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2010 Precision Planted Corn Performance Trials

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Tables, 2010 Corn Performance Trials

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2010 Precision Planted Corn Performance Trials

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This publication reports the results of the 2010 South Dakota corn hybrid performance trials for glyphosate-resistant hybrids. Information includes both the most recent two-year and one-year grain yields in bushels per acre and one-year bushel weight in pounds, along with grain moisture at harvest, lodging, and final stand in percentages. These performance trials are conducted by the South Dakota Crop Performance Testing program at South Dakota State University. Corn performance trial tables are listed on the inside front cover. Environmental data is listed in tables A and B, indices of brand/hybrid entries to performance table number are listed in table C, table D has the performance table footnote legends, and mailing addresses for seed companies are listed in table E.

Test Trial Locations

Trial locations, soil types, seedbed and previous crop history, soil fertility yield goals, and seeding dates are indicated in table B. The participation and efforts of our cooperators—Allen and Inel Ryckman at Warner, Al Heuer at South Shore (Northeast Research Farm), E. Weerts Farms Inc. at Bancroft, Douglas Doyle at Brookings (SDSU Plant Science Research Farm), Curtis Sybesma at Geddes, and Robert Berg and staff at Beresford (Southeast Experiment Station)—are gratefully acknowledged.

Weather Conditions

The efforts of Dennis Todey and his staff at the South Dakota Office of Climate and Weather at South Dakota State University are gratefully acknowledged in obtaining the weather data reported in table B. Seasonal rainfall and its distribution and average temperatures at weather reporting stations nearest each test trial are reported for the period April 1 to October 31. Seasonal precipitation totals were 5" above average at Aberdeen (22.37"), 6" above average at White Lake (24.12"), 8" above average at Beresford (28.49"), 9" above average at Huron (25.98"), and 10" above average at Brookings (29.72"). Seasonal precipitation totals were 4" below average at South Shore (13.99"). The moisture distribution across locations was fairly uniform at Huron, Brookings, Beresford, and White Lake. Two locations encountered moisture deficits. Aberdeen only received 1" of moisture at the airport during August, while 10 miles south at the test trial site there was no moisture. This lack of rainfall likely reduced the potential yield at the Warner trial. At Northeast Research Farm at South Shore, the early season moisture in April was well above average and was near average through July. Thereafter, there was little if any rainfall through harvest. Again, this lack of moisture may have reduced the potential yield at the Northeast Research Farm. The test trials at Bancroft (Huron airport station) were likely affected by the rainfall totals in June and July that were 4" above average. The above average rainfall along with water ponding in the field at Bancroft likely was a major cause in the higher coefficient of variation of 10% or higher amount of experimental error associated with the trial. The coefficient of variation was well within acceptable limits; this means the test trial was valid. The lower coefficient of variation at the other locations only means there was less experimental error associated with the other trial locations, compared to Bancroft.

The average daily temperatures for April were well above average for Huron, Brookings, Beresford, and White Lake, while Aberdeen was 1 degree above average and South Shore was 1 degree below average. May through July temperatures were near average across all locations. However, August temperatures were 3 to 5 degrees higher than average at Aberdeen, South Shore, Bancroft, and Brookings, while other locations were near average.

The accumulation of growing degree days (GDDs) in April and May started out average to slightly below average at Aberdeen, South Shore, and Huron, and well above average at Brookings, Centerville, and White Lake. Thereafter, the GDDs accumulations tended to be average to higher than average (June through August). Again, in September, the GDDs accumulations were below average at all locations, while in October the GDDs accumulations were slightly below average at some locations and above average at other locations. Aberdeen and White were the only locations with below average total season GDDs accumulations, while at the other locations the GDDs accumulations were nearly 100 to 300 GDDs above their average seasonal totals.

General Test Procedures

Seed companies pick the test locations where their entries are tested. Entries are placed into "early" or "late" maturity trials. The relative maturity breaks between the early and late tests are 95 days for Warner and South Shore, 100 days for Yale and Brookings, 105 days for Geddes, and 110 days for Beresford. Hybrids are assigned to trials based on the relative maturity rating reported

by the participating seed company; therefore, we cannot always guarantee entries are placed in the proper maturity trial. In some trials, borderline entries with relative maturity ratings at or near the arbitrary break between the early and late trials may crossover at a given location. In some cases, this may be indicated by exceptionally high or low grain moisture contents at harvest. A higher-than-average moisture content may indicate the hybrid is later in relative maturity than indicated. Likewise, a lower-than-average moisture may indicate the hybrid is earlier in relative maturity than indicated. A fee was charged for all entries at each location. A list of participating seed companies for 2010 is presented in table E.

Experimental Procedures

Entries were seeded in three replications, with each hybrid randomly located within each trial. Plots consisted of four 30-inch rows that were 20-feet long, with the center two rows harvested for yield. A Monosem precision row crop planter was used for seeding plots at all locations. In 2010, the precision planter was calibrated to deliver 28,750 seeds per acre, regardless of seed quality and germination percentage. No seeding rate adjustment was made for low germination. Therefore, percent stand is an indication of initial seed quality and the ability of the seed to cope with the production environment from seeding to harvest. Soil type, land preparation and previous crop history, and fertility yield goal at each test site is outlined in table A. Seedbed preparation was good at all locations. A starter fertilizer of 100 pounds/acre of 37-18-00 was applied 2" below and 2" to the side (2 x 2) of the seed row. Force insecticide in-furrow at label rates for corn rootworm control this year. The weed control herbicides applied at recommended label rates are indicated in table A.

Measurements of Performance

Yields are obtained from the South Dakota Crop Performance Testing Program. Two-year and current yield averages are included where hybrids have been tested for the most recent two-year period.

Yield. Yield values are an average of three replications and are expressed as bushels per acre, adjusted to 15.5% moisture on a dry-matter basis and a bushel weight of 56 pounds. Hybrids of equal potential may yield differently because of variations in slope, soil fertility, and stand. Statistical tests were conducted to determine whether differences obtained were caused by variations in environment or were true hybrid differences. In 2010, the coefficient of variation (CV) values (a measure of experimental error) for yield was relatively low, ranging from 5 to 9% over the six test locations. Experimental error may be the result of several factors, including test methods, or factors such as moisture, temperature, soil variations, or agronomic factors like seeding date, reseeding, or seed quality factors—all of which may or may not be controllable in a given year. Clearly, this year, seasonal moisture distribution and/or subsoil moisture conditions, along with above-average temperatures, combined to produce excellent yields at most locations, along with some very good bushel weight values.

Grain moisture content. Moisture content is expressed as the percentage of moisture in the shelled corn at harvest. Moisture is generally inversely related to maturity and is important in the evaluation of hybrids. Hybrids that provide satisfactory yields and can be stored without additional drying are desirable. During harvest, moisture values were determined by the combine moisture meter, which in turn was periodically checked with a Dickey-John GAC II to verify it was within limits.

Use of tables. 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 before there is a significant yield difference. LSD values are given at the bottom of every column where there is significant difference among the averages within the column. If differences among the averages within a column are not significant, the LSD value is reported as "non-significant" (NS).

The LSD values reported in this publication can be used in two ways. In this publication, the LSD value is used primarily to identify the top performance group (TPG) for two-year yields, for current-year yields, for bushel weight, for grain moisture at harvest, for lodging (below the ear) percentage, and for final stand percentage for each test trial. In order to determine which hybrids are in the TPG for yield, use the LSD value indicated at the bottom of each yield column in any yield table. For example, let's say the column LSD value equals 15 (bu/a) and the highest yield for that column equals 155 bu/a. If you subtract the column LSD value from the highest yield, you obtain an intermediate value of 140 bu/a (155 – 15 = 140). In this case, the minimum top yield value is generally 141 bu., or one bushel greater than the intermediate value of 140 bu. However, we can say the 140 bu. value also qualifies for the top performance group for yield because the yield values are rounded to the nearest bushel per acre. Thus, varieties with an average of 140 bu. or higher are also included in the top yield group to compensate for rounding-off the yield averages to the nearest bushel.

