALUE:	78.2	.	.	53.3	.	.
MAXIMUM BEST VALUE:	.	.	17.2	.	.	2
TEST C.V.#:	8.9	10.0	.	.	.	.

*NS - INDICATES HYBRID DIFFERENCES WITHIN A COLUMN ARE NOT SIGNIFICANT.
#COEF. OF VARIATION - A MEASURE OF EXPERIMENTAL ERROR; IF VALUE EXCEEDS
16.0% DATA SHOULD NOT BE USED TO MAKE HYBRID COMPARISONS.

**Table 9. 1993 corn hybrid performance trial results:
Brookings, SD, SDSU Agronomy Farm, late maturity (101 days or more).**

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
G. HARVEST H-2404	83.3	93.1	21.8	57.4	22110	1
DEKALB DK 512	81.8	.	21.0	51.8	22110	0
DEKALB DK 493	81.6	.	19.5	53.8	22110	1
G. HARVEST H-2390	81.1	90.2	21.7	55.2	22110	0
TOP FARM SX1104A	80.6	.	24.0	56.2	22110	0
KRUGER K9407	80.1	.	23.1	54.2	22110	1
CROW'S 414	79.7	.	21.8	52.7	22110	0
DYNA-GRO 5102	79.2	.	21.5	55.3	22110	2
CARGILL 3777	79.2	.	20.8	58.4	21887	1
CARGILL 4327	78.8	94.7	27.1	50.2	22110	0
AGRIGENE AG5480	78.2	.	25.3	53.7	22110	1
ICI 8692	77.3	.	21.4	58.7	22110	0
STINE 1033	77.3	.	21.4	53.8	22110	0
CARGILL 4277	75.3	.	26.4	48.8	22110	0
KRUGER K9403	74.3	.	24.0	52.8	22110	0
KRUGER K9402	73.9	.	21.9	53.2	22110	1
PIONEER 3655	73.9	.	23.4	55.5	21105	1
EPLEY EX 150	73.8	.	21.3	56.5	21998	1
KRUGER K9007	73.4	87.8	25.4	51.7	22110	0
CUSTOM FARM CFS W4464	73.4	.	23.2	57.4	22110	1
CIBA 4303	73.2	.	23.8	54.4	22110	0
SIGCO 1307	73.0	.	25.2	55.0	22110	0
CENEX/LOL 434	72.6	.	20.4	53.8	22110	0
PAYCO 711	72.4	84.2	26.3	51.5	22110	0
JACQUES 5270	72.3	88.3	21.0	56.6	22110	4
KRUGER K9408	71.5	.	23.5	55.4	22110	0
PIONEER 3563	71.2	83.6	20.5	56.6	22110	0
ASGROW RX510	70.6	.	24.4	50.4	22110	0
KRUGER K9203	70.0	.	19.9	53.4	22110	0
CROW'S 445	69.8	.	26.0	50.8	22110	0
PAYCO 633	69.6	.	25.0	52.7	21887	0
CIBA 4372	69.0	85.1	26.9	49.2	22110	1
MYCOGEN 5440	68.8	.	24.8	48.9	22110	0
DAHLGREN D5002	68.8	.	21.0	52.5	21552	1
ASGROW RX562	68.5	.	25.4	49.0	22110	0
STINE 1021	68.3	.	23.6	53.6	22110	0
KRUGER K9310	68.1	.	25.7	52.7	22110	1
SEXAUER SX540	66.2	.	20.2	52.5	22110	0
DEKALB DK 485	65.8	.	21.7	51.9	21887	1
DYNA-GRO 5313IPRO	65.7	.	24.7	53.5	22110	0
SANDS SOI9061	65.0	82.0	27.9	48.5	22110	0
CROW'S 440	64.7	.	27.9	48.4	22110	0
EPLEY EX 1208	63.2	.	22.2	55.1	22110	1
TERRA TR600E	62.2	.	27.6	46.6	21328	0
TERRA TR1101	61.0	74.9	30.3	46.9	22110	1
ICI 8704	60.1	.	21.2	53.2	22110	1
ASGROW RX515	59.3	.	26.2	47.8	22110	1
KRUGER K9410	58.4	.	24.6	51.9	22110	0
TERRA TR1090	54.2	72.8	29.4	47.5	22110	1
TEST AVERAGE:	71.4	85.2	23.7	52.8	22046	0
TEST LSD (5%) VALUE:	13.1	9.5	2.1	2.7	NS*	1
MINIMUM BEST VALUE:	70.3	85.3		56.1		
MAXIMUM BEST VALUE:			21.5			1
TEST C.V.#:	11.3	6.2				

*NS - INDICATES HYBRID DIFFERENCES WITHIN A COLUMN ARE NOT SIGNIFICANT.
#COEF. OF VARIATION - A MEASURE OF EXPERIMENTAL ERROR; IF VALUE EXCEEDS
16.0% DATA SHOULD NOT BE USED TO MAKE HYBRID COMPARISONS.

**Table 10. 1993 corn hybrid performance trial results:
Sioux Falls, SD, Tom Wintersteen farm, early maturity (105 days or less).**

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
ICI 8704	133.7	*	20.8	60.7	22780	19
ASGROW RX623	133.4	*	22.0	57.2	21328	16
PAYCO 531	132.7	*	18.2	53.9	22668	2
PAYCO 633	131.2	*	19.8	56.7	22557	8
CARGILL 3777	130.5	*	18.8	61.1	22780	3
ASGROW RX510	129.4	*	19.7	54.4	22780	19
G. HARVEST H-2390	127.0	*	20.3	56.7	22780	21
DEKALB DK 462	124.8	*	19.5	55.0	22780	5
DEKALB DK 485	123.5	*	18.2	55.6	22780	6
ASGROW RX515	123.3	*	20.6	54.1	22780	14
ASGROW RX497	123.2	*	21.5	54.4	22780	24
HORIZON 6575	121.2	*	20.4	58.2	22780	4
DEKALB DK 493	121.1	*	17.9	59.2	22780	15
CIBA 4372	120.0	*	19.9	59.9	22780	12
DEKALB DK 512	119.4	*	19.1	54.0	22780	14
G. HARVEST H-2404	118.7	*	20.1	56.3	22780	41
PIONEER 3769	118.1	*	19.0	56.7	22780	2
CIBA 4273	117.4	*	19.6	57.8	22780	20
TOP FARM SX1104A	116.2	*	20.7	58.0	22780	22
CUSTOM FARM CFS 5620	116.0	*	21.5	54.3	22557	14
SIGCO 1200	115.9	*	19.5	55.9	22780	29
ASGROW RX562	114.8	*	21.3	53.3	22557	20
PIONEER 3655	114.7	*	19.9	58.0	22780	35
ICI 8692	113.0	*	19.8	59.6	22780	22
JACQUES 5270	112.6	*	19.2	59.3	22557	27
AGRIGENE AG3965	112.2	*	18.0	55.4	22780	21
SANDS SOI9991	112.2	*	18.4	57.8	21775	11
CURRY 2129	112.0	*	19.1	58.3	22780	7
DAIRYLAND ST-1202	111.4	*	19.7	56.4	22222	6
G. HARVEST H-2407	110.4	*	20.9	56.9	22780	29
DAIRYLAND ST-1198	110.4	*	18.5	58.9	22780	5
N. KING N-4242	108.9	*	17.9	55.4	22780	12
HORIZON 5055	108.3	*	19.1	56.8	22780	15
SANDS SOI9031	107.9	*	19.1	57.1	22110	3
MYCOGEN 3440	106.5	*	18.3	56.2	22222	17
STINE 1042	106.3	*	20.3	57.5	22780	28
TOP FARM SX1097A	106.3	*	20.5	55.7	22780	17
TOP FARM SX2102	104.3	*	18.4	60.0	22780	13
CURRY 2111	103.5	*	18.2	54.8	22333	4
CUSTOM FARM CFS W5559	102.5	*	21.0	54.6	22445	5
PIONEER 3563	100.7	*	19.2	58.7	22780	34
CARGILL 3427	88.5	*	19.8	52.0	22780	34
TEST AVERAGE:	115.8	*	19.6	56.7	22636	16
TEST LSD (5%) VALUE:	17.3	*	1.1	4.3	NS*	19
MINIMUM BEST VALUE:	116.5	*		56.9		
MAXIMUM BEST VALUE:		*	18.9			20
TEST C.V.#:	9.2	*				

*NS - INDICATES HYBRID DIFFERENCES WITHIN A COLUMN ARE NOT SIGNIFICANT.
#COEF. OF VARIATION - A MEASURE OF EXPERIMENTAL ERROR; IF VALUE EXCEEDS
16.0% DATA SHOULD NOT BE USED TO MAKE HYBRID COMPARISONS.

**Table 11. 1993 corn hybrid performance trial results:
Sioux Falls, SD, Tom Wintersteen farm, late maturity (106 days or more).**

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
CARGILL 4277	138.1	*	19.8	58.1	22780	7
CENEX/LOL 522	135.1	*	21.1	60.9	22780	25
SANDS SOI9061	134.5	*	21.6	60.2	22557	7
PIONEER 3514	133.8	*	21.0	58.9	22780	8
CARGILL 4327	132.6	*	21.0	56.7	22780	8
SIGCO 1307	132.4	*	20.5	60.5	22445	30
DEKALB DK 569	131.6	*	21.9	55.9	22557	16
DEKALB DK 554	129.5	*	20.9	57.7	22780	5
PIONEER 3547	127.5	*	22.2	59.5	22780	14
CARGILL 6337	126.7	*	23.7	58.2	22780	28
CIBA 4394	126.5	*	20.1	57.8	22780	9
CUSTOM FARM CFS W6359	125.6	*	23.8	56.0	22780	4
CUSTOM FARM CFS 6428	125.3	*	23.4	54.5	22780	10
ASGROW RX653	124.6	*	21.8	59.3	22557	9
N. KING N-5220	124.0	*	20.1	61.6	22780	13
CROW'S 494	122.5	*	24.0	55.1	22557	32
ASGROW RX681	122.5	*	23.2	58.0	22780	24
CROW'S 440	122.3	*	22.5	58.1	22780	12
SANDS SOI9081	121.6	*	23.4	56.6	22780	8
AGRIGENE AG5480	121.4	*	21.4	60.9	22780	22
TOP FARM SX1107	119.5	*	20.1	60.9	22780	6
CIBA 4494	118.0	*	21.6	57.4	22780	26
CENEX/LOL 238	116.8	*	20.1	59.3	22557	4
N. KING N-6560	116.2	*	24.0	55.9	22780	27
PAYCO 711	115.6	*	20.4	56.4	22780	15
STINE 1069	110.2	*	20.9	57.7	22780	2
CURRY 2154	108.4	*	19.5	59.9	22780	23
TEST AVERAGE:	124.5	*	21.6	58.2	22726	15
TEST LSD (5%) VALUE:	14.0	*	1.2	NS*	NS	20
MINIMUM BEST VALUE:	124.2	*				
MAXIMUM BEST VALUE:		*	20.6			21
TEST C.V.#:	6.9	*				