These minimum TPG values for yield are indicated at the bottom of each yield column, unless too much experimental error (high CV values) is associated with the test. Top yield hybrids are those hybrids that are equal or higher than the minimum TPG value reported at the bottom of each yield column (2010 or 2-yr yield averages). If hybrid yield differences are not significant (NS) and the CV values are 15% or less, then, by definition, all hybrids in the test are in the top yield group. In contrast, if the column CV value is greater than 15%, then no minimum TPG value is indicated because there is too much experimental error associated with the test to make a valid determination of the TPG for yield. When comparing yield means, compare current year averages with other current year averages and compare two-year yield averages with other two-year averages. Do not compare current year averages with two-year averages when comparing hybrids. When evaluating current year averages, remember that entries tested for two years may also have a yield value that qualifies for the TPG in the 2010 yield column.

The TPG for other performance factors—such as bushel weight, percent grain moisture at harvest, percent lodging (below the ear), and percent stand (percent of seeded population)—can also be determined. In order to qualify for the TPG group, a hybrid must have a bushel weight and a final stand percentage value that is equal to or greater than the minimum reported TPG value for bushel weight or final stand percentage. Likewise, in order to qualify for the TYG, a hybrid must have grain moisture, lodging percentages, or lodging score values that are equal to or less

than the maximum reported TPG value for grain moisture and lodging percentage. Note that yield, bushel weight, and percent stand TPG values are greater than a certain yield, bushel weight, or final stand value; or they are minimum values. In contrast, grain moisture and lodging percentage values are equal to or less than a certain value to qualify for the TPG; or they are maximum values. Again, as with hybrid yields, if there are no differences for a performance factor, then, by definition, all hybrids in the test are in the TPG for that performance factor.

The LSD values for the TPG can also be used to determine if two hybrids differ in performance. For example, if a test trial LSD value equals 16 bu/a, and hybrid A yields 132 bu/a while hybrid B yields 118 bu/a, then their yield difference is 14 bu/a (132-118 =14). In this case, the two hybrids do not differ in yield because their yield difference of 14 bu/ac is equal to or less than the reported LSD value of 16 bu/a. In contrast, if hybrid C yields 114 bu/a, the yield difference between hybrids A and C is 18 bu/a (132-114=18). In this case, the yield difference of 18 is higher than the reported LSD value of 16 bu/a; therefore, hybrid A would have a significantly higher yield than hybrid C. Similarly, the LSD values for bushel weight, grain moisture, stalk lodging below the ear, and percent stand can be used to determine if any two hybrids differ in these performance factors. For example, if a trial grain moisture LSD value equals 2%, and hybrid A measures 18% and hybrid B measures 16, their grain moisture difference is 2% (18-16=2). In this case, the two hybrids do not differ in grain moisture because their moisture difference of 2% is equal to or less than the trial LSD value of 2%. In contrast, if hybrid C measures 15%, the grain-moisture difference between hybrids A and C is 5% (18-15=3). In this case, the grain-moisture difference of 3% is more than the reported LSD value 2%; therefore, hybrid A is significantly higher in grain moisture than hybrid C.

PERFORMANCE TRIAL RESULTS BY LOCATIONS

The performance trial results for one year (2010) and for two years (2009–10) follow:

Northern Locations

Note: The top performance group (TPG) for the performance factors yield (bu/a), bushel weight in (lbs.), harvest grain moisture (%), lodging below the ear (%), and final stage (%) are indicated in each performance table by the presence of shaded data values. Evaluate the performance of each hybrid (row) by moving across the table and observing if any of the reported performance values are shaded. The more shaded performance values there are in each row the better the hybrid did as a top-performing hybrid for a given test trial.

Warner:

Early – Glyphosate-resistant trial, Table 1a. The test-trial yield averages were **214** bu/a for two years and **196** bu/a in 2010. Hybrids that yielded **208** bu/a or more for two years and **199** bu/a or more for 2010 qualified for the top-performance-group (TPG) for yield. Hybrids had to differ in yield by **20** bu/a for two years and **19** bu/a in 2010 to be significantly different. In 2010, bushel weights averaged **56** lbs, grain moisture averaged **17%**, lodging percentage averaged zero, and final stand percentage averaged **93%**. In order for a hybrid to be in the TPG for these factors, it had to average **58** lbs. or more in bushel weight, **16%** or less in grain moisture, **1%** or less in lodging percentage, and **95%** or more for final stand percentage.

Late – Glyphosate-resistant trial, Table 1b. The test-trial yield averages were **224** bu/a for two years and **209** bu/a in 2010. Hybrids that yielded **210** bu/a or more for two years and **211** bu/a or more for 2010 qualified for the TPG for yield. Hybrids had to differ in yield by **20** bu/a in 2010 to be significantly different. There was no significant difference in yield among the hybrids tested for the two years. In 2010, bushel weights averaged **58** lbs, grain moisture averaged **19%**, lodging percentage averaged **1%**, and final stand percentage averaged **90%**. In order for a hybrid to be in the TPG for these factors, it had to average **59** lbs. or more in bushel weight, **18%** or less in grain moisture, **5%** or less in lodging percentage, and **96%** or more for final stand percentage.

South Shore:

Early – Glyphosate-resistant trial, Table 2a. The test-trial yield averages were **203** bu/a for two years and **198** bu/a in 2010. The yield differences among those hybrids tested for two years were nonsignificant (NS). Hybrids that yielded **196** bu/a or more for 2010 qualified for the TPG for yield. Hybrids had to differ in yield by **17** bu/a in 2010 to be significantly different. In 2010, bushel weights averaged **56** lbs, grain moisture averaged **16%**, lodging averaged **1%**, and final stand percentage averaged **92%**. In order for hybrids to be in the TPG for these factors, they had to average **57** lbs. or more in bushel weight, **15%** or less in grain moisture, **2%** in lodging percentage, and **95%** or higher in final stand percentage.

Late – Glyphosate-resistant trial, Table 2b. The test-trial yield averages were **210** bu/a for two years and **214** bu/a in 2010. The yield differences among those hybrids tested for two years were nonsignificant (NS). Hybrids that yielded **222** bu/a or more for 2010 qualified for the TPG for yield. Hybrids had to differ in yield by **17** bu/a in 2010 to be significantly different. In 2010, bushel weights averaged **59** lbs, grain moisture averaged **19%**, lodging averaged **1%**, and final stand percentage averaged **91%**. In order for hybrids to be in the TPG for these factors, they had to average **59** lbs. or more in bushel weight, **18%** or less in grain moisture, and **3%** or more in lodging percentage, and **95%** or more in final stand percentage.

Central Locations

Bancroft:

Early – Glyphosate-resistant trial, Table 3a. The test-trial yield averages were **169** bu/a for two years and **152** bu/a in 2010. Hybrids that yielded **143** bu/a or more in 2010 qualified for the TPG for yield. There were no differences in yield average among the hybrids tested two years, so all qualified for the TPG. Hybrids had to differ in yield by **26** bu/a in 2010 to be significantly different. In 2010, bushel weights averaged **56** lbs., grain moisture averaged **17%**, lodging averaged **3%**, and final stand percentage averaged **93%**. In order for hybrids to be in the TPG for these factors, they had to average **57** lbs. or more in bushel weight, **17%** or

less in grain moisture, **4%** or less in lodging percentage, and **94%** or more for final stand percentage.

Late – Glyphosate-resistant trial, Table 3b. The test-trial yield averages were **165** bu/a for two years and **161** bu/a in 2010. Yield differences among hybrids were non-significant for the two-year period. Hybrids that yielded **148** bu/a or more in 2010 qualified for the TPG for yield. In 2010, bushel weights averaged **54** lbs, grain moisture averaged **21%**, lodging percentage averaged **1%**, and the final stand percentage averaged **95%**. In order for hybrids to be in the TPG for these factors, they had to average **54** lbs. or more in bushel weight, **20%** or less in grain moisture, **4%** or less in lodging percentage, and **93%** or more for final stand percentage.