*NS - INDICATES HYBRID DIFFERENCES WITHIN A COLUMN ARE NOT SIGNIFICANT.
#COEF. OF VARIATION - A MEASURE OF EXPERIMENTAL ERROR; IF VALUE EXCEEDS
16.0% DATA SHOULD NOT BE USED TO MAKE HYBRID COMPARISONS.

**Table 12. 1993 corn hybrid performance trial results (irrigated, no-till):
Pierre, SD, Dakota Lakes Research Farm, early maturity (100 days or less).**

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
DYNA-GRO 5100	160.6	.	20.0	56.9	33165	27
DEKALB DK 462	159.7	.	18.7	54.1	33500	1
DAIRYLAND ST-1202	159.3	.	19.3	55.7	33053	0
ASGROW RX497	157.3	.	20.5	53.7	32830	3
DAIRYLAND ST-1198	156.7	94.7	19.1	55.3	33388	1
N. KING N-4242	156.1	.	18.5	55.6	33500	1
G. HARVEST H-2407	154.0	.	18.0	52.7	33388	3
PAYCO 531	153.7	102.0	19.0	56.3	33165	1
WILSON 1140	153.5	94.9	18.8	56.8	33500	1
HORIZON 5055	153.2	.	18.9	57.4	33277	0
DEKALB DK 512	152.5	102.4	18.8	52.1	32830	2
CIBA 4273	151.8	.	19.4	57.2	32830	3
DEKALB DK 493	151.8	.	18.3	54.6	33388	5
KAYSTAR KX-610	150.4	97.0	19.7	56.0	32383	0
LEGEND LS8102	149.6	.	21.1	57.5	33500	6
LEGEND LS8301	146.8	97.7	19.3	56.0	33500	1
G. HARVEST H-2322	146.6	.	18.1	55.1	33388	1
DAHLGREN D5002	142.9	99.5	19.5	55.4	32830	1
LEGEND LS7196	137.3	.	18.5	54.4	33277	1
CARGILL 3477	136.6	.	17.5	55.1	33500	1
DAIRYLAND ST-1294	130.8	.	16.1	56.4	33388	1
CIBA 4183	128.2	.	17.8	56.7	33277	1
LEGEND LS7395	126.7	.	17.6	57.1	32942	0
KAYSTAR KX-615	125.7	.	20.9	56.0	32607	1
LEGEND LS7393	125.3	.	17.8	57.4	29815	1
CARGILL 3777	91.8	.	18.3	59.4	32830	0
TEST AVERAGE:	144.6	98.3	18.8	55.8	33040	2
TEST LSD (5%) VALUE:	28.9	NS*	1.3	2.3	1571	6
MINIMUM BEST VALUE:	131.6			57.2		6
MAXIMUM BEST VALUE:			17.3			6
TEST C.V.#:	12.2	11.9				

*NS - INDICATES HYBRID DIFFERENCES WITHIN A COLUMN ARE NOT SIGNIFICANT.
#COEF. OF VARIATION - A MEASURE OF EXPERIMENTAL ERROR; IF VALUE EXCEEDS
16.0% DATA SHOULD NOT BE USED TO MAKE HYBRID COMPARISONS.

**Table 13. 1993 corn hybrid performance trial results (irrigated, no-till):
Pierre, SD, Dakota Lakes Research Farm, late maturity (101 days or more).**

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
CARGILL 7697	179.6	140.5	28.4	56.8	33500	7
CIBA 4372	164.4	126.6	21.1	60.3	33500	8
DEKALB DK 580	163.8	.	26.5	59.4	33165	3
PIONEER 3514	163.8	.	24.9	58.8	32942	0
SEXAUER SX678	163.6	.	25.2	59.0	31490	2
PIONEER 3417	163.0	121.6	25.0	57.9	32383	2
LEGEND LS9112	163.0	.	27.0	59.4	33053	1
PIONEER 3547	162.6	.	25.4	60.3	33165	4
G. HARVEST H-2493	161.5	146.0	24.1	55.6	32942	1
HORIZON 6575	161.1	.	23.5	58.5	32607	1
LEGEND LS8205	160.9	.	25.6	57.2	33165	1
PIONEER 3357	159.0	124.8	29.4	58.7	33500	9
N. KING N-6560	158.9	128.0	29.5	59.0	33500	3
LEGEND LS8104	157.5	.	25.5	57.9	32942	6
CIBA 4394	156.3	.	23.9	57.6	32607	1
DEKALB DK 623	156.2	124.1	26.2	57.2	32942	1
ICI 8501	155.6	.	26.5	55.6	33500	1
DAHLGREN D5092	155.1	120.7	25.5	57.5	32942	3
PIONEER 3394	154.8	.	25.1	58.7	32942	3
DEKALB DK 554	153.9	.	20.1	55.6	31378	3
JACQUES 6970	153.5	.	22.3	56.3	32942	2
LEGEND LS9310	152.5	.	25.2	53.1	31602	4
ICI 8543	152.0	125.9	25.8	55.7	33388	5
PAYCO 633	151.9	.	21.9	59.9	32495	1
PAYCO 814	151.7	.	27.5	58.3	33500	1
DAIRYLAND ST-1205	151.7	114.8	24.1	56.8	33053	2
SEXAUER SX540	151.7	.	20.3	58.7	31825	0
CARGILL X4204	151.4	.	24.2	57.4	32383	3
SIGCO 1307	148.8	.	23.3	58.1	32718	1
N. KING N-5220	148.3	.	25.4	58.5	33053	6
G. HARVEST H-2404	146.6	.	22.8	59.3	31937	18
KAYSTAR KX-667	144.2	.	24.2	58.3	32718	3
PAYCO 803	144.0	.	24.3	55.4	32607	1
KAYSTAR KX-655	143.7	.	23.7	58.1	31155	3
ASGROW RX510	141.4	.	22.7	58.2	31825	11
MYCOGEN 5440	140.9	.	22.8	55.7	32383	7
PAYCO 711	139.5	.	27.9	57.3	32383	3
LEGEND LS8406	139.1	.	24.3	57.3	33165	2
ASGROW RX515	137.8	.	27.2	57.8	32383	3
CARGILL 6677	137.2	.	28.0	56.6	33165	4
DYNA-GRO 5102	136.7	.	20.5	59.2	32942	6
DYNA-GRO 5313IPRO	133.3	.	24.8	59.0	33500	3
TEST AVERAGE:	152.7	127.3	24.8	57.8	32745	4
TEST LSD (5%) VALUE:	17.7	NS*	1.4	3.0	NS	6
MINIMUM BEST VALUE:	162.0	.	.	57.4	.	.
MAXIMUM BEST VALUE:	.	.	21.4	.	.	6
TEST C.V.#:	7.1	8.8	.	.	.	.

*NS - INDICATES HYBRID DIFFERENCES WITHIN A COLUMN ARE NOT SIGNIFICANT.
#COEF. OF VARIATION - A MEASURE OF EXPERIMENTAL ERROR; IF VALUE EXCEEDS
16.0% DATA SHOULD NOT BE USED TO MAKE HYBRID COMPARISONS.

**Table 14. 1993 corn hybrid performance trial results:
Armour, SD, Robert Clark farm, early maturity (110 days or less).**

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
DEKALB DK 569	172.1	.	22.1	52.2	20100	5
ASGROW RX623	165.7	151.6	22.6	55.5	20100	2
CARGILL 4327	160.9	154.7	20.7	55.9	20100	3
PAYCO 711	159.2	153.6	20.2	56.4	20100	6
PIONEER 3514	158.8	.	21.4	55.9	19988	1
KRUGER K9310	157.7	150.5	22.5	55.0	20100	1
CIBA 4303	157.5	.	20.8	58.7	20100	3
CARGILL X4204	157.3	.	22.0	56.2	20100	2
ICI 8704	157.0	.	21.3	56.5	20100	2
PIONEER 3547	156.9	.	22.0	57.4	20100	1
DEKALB DK 554	156.6	145.2	19.7	53.4	20100	1
KAYSTAR KX-685	156.2	149.9	20.6	56.9	20212	1
SANDS SOI9061	155.7	.	20.6	56.5	20100	2
CIBA 4372	155.5	.	20.0	58.0	20100	2
DEKALB DK 512	155.4	148.6	19.2	55.1	19988	2
SEXAUER SX675	155.2	.	20.4	56.4	20100	4
ASGROW RX707	154.8	.	24.7	52.0	19988	2
HORIZON 6575	154.7	.	20.6	55.6	20100	1
CARGILL 6337	154.0	.	22.9	53.6	20100	3
CROW'S 375	153.3	.	19.6	58.4	20100	3
ASGROW RX653	151.8	.	24.1	53.3	20100	1
DAIRYLAND ST-1208	151.2	.	21.0	56.2	20100	2
CIBA 4394	151.0	.	21.0	57.8	20100	1
HOEGEMEYER 2583	149.7	128.3	21.0	53.6	20100	3
N. KING N-6560	149.4	.	24.1	55.6	20100	4
PIONEER 3417	148.1	.	21.8	55.2	20100	1
G. HARVEST H-2407	148.1	.	18.9	54.8	20100	2
CROW'S 440	148.0	.	21.7	55.5	20100	2
KRUGER K9410	147.8	.	22.2	54.5	20100	1
N. KING N-5220	147.3	.	19.8	59.4	20100	1
KRUGER K9408	146.8	.	20.4	58.8	20100	1
G. HARVEST H-2404	145.8	139.8	20.3	58.0	20100	4
ASGROW RX681	145.8	.	23.5	56.7	20100	4
HOEGEMEYER 670	145.4	138.8	18.8	58.0	20100	0
TOP FARM SX1107	143.1	.	21.2	55.1	20100	1
ICI 8692	142.3	.	19.4	58.7	20100	3
TOP FARM SX1104A	142.1	.	19.4	58.3	20100	2
DAHLGREN D5073	141.3	.	18.7	57.1	20100	0
HOEGEMEYER 2592	139.2	.	19.1	56.8	20100	1
DAIRYLAND ST-1207	138.9	.	19.8	58.4	20100	1
SANDS SOI9031	137.1	.	17.5	57.8	20100	0
KRUGER K9407	134.1	.	17.8	56.7	20100	2
WILSON 1140	134.0	130.1	18.0	57.2	20100	0
SEXAUER SX640	133.2	.	18.5	57.0	20100	2
TOP FARM SX2102	127.8	.	17.0	59.1	20100	0
TOP FARM SX1097A	126.0	126.5	17.9	59.0	20100	1
TEST AVERAGE:	149.4	143.1	20.6	56.4	20095	2
TEST LSD (5%) VALUE:	16.1	17.3	1.3	2.1	NS*	3
MINIMUM BEST VALUE:	156.1	137.5		57.4		
MAXIMUM BEST VALUE:			18.4			3
TEST C.V.#:	6.6	7.8				