Brookings:

Early – Glyphosate-resistant trial, Table 4a. The test-trial yield averages were **226** bu/a for two years and **228** bu/a in 2010. Hybrids that yielded **230** bu/a or more for two years and **242** bu/a or more for 2010 qualified for the TPG for yield. Hybrids had to differ in yield by **20** bu/a for two years and **14** bu/a in 2010 to be significantly different. In 2010, bushel weights averaged **57** lbs, grain moisture averaged **15%**, lodging percentage averaged **1%**, and final stand percentage averaged **93%**. In order for hybrids to be in the TPG for these factors, they had to average **59** lbs. or more in bushel weight, **13%** or less in grain moisture, **2%** or less in lodging percentage, and **94%** or more for final stand percentage.

Late – Glyphosate-resistant trial, Table 4b. The test-trial yield averages were **231** bu/a for two years and **235** bu/a in 2010. Hybrids that yielded **230** bu/a or more for two years and **247** bu/a or more in 2010 qualified for the TPG for yield. Hybrids had to differ in yield by **15** bu/a for two years and **12** bu/a in 2010 to be significantly different. In 2010, bushel weights averaged 57 lbs, grain moisture averaged **18%**, lodging averaged slightly more than **1%**, and percent stand averaged **90%**. In order for hybrids to be in the TPG for all performance factors, they had to average **58** lbs. or more in bushel weight, **17%** or less in grain moisture, **1%** or less in lodging percentage, and **86%** or more for final stand percentage.

Southern Locations

Geddes:

Early – Glyphosate-resistant trial, Table 5a. The test-trial yield average was **236** bu/a for two years and **223** bu/a in 2010. The average yield differences among the hybrids tested two years were non-significant (NS), so all the hybrids tested qualified for the TPG. Hybrids that yielded **226** bu/a or more in 2010 qualified for the TPG for yield. In 2010, bushel weights averaged **58** lbs, grain moisture averaged **16%**, lodging percentage averaged **2%**, and percent stand averaged **95%**. In order for hybrids to be in the TPG for these factors, they had to average **60** lbs. or more in bushel weight, **16%** or less in grain moisture, **6%** or less in lodging, and **94%** or more for percent stand.

Late – Glyphosate-resistant trial, Table 5b. The test trial yield average was **224** bu/a for two years and **228** bu/a in 2010. Yield differences among hybrids tested for two years were non-significant (NS); thus, all entries tested two years were in the TPG for yield. Hybrids that yielded **221** bu/a or more in 2010 qualified for the TPG for yield. In 2010, bushel weights averaged **57** lbs, grain moisture averaged **18%**, lodging percentage averaged **4%**, and percent stand averaged **94%**. In order for hybrids to be in the TPG for these factors, they had to average **59** lbs. or more in bushel weight, **18%** or less in grain moisture, **4%** or less in lodging, and **94%** or more for final stand percentage.

Beresford:

Early – Glyphosate-resistant trial, Table 6a. The test-trial yield averages were **234** bu/a for two years and **230** bu/a in 2010. There were no differences in yield average among the hybrids tested two years, so all hybrids tested qualified for the TPG. Hybrids that yielded **236** bu/a or more in 2010 qualified for the TPG for yield. Hybrids had to differ in yield by **15** bu/a in 2010 to be significantly different. In 2010, bushel weights averaged **58** lbs, grain moisture averaged **17%**, lodging percentage averaged zero percent, and final stand percentage averaged **98%**. In order for hybrids to be in the TPG for these factors, they had to average **60** lbs. or more in bushel weight, **15%** or less in grain moisture, **2%** or less in lodging percentage, and **97%** or more for final stand percentage.

Late – Glyphosate-resistant, Table 6b. The test trial yield averages were **233** bu/a for two years and **224** bu/a in 2010. There were no differences in yield average among the hybrids tested two years, so all hybrids tested qualified for the TPG. Hybrids that yielded **224** bu/a or more in 2010 qualified for the TPG for yield. Hybrids had to differ in yield by **20** bu/a in 2010 to be significantly different. In 2010, bushel weights averaged **57** lbs. grain moisture averaged **21%**, lodging percentage averaged **2%**, and final stand percentage averaged **96%**. In order for hybrids to be in the TPG for these factors, they had to average **59** lbs. or more in bushel weight, **19%** or less in grain moisture, **3%** or less in lodging percentage, and **95%** or more in final stand percentage.

Table A. Description of 2010 corn hybrid trial locations- soil type, tillage method, prior crop, herbicides used, and seeding dates.

Location (County)	Soil Type	Tillage Method	Prior crop	Herbicides Applied at label rates		Fertility Yield Goal bu/a	Date Seeded
				Pre	Post		
Warner (Brown)	Harmony-Aberdeen silty clay loam, 0-2% slope	Conventional	Spring Wheat	Harness Xtra	Roundup once	200	May 4
South Shore (Codington)	Kranzburg silty clay loam, 3-6% slope	Conventional	Spring Wheat	Dual II Magnum	Roundup once	180	May 5
Bancroft (Kingsbury)	Houdek-Stickney-Tetonka loam, 0-3% slope	Conventional	Soybean	Fall Dual	Roundup once	180	May 19
Brookings (Brookings)	Barnes clay loam, 0-2% slope	Conventional	Soybean	Dual II Magnum	Roundup twice	200	April 28
Geddess (Chas. Mix)	Highmore-Walke silt loam, 0-2% slope	No-till	Winter Wheat	-	Roundup twice	200	May 18
Beresford (Clay)	Egan-Clarno-Trent silty clay loam, 0-2% slope	Conventional	Soybean	-	Roundup once	210	May 3

Plots were seeded at 28,750 seeds per acre.

Table B. Nearest weather station monthly rainfall and growing degree day totals and average daily temperatures and their departures from average during the 2010 growing season. South Dakota Office of Climate and Weather, South Dakota State University, Brookings, SD.

Station (Test site)	Variable		Monthly data - April 1 to October 31							Sum or Average
			April	May	June	July	Aug	Sept	Oct	
Aberdeen Airport (Warner)	Rain totals - inch	'10	3.15	4.46	5.40	3.24	1.01	4.08	1.03	22.37
	1971-2000 avg.		1.83	2.69	3.49	2.92	2.42	1.81	1.63	16.79
		DFA*	1.32	1.77	1.91	0.32	-1.41	2.27	-0.60	5.58
	Temp.Avg. -°F	'10	51.0	56.2	67.2	72.6	73.4	57.9	49.3	61.09
	1971-2000 avg.		45.4	57.9	66.8	72.2	70.5	59.8	46.7	59.90
		DFA	5.6	-1.7	0.4	0.4	2.9	-1.9	2.6	1.19
	GDDs Totals	'10	85	265	525	708	734	245	106	2,668
	1971-2000 avg.		111	316	498	691	644	349	143	2,752
		DFA*	-26	-51	27	17	90	-104	-37	-84
South Shore Northeast Research Farm	Rain totals - inch	'10	0.94	2.76	6.53	3.51	0.25	0.00	0.00	13.99
	1971-2000 avg.		1.96	2.61	4.01	2.91	2.85	2.03	1.92	18.29
		DFA	-1.02	0.15	2.52	0.60	-2.60	-2.03	-1.92	-4.30
	Temp.Avg. -°wF	'10	51.1	56.4	65.9	71.7	72.5	57.2	50.1	60.70
	1971-2000 avg.		43.2	56.0	65.3	70.4	67.8	57.8	45.0	57.93
		DFA	7.9	0.4	0.6	1.3	4.7	-0.6	5.1	2.77
	GDDs Totals	'10	83	272	478	673	697	221	115	2,539
	1971-2000 avg.		73	278	456	631	558	306	107	2,409
		DFA*	10	-6	22	42	139	-85	8	130
Huron (Bancroft)	Rain totals - inch	'10	2.40	3.67	7.52	6.43	1.60	3.50	0.86	25.98
	1971-2000 avg.		2.29	3.00	3.28	2.86	2.07	1.80	1.59	16.89
		DFA	0.11	0.67	4.24	3.57	-0.47	1.70	-0.73	9.09
	Temp.Avg. -°F	'10	52.6	57.3	68.4	74.6	75.4	60.2	51.6	62.87
	1971-2000 avg.		46.1	58.2	67.9	73.4	71.5	61.0	47.9	60.86
		DFA	6.5	-0.9	0.5	1.2	3.9	-0.8	3.7	2.01
	GDDs Totals	'10	124	286	560	770	798	318	141	2,997
	1971-2000 avg.		124	318	536	719	665	378	169	2,909
		DFA*	0	-32	24	51	133	-60	-28	88

Brookings SDSU Plant Science Farm	Rain totals - inch	'10	1.24	2.22	7.95	5.29	4.75	7.39	0.88	29.72
	1971-2000 avg.		2.03	2.95	4.23	3.11	2.94	2.48	1.78	19.52
		DFA	-0.79	-0.73	3.72	2.18	1.81	4.91	-0.90	10.20
	Temp.Avg. -°F	'10	51.5	56.7	66.4	72.1	72.7	57.9	49.1	60.91
	1971-2000 avg.		44.2	56.7	66.1	70.7	68.6	59.1	46.3	58.81
		DFA	7.3	0.0	0.3	1.4	4.1	-1.2	2.8	2.10
	GDDs Totals	'10	203	303	487	668	700	288	189	2,838
	1971-2000 avg.		85	293	483	640	577	330	138	2,546
		DFA*	118	10	4	28	123	-42	51	292
Centerville, 6 SE (Beresford) Southeast Experiment Station	Rain totals - inch	'10	1.91	2.19	6.69	6.99	3.47	6.03	1.21	28.49
	1971-2000 avg.		2.47	3.65	3.95	3.35	2.83	2.26	1.80	20.31
		DFA	-0.56	-1.46	2.74	3.64	0.64	3.77	-0.59	8.18
	Temp.Avg. -°F	'10	53.4	58.8	69.8	74.1	73.9	60.6	51.2	63.11
	1971-2000 avg.		47.2	59.5	69.4	73.7	71.5	62.3	49.7	61.90
		DFA	6.2	-0.7	0.4	0.4	2.4	-1.7	1.5	1.21
	GDDs Totals	'10	257	355	561	720	733	384	250	3,260
	1971-2000 avg.		135	338	582	733	666	396	194	3,044
		DFA*	122	17	-21	-13	67	-12	56	216
White Lake (Geddes)	Rain totals - inch	'10	2.86	2.93	6.45	6.4	2.35	2.48	0.65	24.12
	1971-2000 avg.		2.49	3.6	3.19	2.88	2.21	2.09	1.59	18.05
		DFA	0.37	-0.67	3.26	3.52	0.14	0.39	-0.94	6.07
	Temp.Avg. -°F	'10	51.3	56.8	68.5	74.3	74.0	58.8	50.7	62.06
	1971-2000 avg.		47.9	59.7	69.0	74.5	72.7	62.8	49.8	62.34
		DFA	3.4	-2.9	-0.5	-0.2	1.3	-4.0	0.9	-0.29
	GDDs Totals	'10	204	305	552	707	698	272	243	2,981
	1971-2000 avg.		148	342	567	740	696	415	190	3,098
		DFA*	56	-37	-15	-33	2	-143	53	-117

* DFA - departure from normal, difference current year is greater or less (-) than the long-term average.

Table C. Glyphosate-resistant 2010 corn hybrid entries by brand/hybrid, seed product traits, and index to performance table no.(s).

Brand/Hybrid	Seed Biotech Traits [1]	Table No.(s)
AGSOURCE/ 3A-889 RR	Gly	1a, 2a
AGSOURCE/ 3P-494+RR/YGPL		1a, 2a
AGSOURCE/ 3T-294 VT3	CB,CRw,Gly	1a, 2a
AGSOURCE/ 3T-297 VT3	CB,CRw,Gly	1b, 2b
AGSOURCE/ 3T-914 VT3	CB,CRw,Gly	6b
AGSOURCE/ 5N-593GTCBLLRW	CB,CRw*,Glu,Gly	1a, 2a
AGSOURCE/ 5N-813GTCBLLRW	CB,CRw*,Glu,Gly	6b
AGSOURCE/ 5N695AGTCBLLRW	CB,CRw*,Glu,Gly	3a
AGSOURCE/ 5X-500A RR/HXT	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	2b, 3b
AGSOURCE/ 5X-598A RR/HXT	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	2b, 3a
CHANNEL/ 189-59VT3	CB,CRw,Gly	1a, 2a
CHANNEL/ 190-21VT3P	ECB,SWCB,SCB,CEw,FAw,CRw*,Gly	1a, 2a
CHANNEL/ 193-46VT3	CB,CRw,Gly	1a, 2a
CHANNEL/ 196-06VT3	CB,CRw,Gly	1b, 2b, 3a, 4a
CHANNEL/ 199-55VT3	CB,CRw,Gly	3a, 4a, 5a
CHANNEL/ 201-16VT3	CB,CRw,Gly	5a, 6a
DAIRYLAND/ ST-6310	Gly	6a
DAIRYLAND/ ST-9208Q	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	6a
DAIRYLAND/ ST-9395	CB,CRw,Gly	1a, 2a
DAIRYLAND/ ST-9500Q	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	1b, 4a
DAIRYLAND/ ST-9594	CB,CRw,Gly	1a, 2a
DAIRYLAND/ ST-9597Q	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	1b, 4a
DAIRYLAND/ ST-9703Q	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	4b
DAIRYLAND/ ST-9789	CB,CRw,Gly	1a, 2a
DAIRYLAND/ ST-9992	CB,CRw,Gly	1a, 2a
DAIRYLAND/ ST9206Q	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	6a
DEKALB/ DKC42-72(VT3)	CB,CRw,Gly	1a, 2a, 3a, 4a
DEKALB/ DKC43-27(VT3)	CB,CRw,Gly	1a, 2a, 3a, 4a
DEKALB/ DKC45-52(GENVT3P)	ECB,SWCB,SCB,CEw,FAw,CRw*,Gly	1a, 2a, 3a, 4a, 5a
DEKALB/ DKC48-37(VT3)	CB,CRw,Gly	1b, 2b, 3a, 4a, 5a
DEKALB/ DKC50-35(VT3)	CB,CRw,Gly	1b, 2b, 3a, 4a, 6a
DEKALB/ DKC50-66(VT3)	CB,CRw,Gly	1b, 2b, 3a, 4a, 5a, 6a
DEKALB/ DKC51-86(GENVT3P)	ECB,SWCB,SCB,CEw,FAw,CRw*,Gly	2b, 6a
DEKALB/ DKC52-59(VT3)	CB,CRw,Gly	1b, 2b, 5a, 6a
DEKALB/ DKC58-83(GENVT3P)	ECB,SWCB,SCB,CEw,FAw,CRw*,Gly	5b, 6a
DEKALB/ DKC59-35(VT3)	CB,CRw,Gly	5b, 6a
DEKALB/ DKC59-88(VT3)	CB,CRw,Gly	5b, 6a
DEKALB/ DKC61-69(VT3)	CB,CRw,Gly	5b, 6b
DEKALB/ DKC62-54(VT3)	CB,CRw,Gly	6b
DEKALB/ DKC63-84(VT3)	CB,CRw,Gly	6b
EPLEY/ E1125GT	Gly	1b, 2b
EPLEY/ E1275RR	Gly	1b, 2b, 4a
EPLEY/ E1315RR	Gly	3a, 4a, 5a
EPLEY/ E1418GT3000	CB,CRw*,Glu,Gly	3b, 4b, 5a
EPLEY/ E1479HXTLLRR	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	3b, 4b, 5a, 6a
EPLEY/ E1535GT	Gly	3b, 4b, 5a, 6a
EPLEY/ E2404VT3PRO	ECB,SWCB,SCB,CEw,FAw,CRw*,Gly	6a
G2 GEN./ 5H-007 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	4b
G2 GEN./ 5H-105 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	3b, 4b, 5a
G2 GEN./ 5H-210 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	5b, 6a
G2 GEN./ 5H-404 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	3b, 4b
G2 GEN./ 5H-501 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	1b, 4a, 5a
G2 GEN./ 5H-501A RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	3b
G2 GEN./ 5H-502 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	2b, 3a, 4a, 5a
G2 GEN./ 5H-502A RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	3b
G2 GEN./ 5H-509 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	5b, 6a
G2 GEN./ 5H-511 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	5b, 6a
G2 GEN./ 5H-511A RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	6b
G2 GEN./ 5H-513 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	6b
G2 GEN./ 5H-597 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	1b

Table C. Glyphosate-resistant 2010 corn hybrid entries by brand/hybrid, seed product traits, and index to performance table no.(s) (continued).