*NS - INDICATES HYBRID DIFFERENCES WITHIN A COLUMN ARE NOT SIGNIFICANT.
#COEF. OF VARIATION - A MEASURE OF EXPERIMENTAL ERROR; IF VALUE EXCEEDS
16.0% DATA SHOULD NOT BE USED TO MAKE HYBRID COMPARISONS.

**Table 15. 1993 corn hybrid performance trial results:
Armour, SD, Robert Clark farm, late maturity (111 days or more).**

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
DEKALB DK 580	168.5	.	22.1	52.8	20100	1
KRUGER K9415	166.6	.	26.8	49.3	20100	2
PIONEER 3398	165.6	151.0	24.9	51.8	20100	1
KRUGER K9314A	165.0	.	26.4	52.1	20100	1
CARGILL 7697	164.1	.	26.2	54.1	20100	2
SANDS SOI9081	162.3	142.9	24.2	54.2	20100	2
CARGILL 6927	161.7	149.1	23.9	53.8	20100	2
KRUGER K9315B	161.7	148.1	25.7	51.4	20100	1
KRUGER K9315A	160.6	148.1	26.6	51.9	20100	2
PAYCO 823	158.0	.	25.3	49.6	20100	1
DAHLGREN D5113	157.3	.	23.5	54.1	20100	2
WILSON E4353	157.2	.	24.4	50.9	20100	0
DEKALB DK 646	156.6	140.3	27.0	48.1	20100	3
HOEGEMEYER 2641	155.7	.	23.8	55.3	20100	1
SANDS SOI9123	155.7	.	24.8	49.9	20100	2
CROW'S 494	155.1	.	26.4	51.4	20100	4
HOEGEMEYER 2681	153.8	144.7	27.9	51.8	20100	1
KRUGER K9414A	153.8	.	24.5	54.1	20100	2
KRUGER K9412	152.7	.	24.8	49.5	20100	0
N. KING N-6484	152.4	.	25.0	50.3	20100	2
PIONEER 3357	152.3	145.1	24.4	53.2	20100	2
CROW'S 401	151.2	.	24.7	50.8	20100	0
CIBA 4494	148.6	.	24.0	53.7	20100	7
WILSON 1540	144.6	146.5	25.2	51.2	20100	4
DEKALB DK 623	142.9	134.3	25.6	51.8	20100	3
WILSON 1432	141.1	.	21.4	54.0	20100	3
TEST AVERAGE:	156.3	145.0	25.0	52.0	20100	2
TEST LSD (5%) VALUE:	9.8	NS*	1.2	2.4	NS	NS
MINIMUM BEST VALUE:	158.8			53.0		
MAXIMUM BEST VALUE:			22.5			
TEST C.V.#:	3.8	5.3				

*NS - INDICATES HYBRID DIFFERENCES WITHIN A COLUMN ARE NOT SIGNIFICANT.
#COEF. OF VARIATION - A MEASURE OF EXPERIMENTAL ERROR; IF VALUE EXCEEDS
16.0% DATA SHOULD NOT BE USED TO MAKE HYBRID COMPARISONS.