Brand/Hybrid	Seed Biotech Traits [1]	Table No.(s)
G2 GEN./ 5H-597A RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	1a, 2a
G2 GEN./ 5H-696 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	1a, 2a
G2 GEN./ 5H-700 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	3a, 4a
G2 GEN./ 5H-797 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	1b, 2b
G2 GEN./ 5H-812 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	6b
G2 GEN./ 5H-891 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	1a, 2a
G2 GEN./ 5H-905 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	4b, 5a
G2 GEN./ 5H-992 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	1a, 2a
G2 GEN./ 5H-999 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	2b
G2 GEN./ 5X-007 RR/HXT	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	4b, 5a
G2 GEN./ 5X-411 RR/HXT	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	5b, 6a
G2 GEN./ 5X-411A RR/HXT	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	5b, 6a
G2 GEN./ 5X-411B RR/HXT	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	6b
G2 GEN./ 5X-500 RR/HXT	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	1b, 2b, 3a, 4a
G2 GEN./ 5X-512 RR/HXT	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	6b
G2 GEN./ 5X-598 RR/HXT	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	1b, 2b, 3a, 4a
G2 GEN./ 5X-895 RR/HXT	Gly	1a, 2a
HEINE/ 723VT3	CB,CRw,Gly	4b
HEINE/ 742VT3	CB,CRw,Gly	4b
HEINE/ 744RRYGCB		4b
HEINE/ 745VT3	CB,CRw,Gly	4b
HEINE/ 810VT3 PRO	ECB,SWCB,SCB,CEw,FAw,CRw*,Gly	6a
HOEGEMEYER/ EX6200GTCBLL	CB,Glu,Gly	4a
HOEGEMEYER/ EX68383000GT	CB,CRw*,Glu,Gly	4a
HOEGEMEYER/ EXP6456HXRR	WBCw,CB,BCw,FAw,Glu, Gly	4a
HOEGEMEYER/ EXP7998HXRR	WBCw,CB,BCw,FAw,Glu, Gly	6a
HOEGEMEYER/ HPT6589HXRR	WBCw,CB,BCw,FAw,Glu, Gly	4a
HOEGEMEYER/ HPT7584HXTRR	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	6a
HOEGEMEYER/ HPT7757HXTRR	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	6a
HOEGEMEYER/ HPT8041HXRR	WBCw,CB,BCw,FAw,Glu, Gly	6a
MASTERS CHOICE/ MCT-480	Gly	1a
MASTERS CHOICE/ MCT-493	CB,CRw*,Glu,Gly	1a
MASTERS CHOICE/ MCT-527	CB,CRw*,Glu,Gly	5a
NUTECH/ 3A-109 GT	Gly	6a
NUTECH/ 3A-406 GT	Gly	5b
NUTECH/ 3A-710 GT	Gly	5b, 6a
NUTECH/ 3A-804 GT	Gly	4b
NUTECH/ 3C-889 RR/YGCB	CRw*,Gly	1a, 2a
NUTECH/ 3C-889A RR/YGCB	CRw*,Gly	1a
NUTECH/ 3P-494+ RR/YGPL	CB,CRw*,Gly	1a, 2a
NUTECH/ 3T-098 VT3	CB,CRw,Gly	1b, 2b, 3a, 4a
NUTECH/ 3T-300 VT3	CB,CRw,Gly	1b, 4a
NUTECH/ 3T-393 VT3	CB,CRw,Gly	1a, 2a
NUTECH/ 3T-401 VT3	CB,CRw,Gly	1b, 2b, 3a, 4a, 5a
NUTECH/ 3T-401A VT3	CB,CRw,Gly	3b, 4b
NUTECH/ 3T-413 VT3	CB,CRw,Gly	6b
NUTECH/ 3T-415 VT3	CB,CRw,Gly	6b
NUTECH/ 3T-603A VT3	CB,CRw,Gly	5a
NUTECH/ 3T-713 VT3	CB,CRw,Gly	5b, 6b
NUTECH/ 3T-810 VT3	CB,CRw,Gly	5b, 6a
NUTECH/ 5B-290 GT/CB/LL	CB,Glu,Gly	2a
NUTECH/ 5B-612 GT/CB/LL	CB,Glu,Gly	5b, 6b
NUTECH/ 5H-700A RR/HX	WBCw,CB,BCw,FAw,Glu, Gly	2b
NUTECH/ 5N-001 GTCBLLRW	CB,CRw*,Glu,Gly	3a
NUTECH/ 5N-102 GTCBLLRW	CB,CRw*,Glu,Gly	1b, 2b, 3a, 4a, 5a
NUTECH/ 5N-102AGTCBLLRW	CB,CRw*,Glu,Gly	3b, 4b
NUTECH/ 5N-197 GTCBLLRW	CB,CRw*,Glu,Gly	1b, 2b, 3a, 4a
NUTECH/ 5N-197AGTCBLLRW	CB,CRw*,Glu,Gly	1a, 2a
NUTECH/ 5N-215 GTCBLLRW	CB,CRw*,Glu,Gly	6b
NUTECH/ 5N-695 GTCBLLRW	CB,CRw*,Glu,Gly	1a, 2a

Table C. Glyphosate-resistant 2010 corn hybrid entries by brand/hybrid, seed product traits, and index to performance table no.(s) (continued).

Brand/Hybrid	Seed Biotech Traits [1]	Table No.(s)
NUTECH/ 5N-803 GTCBLLRW	CB,CRw*,Glu,Gly	3b, 4b, 5a
NUTECH/ 5N-804 GTCBLLRW	CB,CRw*,Glu,Gly	3b, 4b, 5a
PIONEER/ PIONEER BR.33P83	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	6b
PIONEER/ PIONEER BR.36V53	WBCw,CB,BCw,FAw,Glu, Gly	1b, 3b, 4b, 5a, 6a
PIONEER/ PIONEER BR.37K11	WBCw,CB,BCw,FAw,Glu, Gly	5a
PIONEER/ PIONEER BR.38H08	WBCw,CB,BCw,FAw,Glu, Gly	1a, 2a
PIONEER/ PIONEER BR.P0461HR	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	5a
PIONEER/ PIONEER BR.P0461XR	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	3b, 4b, 6a
PIONEER/ PIONEER BR.P8917XR	Gly	2a
PIONEER/ PIONEER BR.P9176XR	Gly	2a
PIONEER/ PIONEER BR.P9494XR	Gly	1a, 3a, 4a
SEEDS 2000/ 3172RR	CRw*,Gly	5b
SEEDS 2000/ 9501VT3	CB,CRw,Gly	1a, 2a
SEEDS 2000/ 9502VT3	CB,CRw,Gly	1a, 2a
SEEDS 2000/ 9701SS	ECB,SWCB,SCB,CEw,FAw,CRw*,WBCw,BCw,Gly	1b, 2b, 3a, 4a
SEEDS 2000/ 9901VT3	CB,CRw,Gly	1b, 2b, 3a, 4a
SEEDS 2000/ EXP 9602G3	CB,CRw*,Glu,Gly	1b, 2b, 3a, 4a
SEEDS 2000/ EXP X104G3	CB,CRw*,Glu,Gly	3b, 4b, 5a
SEEDS 2000/ EXP X299V	CB,CRw,Gly	1b, 2b, 3a, 4a
WENSMAN/ W 7230VT3	CB,CRw,Gly	3a, 4a
WENSMAN/ W 7267VT3	CB,CRw,Gly	3a, 4a
WENSMAN/ W 7270VT3PRO	ECB,SWCB,SCB,CEw,FAw,CRw*,Gly	3a, 4a
WENSMAN/ W 7273VT3	CB,CRw,Gly	3a, 4a
WENSMAN/ W 7289VT3	CB,CRw,Gly	3a, 4a, 5a
WENSMAN/ W 7433VT3	CB,CRw,Gly	3b, 4b, 5a, 6a
WENSMAN/ W 7455VT3	CB,CRw,Gly	3b, 4b, 5b, 6a
WENSMAN/ W 7473VT3	CB,CRw,Gly	5b, 6a
WENSMAN/ W 7562VT3	CB,CRw,Gly	5b, 6b
WENSMAN/ W 8180STX	ECB,SWCB,SCB,CEw,FAw,CRw*,WBCw,BCw,Gly	3a, 4a
WENSMAN/ W 8364STX	ECB,SWCB,SCB,CEw,FAw,CRw*,WBCw,BCw,Gly	3b, 4b, 5a, 6a

[1] Insect traits - Black Cutworm (BCw), Western Bean Cutworm (WBCw), Corn Borer (CB), Eastern Corn Borer (ECB), Southwestern Corn Borer (SWCB), Sugarcane Borer (SCB), Corn Rootworm (CRw), CRw*(includes Mexican, Northern, and Western Corn Rootworm, Fall Armyworn (FAw), and Corn Earworm CEw.