**Table 16. 1993 corn hybrid performance trial results:
Beresford, SD, SE Research Farm, early maturity (110 days or less).**

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
EPLEY EX 2417	139.6	.	23.8	53.3	24120	0
MW GENETIC G7460	137.6	.	24.7	55.5	23953	7
TOP FARM SX1104A	137.0	131.9	24.5	53.6	24120	1
SEXAUER SX730	135.9	.	23.4	53.2	24120	2
G. HARVEST H-2404	135.5	141.0	23.8	54.3	24120	8
CROW'S 375	134.8	.	24.1	54.6	24120	3
KRUGER K9407	134.7	.	22.8	51.4	24120	3
DAHLGREN D5073	131.7	.	23.5	52.0	23953	0
ASGROW RX623	131.4	149.3	24.5	50.2	24120	6
SANDS SOI9061	130.6	.	24.6	52.4	24120	4
LEGEND LS8301	130.5	.	21.5	54.4	24120	1
N. KING N-6560	129.9	.	25.9	52.8	24120	4
WILSON 1140	127.9	139.2	19.8	55.9	24120	2
HORIZON 9110	127.7	.	27.2	49.1	24120	4
MW GENETIC SX108AA	127.5	.	27.0	49.4	23618	1
SIGCO 1307	127.4	.	23.8	53.3	24120	5
G. HARVEST H-2407	127.1	.	21.4	52.0	24120	2
CROW'S 440	126.5	.	26.0	50.9	24120	2
MYCOGEN 6220	126.0	.	25.1	50.2	24120	6
ASGROW RX681	125.9	.	26.0	53.3	24120	6
TOP FARM SX1107	125.6	148.7	22.3	54.9	24120	0
DEKALB DK 569	125.3	.	24.6	50.5	24120	5
HOEGEMEYER 2592	124.7	.	24.4	51.7	23785	0
CARGILL X4204	124.7	.	25.4	51.1	24455	3
SANDS SOI9031	124.6	.	21.9	54.1	23785	1
DEKALB DK 554	124.1	139.6	24.4	50.8	24120	4
PIONEER 3514	123.6	.	24.3	54.6	24120	2
ASGROW RX562	123.2	.	23.1	52.2	24120	5
LEGEND LS8205	122.7	141.1	23.1	54.2	24120	2
SANDS SOI9991	122.5	137.3	19.5	55.1	23450	0
FONTANELLE 4002	122.5	.	21.7	53.4	22948	2
ASGROW RX707	122.2	.	26.2	49.6	23953	19
CIBA 4394	121.3	.	23.8	53.4	24120	4
HORIZON 6575	121.3	.	22.4	53.9	24120	1
KALTENBERG K5901	121.3	.	23.8	53.3	24120	1
HOEGEMEYER 2608	120.9	141.3	23.5	53.1	24120	1
AGRIPRO 429	120.8	.	25.4	52.2	23953	5
DAIRYLAND ST-1207	120.8	137.2	22.8	55.2	24120	3
CARGILL 6337	120.7	.	26.2	51.4	23953	7
CURRY 2147	120.7	.	23.2	53.5	24120	1
LEGEND LS8406	120.4	.	23.5	52.5	24120	4
EPLEY EX 3600	120.2	.	26.0	49.8	23953	1
DAIRYLAND ST-1208	120.2	.	24.8	52.6	24120	1
PAYCO 711	119.0	139.2	25.3	52.1	24120	4
PIONEER 3547	118.4	.	24.8	56.3	24120	11
TERRA TR1020	118.3	.	21.8	55.0	24120	2
KAYSTAR KX-685	118.0	146.7	23.5	53.3	24120	4
FONTANELLE X0891	117.4	.	24.0	53.5	22948	2
CURRY 2158	117.3	.	24.6	52.2	24120	2
CIBA 4372	117.1	145.3	24.4	52.9	24120	1

TABLE 16. BERESFORD - EARLY MATURITY TRIAL (CONTINUED).

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
HOEGEMEYER 2611	117.0	138.9	24.2	53.6	24120	2
DEKALB DK 512	116.7	144.8	22.7	51.0	24120	4
LEGEND LS8409	116.7	.	25.6	50.2	24120	0
FONTANELLE 4232	116.2	.	26.2	47.5	24120	2
N. KING N-5220	115.8	.	22.3	55.1	24120	0
EPLEY EX 150	115.8	.	22.7	54.4	24120	5
TERRA TR600E	115.3	.	24.7	51.8	23618	2
MW GENETIC G7665	114.6	.	25.4	48.9	23953	2
AGRIGENE AG5955	114.0	.	26.5	50.1	24120	4
KRUGER K9408	113.6	.	22.9	55.1	24120	10
KRUGER K9308A	113.3	.	24.9	51.6	23953	2
ASGROW RX653	112.2	.	25.4	52.2	22445	1
CURRY 2154	109.8	.	22.2	53.2	24120	9
KRUGER K9410	108.7	.	26.5	51.4	24288	4
JACQUES 6970	108.1	143.3	25.0	51.9	24120	4
SEXAUER SX750	105.3	.	26.5	48.4	23953	2
FONTANELLE X0515	104.1	.	23.1	53.4	24120	2
STINE 1069	102.2	.	24.7	51.2	24120	4
TEST AVERAGE:	121.8	141.5	24.1	52.5	24012	3
TEST LSD (5%) VALUE:	NS*	NS	1.6	2.3	NS	5
MINIMUM BEST VALUE:				54.1		
MAXIMUM BEST VALUE:			21.2			5
TEST C.V.#:	8.0	7.5				

*NS - INDICATES HYBRID DIFFERENCES WITHIN A COLUMN ARE NOT SIGNIFICANT.
#COEF. OF VARIATION - A MEASURE OF EXPERIMENTAL ERROR; IF VALUE EXCEEDS 16.0% DATA SHOULD NOT BE USED TO MAKE HYBRID COMPARISONS.

**Table 17. 1993 corn hybrid performance trial results:
Beresford, SD, SE Research Farm, late maturity (111 days or more).**

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
PIONEER 3394	132.8	.	25.9	50.7	24120	3
CARGILL 7697	132.2	.	29.0	50.6	23785	6
CARGILL 7997	131.8	154.0	29.7	48.9	24120	5
MW GENETIC G7786	131.2	143.7	27.0	52.7	24120	8
KALTENBERG K7505	126.7	.	27.2	51.5	23953	9
PAYCO 814	126.2	.	27.0	50.3	24120	0
HOEGEMEYER 2641	125.8	.	27.0	52.0	24120	3
SEXAUER SX780	124.5	.	27.6	51.8	24120	0
KALTENBERG K7209	124.4	.	26.8	49.7	24120	0
G. HARVEST H-2485	122.9	146.0	25.1	52.6	24120	2
KALTENBERG K7500	122.7	145.6	28.2	51.7	24120	4
SANDS SOI9081	120.3	145.5	27.0	49.1	24120	1
HORIZON 7115	120.3	135.0	28.8	49.2	22445	1
KRUGER K9415	119.9	.	28.7	47.3	24120	7
HORIZON 7711	119.4	.	28.9	47.1	24120	4
CURRY 2182	119.3	.	27.5	50.0	24120	1
LEGEND LS9315	119.2	.	27.9	50.0	24120	2
CIBA 4450	118.6	.	28.0	49.7	24120	3
ICI 8543	118.3	144.6	27.3	49.2	22780	4
KRUGER K9314A	118.0	.	28.0	48.9	24120	1
SANDS SOI9123	117.5	.	27.0	47.7	24120	1
STINE 1116A	117.2	.	29.0	48.2	24120	2
MW GENETIC G8445	116.7	.	29.3	48.9	24120	3
KALTENBERG K7109	116.1	142.7	27.4	48.7	23115	2
SIOUXLAND SS-9211	116.0	.	27.6	51.8	24120	4
HOEGEMEYER 2621	115.9	.	24.8	51.9	23953	3
KRUGER K9412	115.5	.	27.3	48.6	24120	4
PIONEER 3357	115.5	145.2	28.2	50.2	24120	3
DEKALB DK 646	115.5	143.7	29.8	46.8	24120	1
HORIZON 7878	115.4	133.1	28.6	49.4	24120	6
KRUGER K9311	115.3	.	27.5	49.7	23953	3
G. HARVEST H-2530	114.2	.	26.1	49.4	24120	3
N. KING N-6484	114.1	.	26.6	47.7	23953	1
TERRA TR1101	113.8	140.8	28.4	47.5	24120	3
CROW'S 494	113.4	.	28.1	50.4	22110	5
LEGEND LS9313	112.2	.	29.6	46.6	24120	3
WILSON E4353	112.1	.	26.0	48.8	24120	1
PIONEER 3362	111.5	143.0	27.3	48.9	22613	0
HOEGEMEYER 2628	111.4	143.2	28.6	48.6	24120	3
PAYCO 902	111.1	.	28.5	48.7	23283	5
TERRA TR1090	110.9	140.0	29.1	48.1	24120	5
KRUGER K9414	109.7	.	26.9	52.1	24120	6
ICI 8539	108.9	126.1	27.1	52.6	24120	11
DEKALB DK 580	108.9	.	26.6	49.0	24120	1
TOP FARM SX1114	108.9	.	28.6	48.5	24120	1
AGRIPRO 605	107.7	.	29.4	48.4	24120	2
TERRA TR1125	107.0	135.8	28.3	50.1	24120	4
CIBA 4494	105.9	.	25.8	50.8	23953	10
DEKALB DK 623	105.5	132.8	27.4	47.5	24120	3
KRUGER K9314	104.2	.	28.7	48.8	24288	12

TABLE 17. BERESFORD - LATE MATURITY TRIAL (CONTINUED).