Herbicide traits - Glyphosate tolerance (Gly) and Glufosinate tolerance (Glu).

NOTE: Biotech traits were obtained by referencing the product registrant trade name and seed characteristics as listed in the Know Before You Grow section at the National Corn Growers Website (http://www.ncga.com/) with the hybrid information supplied by each seed company. Biotech seed products change over time, therefore, growers are strongly encouraged to verify all biotech traits of interest with the respective seed dealer.

Table D. Explanation of performance table footnotes.

No.	Explanation of footnotes
[1]	Entries are listed by Brand/Variety– Entries are sorted by 2-yr then by 2009 yield average.
[2]	Brand Relative Maturity (Rel. Mat.)– the relative maturity rating as reported by the seed company.
[3]	Lodging Percentage– percentage of stalks broken below the ear at harvest.
[4]	Final Stand Percentage – the number of standing stalks at harvest as a percentage of the seeded population.
[5]	Least Significant Difference (LSD 0.05) – the difference any two values within a column must be equal to or exceed for the values to be significantly different (0.05 level of probability). If the difference is less than the LSD values the difference between them are nonsignificant (NS).
[6]	Min. TPG-avg.– the minimum column value for yield, bushel weight, and final stand percentage that a hybrid must equal or exceed to be in the TPG.
[7]	Max. TPG-avg.– the maximum column value for grain moisture at harvest, lodging percentage, or lodging score that a hybrid must equal or be less than to be in the TPG.
[8]	Coefficient of variation (C.V.)– the percent of experimental error associated with a test trial. Ideally, the CV value for yield is less than 15%. Values less than 5% are less common while values of 6-15% are more common. If a value exceeds 15%; the trial contained too much experimental error to be valid, so the results are not reported.

Table E. Mailing addresses for seed entries in the 2010 corn hybrid trials by seed brand name.

Seed brand	Seed company mailing address
AgSource	AgSource Seeds Inc., 415 S. Duff Avenue, Suite C, Ames, IA 50010
Dairyland	Dairyland Seed, PO Box 958, West Bend, WI 53095
Dekalb	Monsanto, 102 W. Carol Ave., Cortland, IL 60112
Masters Choice	3010 St. Rt. 146 E, Anna, IL 62906
Epley Bros.	Epley Bros. Hybrids Inc., PO Box 310, Shell Rock, IA 50670
G-2 Genetics	G-2 Genetics, 415 S. Duff Avenue, Suite C, Ames, IA 50010
Heine	Heine Hybrid Seed Corn, 1020 E. 320th St., Vermillion, SD 57069
Hoegemeyer	Hoegemeyer Hybrids, 1755 Hoegemeyer Road, Hooper, NE 68031
Channel	Channelbio Corp., Box 277, Laurel, NE 68745
NuTech	Nutech Seed, LLC, 415 S. Duff Avenue, Suite C, Ames, IA 50010
Pioneer	Pioneer Hi-Bred International, 151 Saint Andrews Court, Mankato, MN 5600
Seeds 2000	Seeds 2000, 115 N 3rd St., Breckenridge, MN 56520
Wensman	Wensman Seed Co., PO Box 190, 63585 HWY 10, Wadena, MN 56482

Table 1a. Warner early maturity Roundup Ready corn hybrid test results, 2009-10, Allen & Inel Ryckman Farm. Seeded May 4, 2010 at 28,750 seeds per acre.

Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	Yield Averages*		Other 2010 Averages*			
		2-Yr bu/a	2010 bu/a	Bu.Wt. lb	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
AGSOURCE/ 3P-494+RR/YGPL + Cruiser 250	94	**228**	**215**	56	**16**	**0**	**100**
DAIRYLAND/ ST-9594 + Cruiser Extreme 250	94	**222**	197	**59**	**16**	**0**	**95**
DAIRYLAND/ ST-9395 + Cruiser Extreme 250	95	**221**	197	56	**16**	**1**	91
SEEDS 2000/ 9501VT3 + Poncho 250	95	**221**	197	56	**16**	**1**	94
PIONEER/ PIONEER BR.38H08 + Poncho 1250	92	**215**	**205**	55	**16**	**0**	**95**
DEKALB/ DKC42-72(VT3) + Poncho 250	92	**211**	189	56	**16**	**0**	**98**
SEEDS 2000/ 9502VT3 + Poncho 250	95	**209**	187	56	17	**1**	91
DEKALB/ DKC43-27(VT3) + Poncho 250	93	199	179	57	**16**	**0**	89
AGSOURCE/ 3T-294 VT3 + Poncho 250	94	198	188	57	17	**0**	**96**
MASTERS CHOICE/ MCT-493 + Poncho 250	93	.	**218**	**58**	17	**0**	**100**
G2 GEN./ 5H-597A RR/HX + Cruiser 250	95	.	**214**	57	18	**1**	93
DEKALB/ DKC45-52(GENVT3P) + Acceleron	95	.	**213**	57	**16**	**0**	**98**
G2 GEN./ 5H-696 RR/HX + Cruiser 250	95	.	**213**	55	21	**0**	**96**
CHANNEL/ 190-21VT3P + Acceleron	90	.	**205**	57	15	**1**	**99**
NUTECH/ 3P-494+ RR/YGPL +	94	.	**200**	56	**16**	**0**	**100**
DAIRYLAND/ ST-9992 + Cruiser Extreme 250	92	.	**199**	56	**16**	**0**	94
NUTECH/ 3C-889A RR/YGCB + Poncho 250	89	.	**199**	56	**16**	**0**	89
NUTECH/ 5N-197AGTCBLLRW + Poncho 250	95	.	198	55	20	**0**	86
AGSOURCE/ 5N-593GTCBLLRW + Poncho 250	93	.	197	56	17	**0**	**96**
PIONEER/ PIONEER BR.P9494XR + Poncho 1250	94	.	196	54	17	**0**	**97**
DAIRYLAND/ ST-9789 + Cruiser Extreme 250	89	.	196	**58**	**16**	**0**	**97**
G2 GEN./ 5X-895 RR/HXT + Cruiser 250	95	.	196	53	20	**0**	85
NUTECH/ 5N-695 GTCBLLRW + Cruiser 250	95	.	194	56	19	**0**	89
CHANNEL/ 193-46VT3 + Acceleron	93	.	194	58	**16**	**0**	**97**
CHANNEL/ 189-59VT3 + Acceleron	89	.	193	56	**16**	**0**	**95**
MASTERS CHOICE/ MCT-480 + Poncho 250	90	.	191	57	17	2	**99**
NUTECH/ 3C-889 RR/YGCB + Poncho 250	89	.	190	57	17	**0**	93
AGSOURCE/ 3A-889 RR + Poncho 250	89	.	190	57	**16**	**0**	**95**
G2 GEN./ 5H-891 RR/HX + Cruiser 250	91	.	188	57	15	**0**	**96**
G2 GEN./ 5H-992 RR/HX + Cruiser 250	92	.	174	54	**16**	**0**	61
NUTECH/ 3T-393 VT3 + Cruiser 250	93	.	173	56	17	**0**	72
Trial avg.:	93	214	196	56	17	0	93
High avg.:	95	228	218	59	21	2	103
Low avg.:	89	198	173	53	15	0	61
[5] LSD(.05):		20	19	1	1	1	6
[6] Min.TPG value:		208	199	58	.	.	95
[7] Max.TPG value:		.	.	.	16	1	.
[8] Coef. of var.:		4	6	1	5	320	4
No. entries:	31	9	31	31	31	31	31

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better.
Note that additional table footnotes are explained in table D.