----- BRAND & HYBRID -----	YIELDS AT 15.5% MOIST.		1993 HARVEST MOIST. (%)	BUSHEL WEIGHT (LB)	FINAL POP. PER ACRE	STALK LODGE (%)
	1993 (BU/AC)	2-YR				
LEGEND LS9310	103.6	132.5	27.8	48.0	24120	1
SIOUXLAND SS-9109	101.5	.	27.3	49.6	24120	1
LEGEND LS9112	95.2	130.1	27.9	49.9	23450	1
CROW'S 401	93.6	.	27.8	45.9	22445	2
DAHLGREN DC-545	90.2	.	29.9	45.6	23115	2
PAYCO 823	89.0	.	27.8	47.4	24120	1
KRUGER K9315A	63.6	116.9	15.6	25.2	24120	2
KRUGER K9414A	42.2	.	15.7	22.6	24120	1
TEST AVERAGE:	112.4	139.0	27.4	48.5	23901	3
TEST LSD (5%) VALUE:	33.6	NS*	NS	NS	NS	6
MINIMUM BEST VALUE:	99.3					
MAXIMUM BEST VALUE:						6
TEST C.V.#:	14.9	11.7				

*NS - INDICATES HYBRID DIFFERENCES WITHIN A COLUMN ARE NOT SIGNIFICANT.
#COEF. OF VARIATION - A MEASURE OF EXPERIMENTAL ERROR; IF VALUE EXCEEDS
16.0% DATA SHOULD NOT BE USED TO MAKE HYBRID COMPARISONS.

Entries in the 1993 South Dakota corn performance trials.

COMPANY (BRAND)	HYBRID	COMPANY (BRAND)	HYBRID	COMPANY (BRAND)	HYBRID			
AGRIGENE	AG3500	DAIRYLAND "HEFTY SEED COMPANY"	ST-1198	KALTENBERG	K7500			
	AG3920		ST-1205		K5200			
	AG5480		ST-1207		K7109			
	AG3965		ST-1294		K5901			
	AG5955		ST-1195		K7209			
AGRIPRO	194	DEKALB	ST-1202		K3909			
	328		ST-1208		K4400			
	429		DK 485		K4500			
	605		DK 401		K4800			
ASGROW	RX497		DK 462		K4805			
	RX510		DK 554		K5305			
	RX623		DK 381		K5600			
	RX653		DK 512		K7505			
	RX707		DK 623					
	RX350		DK 646		KAYSTAR	KX-685		
	RX433		DK 471			KX-610		
	RX515		DK 493			KX-615		
	RX562		DK 569			KX-655		
	RX681		DK 580			KX-667		
CARGILL	3477	DYNA-GRO	5100	KRUGER	K9007			
	6927		5102		K9203			
	4327		15095		K9402			
	3427		5313IPRO		K9308A			
	2927	EPLEY	EX 1201		K9310			
	7697		EX 1208		K9315B			
	7997		EX 150		K9500			
	3777		EX 2417		K9403			
	4277		EX 3600		K9407			
	X4204				K9408			
6337	FONTANELLE	4232	K9410					
6677		X0891	K9311					
		X0515	K9412					
		4002	K9314					
CENEX/LOL	522	G. HARVEST "JC ROBINSON SEED COMPANY"	H-2404	LEGEND	LS8102			
	375		H-2295		LS8104			
	424		H-2390		LS9112			
	434		H-2485		LS8205			
	238		H-2322		LS8301			
CIBA	4450		H-2493		LS9310			
	4172		H-2292		LS8406			
	4372		H-2407		LS7196			
	4183		H-2530		LS7395			
	4273		G. VALLEY "STENGEL SEED"		GVS282	LS7393		
	4303		GVS298		LS8409			
	4394		HOEGEMEYER		2628	LS7398		
	4494				670	LS9313		
					2583	LS9315		
					2608			
CROW'S	414		2611	MW GENETICS	G7786			
	440		2681		G7460			
	401		2621		G7665			
	375		2641		SX108AA			
	445		2592		G8445			
	494		HORIZON		7115	MYCOGEN	3440	
					4545		5440	
	9110	6220						
CURRY	2111		7878	N. KING	N-6560			
	2129		5055		N-3808			
	2147		6575		N-2409			
	2154		7711		N-2933			
	2158		ICI		8543	N-5220		
	2182				8777	N-6484		
					8539	N-4242		
					8883			
	CUSTOM FARM		CFS W3851			8692		
			CFS W2457			8704		
CFS 4227		8501						
CFS 3818		JACQUES	5170					
CFS W4464			5270					
CFS W6359			6970					
DAHLGREN	DC-545							
	D5002							
	D5092							
	D5962							
	D5073							
D5113								

ENTRIES (CONTINUED).

COMPANY (BRAND)	HYBRID	COMPANY (BRAND)	HYBRID	COMPANY (BRAND)	HYBRID
PAYCO	402	SANDS	SOI9061	STINE	992
	531		SOI9081		1033
	711		SOI9991		1122X
	413		SOI9031		930
	4421		SOI9123		1021
	633	SEXAUER	SX450		1042
	803		SX540		1069
	814		SX420	TERRA	1116A
	823		SX430		TR1125
	902		SX640		TR1020
PIONEER	3362		SX675		TR1090
	3733		SX750		TR910
	3417		SX780		TR1101
	3563		SX678		TR600E
	3398		SX730	TOP FARM	SX1193
	3357		SX510		SX1097A
	3861	SIGCO	1200		SX1104A
	3907		1301		SX1107
	3769		1489		SX2190
	3739		1497		SX2195
	3655		1307		SX2102
	3547	SIouxLAND	SS-9211	WILSON	SX1114
	3514		SS-9109		1140
	3394				1540
					1432
					E4353