Table 1b. Warner late maturity Roundup Ready corn hybrid test results, 2009-10, Allen & Inel Ryckman Farm. Seeded May 4, 2010 at 28,750 seeds per acre.

Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	Yield Averages*		Other 2010 Averages*			
		2-Yr bu/a	2010 bu/a	Bu.Wt. lb	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
DEKALB/ DKC52-59(VT3) + Poncho 250	102	**236**	**231**	56	20	**0**	**100**
NUTECH/ 3T-401 VT3 + Cruiser 250	100	**230**	**227**	**59**	20	**0**	**97**
DEKALB/ DKC50-66(VT3) + Poncho 250	100	**230**	**226**	58	**16**	**0**	**100**
NUTECH/ 3T-098 VT3 + Cruiser 250	98	**230**	**214**	**59**	**18**	**1**	90
G2 GEN./ 5H-501 RR/HX + Cruiser 250	100	**227**	**214**	57	21	**0**	91
G2 GEN./ 5H-797 RR/HX + Cruiser 250	97	**227**	**213**	57	**18**	**0**	93
NUTECH/ 3T-300 VT3 + Cruiser 250	100	**226**	**222**	56	20	**1**	82
SEEDS 2000/ 9901VT3 + Poncho 250	99	**216**	195	**59**	19	**0**	81
DAIRYLAND/ ST-9500Q + Cruiser Extreme 250	100	**210**	**212**	57	22	**0**	95
DAIRYLAND/ ST-9597Q + Cruiser Extreme 250	97	**210**	**201**	58	**18**	**1**	**100**
CHANNEL/ 196-06VT3 + Acceleron	96		**226**	58	**18**	**0**	95
SEEDS 2000/ EXP 9602G3 + Cruiser 250	96		**222**	57	**18**	**0**	93
NUTECH/ 5N-102 GTCBLLRW + Cruiser 250	100		**221**	57	19	**1**	**96**
G2 GEN./ 5H-597 RR/HX + Cruiser 250	97		**221**	**59**	**18**	**1**	**100**
SEEDS 2000/ 9701SS + Acceleron	97		**219**	56	**17**	**3**	**93**
DEKALB/ DKC50-35(VT3) + Poncho 250	100		**214**	58	19	**0**	**98**
PIONEER/ PIONEER BR.36V53 + Poncho 1250	102		**214**	57	19	**0**	90
NUTECH/ 5N-197 GTCBLLRW + Poncho 250	97		210	58	**18**	**0**	86
EPLEY/ E1125GT + Maxim XL,Lorsban Dynasty	98		208	57	19	**5**	**99**
DEKALB/ DKC48-37(VT3) + Poncho 250	98		203	60	**17**	**0**	93
G2 GEN./ 5X-500 RR/HXT + Cruiser 250	100		196	58	**18**	**1**	83
EPLEY/ E1275RR + Maxim XL,Lorsban Dynasty	97		196	**59**	**17**	**1**	91
G2 GEN./ 5X-598 RR/HXT + Cruiser 250	98		195	57	19	**1**	86
AGSOURCE/ 3T-297 VT3 + Poncho 250	97		159	58	**17**	**0**	67
SEEDS 2000/ EXP X299V + Poncho 250	99		155	**59**	19	**0**	64
Trial avg.:	99	224	209	58	19	1	90
High avg.:	102	236	231	60	22	5	100
Low avg.:	96	210	155	56	16	0	64
[5] LSD(.05):		NS**	20	1	2	NS	4
[6] Min.TPG value:		210	211	59			96
[7] Max.TPG value:					18	5	
[8] Coef. of var.:		5	6	1	6	275	3
No. entries:	25	10	25	25	25	25	25

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better.
** Indicates differences between values within a column are non-significant (NS).
Note that additional table footnotes are explained in table D.

Table 2a. South Shore early maturity Roundup Ready corn hybrid test results, 2009-10, Northeast Research Farm. Seeded May 5, 2010 at 28,750 seeds per acre.

Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	Yield Averages*		Other 2010 Averages*			
		2-Yr bu/a	2010 bu/a	Bu.Wt. lb	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
DAIRYLAND/ ST-9594 + Cruiser Extreme 250	94	**213**	**212**	**59**	17	**0**	**98**
DAIRYLAND/ ST-9789 + Cruiser Extreme 250	89	**209**	**208**	**58**	17	**0**	**97**
AGSOURCE/ 3T-294 VT3 + Poncho 250	94	**207**	**207**	**58**	17	**0**	**100**
DAIRYLAND/ ST-9395 + Cruiser Extreme 250	95	**206**	**200**	**57**	17	**1**	85
DEKALB/ DKC42-72(VT3) + Poncho 250	92	**206**	**199**	**57**	17	**0**	91
DEKALB/ DKC43-27(VT3) + Poncho 250	93	**204**	**196**	**57**	16	**1**	91
SEEDS 2000/ 9502VT3 + Poncho 250	95	**199**	195	**57**	18	**0**	87
SEEDS 2000/ 9501VT3 + Poncho 250	95	**197**	190	56	**15**	**1**	**100**
PIONEER/ PIONEER BR.38H08 + Poncho 1250	92	**196**	**196**	55	**15**	**1**	90
AGSOURCE/ 3P-494+RR/YGPL + Cruiser 250	94	**195**	**197**	55	**15**	**1**	94
CHANNEL/ 190-21VT3P + Acceleron	90	.	**213**	**59**	16	**0**	**99**
DAIRYLAND/ ST-9992 + Cruiser Extreme 250	92	.	**212**	56	17	**1**	**99**
NUTECH/ 3P-494+ RR/YGPL +	94	.	**211**	55	16	2	**95**
NUTECH/ 5B-290 GT/CB/LL + Poncho 250	90	.	**211**	56	**15**	**1**	**99**
DEKALB/ DKC45-52(GENVT3P) + Acceleron	95	.	**210**	**57**	17	**0**	**100**
G2 GEN./ 5H-696 RR/HX + Cruiser 250	95	.	**205**	**57**	18	**0**	**96**
AGSOURCE/ 5N-593GTCBLLRW + Poncho 250	93	.	**203**	56	**15**	**0**	**98**
G2 GEN./ 5H-597A RR/HX + Cruiser 250	95	.	**202**	**57**	18	**0**	92
CHANNEL/ 189-59VT3 + Acceleron	89	.	**202**	**57**	16	**0**	94
NUTECH/ 3C-889 RR/YGCB + Poncho 250	89	.	**199**	**57**	16	**0**	**97**
G2 GEN./ 5H-891 RR/HX + Cruiser 250	91	.	**198**	56	**14**	**0**	94
AGSOURCE/ 3A-889 RR + Poncho 250	89	.	**198**	56	**15**	**0**	94
PIONEER/ PIONEER BR.P9176XR + Poncho 1250	91	.	**197**	**58**	16	**1**	**97**
CHANNEL/ 193-46VT3 + Acceleron	93	.	195	**57**	16	**1**	**95**
NUTECH/ 5N-695 GTCBLLRW + Cruiser 250	95	.	189	55	16	7	86
NUTECH/ 5N-197AGTCBLLRW + Poncho 250	95	.	184	56	16	5	89
PIONEER/ PIONEER BR.P8917XR + Poncho 1250	89	.	178	**58**	16	1	89
NUTECH/ 3T-393 VT3 + Cruiser 250	93	.	178	55	17	0	80
G2 GEN./ 5H-992 RR/HX + Cruiser 250	92	.	178	54	16	0	64
G2 GEN./ 5X-895 RR/HXT + Cruiser 250	95	.	176	54	17	0	77
Trial avg.:	93	203	198	56	16	1	92
High avg.:	95	213	213	59	18	7	100
Low avg.:	89	195	176	54	14	0	64
[5] LSD(.05):		NS**	17	2	1	2	5
[6] Min.TPG value:		195	196	57	.	.	95
[7] Max.TPG value:		.	.	.	15	2	.
[8] Coef. of var.:		4	5	2	6	145	4
No. entries:	30	10	30	30	30	30	30

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better.
** Indicates differences between values within a column are non-significant (NS).
Note that additional table footnotes are explained in table D.

Table 2b. South Shore late maturity Roundup Ready corn hybrid test results, 2009-10, Northeast Research Farm. Seeded May 5, 2010 at 28,750 seeds per acre.

Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	Yield Averages*		Other 2010 Averages*			
		2-Yr bu/a	2010 bu/a	Bu.Wt. lb	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
G2 GEN./ 5H-999 RR/HX + Cruiser 250	99	**220**	**224**	**59**	19	**1**	**96**
DEKALB/ DKC50-66(VT3) + Poncho 250	100	**218**	**222**	**60**	**17**	**0**	**99**
NUTECH/ 3T-401 VT3 + Cruiser 250	100	**214**	**235**	58	22	**0**	**100**
NUTECH/ 3T-098 VT3 + Cruiser 250	98	**208**	**228**	**59**	20	**0**	94
DEKALB/ DKC48-37(VT3) + Poncho 250	98	**208**	207	**60**	**17**	**0**	91
G2 GEN./ 5H-797 RR/HX + Cruiser 250	97	**204**	212	**59**	18	**0**	92
SEEDS 2000/ 9901VT3 + Poncho 250	99	**201**	207	**59**	20	**0**	83
DEKALB/ DKC50-35(VT3) + Poncho 250	100	.	**239**	**59**	21	**0**	**98**
DEKALB/ DKC51-86(GENVT3P) + Acceleron	101	.	**238**	**59**	20	**0**	**100**
DEKALB/ DKC52-59(VT3) + Poncho 250	102	.	**228**	**59**	20	**0**	92
G2 GEN./ 5H-502 RR/HX + Cruiser 250	100	.	**226**	58	22	**1**	91
SEEDS 2000/ EXP 9602G3 + Cruiser 250	96	.	**226**	57	**17**	**0**	**97**
CHANNEL/ 196-06VT3 + Acceleron	96	.	**224**	**59**	19	**1**	**98**
NUTECH/ 5H-700A RR/HX + Cruiser 250	100	.	219	58	21	**0**	88
NUTECH/ 5N-197 GTCBLLRW + Poncho 250	97	.	217	58	21	**3**	89
NUTECH/ 5N-102 GTCBLLRW + Cruiser 250	100	.	212	56	21	**1**	92
EPLEY/ E1275RR + Maxim XL,Lorsban Dynasty	97	.	212	**59**	**17**	**2**	**97**
SEEDS 2000/ 9701SS + Acceleron	97	.	207	**59**	**17**	**3**	92
EPLEY/ E1125GT + Maxim XL,Lorsban Dynasty	98	.	206	57	19	9	91
AGSOURCE/ 3T-297 VT3 + Poncho 250	97	.	202	**59**	19	**0**	80
G2 GEN./ 5X-500 RR/HXT + Cruiser 250	100	.	201	**59**	19	**0**	87
AGSOURCE/ 5X-598A RR/HXT + Cruiser 250	98	.	199	57	19	**1**	84
G2 GEN./ 5X-598 RR/HXT + Cruiser 250	98	.	196	57	19	**0**	80
AGSOURCE/ 5X-500A RR/HXT + Cruiser 250	101	.	196	58	19	**0**	90
SEEDS 2000/ EXP X299V + Poncho 250	99	.	178	**59**	20	**0**	66
Trial avg.:	99	210	214	59	19	1	91
High avg.:	102	220	239	60	22	9	100
Low avg.:	96	201	178	56	17	0	66
[5] LSD(.05):		NS**	17	1	1	3	5
[6] Min.TPG value:		201	222	59	.	.	95
[7] Max.TPG value:		.	.	.	18	3	.
[8] Coef. of var.:		5	5	1	4	248	4
No. entries:	25	7	25	25	25	25	25

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better.
** Indicates differences between values within a column are non-significant (NS).
Note that additional table footnotes are explained in table D.

Table 3a. Bancroft early maturity glyphosate-resistant corn hybrid test results, 2009-10, E. Weerts Farms Inc. Seeded May 19, 2010 at 28,750 seeds per acre.

Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	Yield Averages*		Other 2010 Averages*			
		2-Yr bu/a	2010 bu/a	Bu.Wt. lb	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
DEKALB/ DKC48-37(VT3) + Poncho 250	98	**177**	**159**	56	**16**	**2**	90
DEKALB/ DKC50-66(VT3) + Poncho 250	100	**176**	**165**	56	**17**	**1**	**99**
WENSMAN/ W 7270VT3PRO + Acceleron	97	**175**	**160**	**57**	**16**	**1**	**98**
NUTECH/ 3T-098 VT3 + Cruiser 250	98	**173**	**163**	54	**17**	**4**	**94**
NUTECH/ 3T-401 VT3 + Cruiser 250	100	**171**	**169**	**57**	19	**2**	**100**
DEKALB/ DKC43-27(VT3) + Poncho 250	93	**170**	**146**	**57**	**16**	**0**	91
DEKALB/ DKC50-35(VT3) + Poncho 250	100	**167**	**152**	56	**17**	**0**	90
WENSMAN/ W 7289VT3 + Poncho 250	99	**166**	**153**	**57**	18	**3**	**96**
SEEDS 2000/ 9901VT3 + Poncho 250	99	**156**	**152**	**58**	20	**0**	88
EPLEY/ E1315RR + Maxim XL,Lorsban Dynasty	100	**156**	**144**	55	18	7	**94**
WENSMAN/ W 7267VT3 + Poncho 250	97	.	**168**	54	**17**	7	**95**
CHANNEL/ 199-55VT3 + Acceleron	99	.	**165**	55	**16**	**3**	**96**
G2 GEN./ 5H-502 RR/HX + Cruiser 250	100	.	**160**	56	19	**1**	**97**
SEEDS 2000/ EXP 9602G3 + Cruiser 250	96	.	**158**	54	**15**	**0**	**95**
CHANNEL/ 196-06VT3 + Acceleron	96	.	**156**	55	**16**	**4**	**94**
SEEDS 2000/ 9701SS + Acceleron	97	.	**155**	55	19	**1**	**99**
PIONEER/ PIONEER BR.P9494XR + Poncho 1250	94	.	**153**	53	**16**	**2**	**94**
G2 GEN./ 5H-700 RR/HX + Cruiser 250	100	.	**153**	**57**	18	**3**	93
NUTECH/ 5N-001 GTCBLLRW + Cruiser 250	100	.	**152**	53	**17**	**2**	**95**
DEKALB/ DKC42-72(VT3) + Poncho 250	92	.	**150**	56	**16**	**0**	92
WENSMAN/ W 7273VT3 + Poncho 250	98	.	**150**	55	18	9	92
NUTECH/ 5N-197 GTCBLLRW + Poncho 250	97	.	**149**	55	19	**1**	90
WENSMAN/ W 8180STX + Acceleron	95	.	**147**	56	**17**	7	**99**
DEKALB/ DKC45-52(GENVT3P) + Acceleron	95	.	**146**	56	**16**	**3**	**100**
G2 GEN./ 5X-500 RR/HXT + Cruiser 250	100	.	**146**	55	18	**2**	**94**
WENSMAN/ W 7230VT3 + Poncho 250	96	.	**145**	**57**	**16**	9	**96**
AGSOURCE/ 5X-598A RR/HXT + Cruiser 250	98	.	**144**	56	18	**0**	87
SEEDS 2000/ EXP X299V + Poncho 250	99	.	141	**57**	**17**	5	**96**
G2 GEN./ 5X-598 RR/HXT + Cruiser 250	98	.	140	55	19	**0**	81
AGSOURCE/ 5N695AGTCBLLRW + Cruiser 250	95	.	136	56	**17**	5	82
NUTECH/ 5N-102 GTCBLLRW + Cruiser 250	100	.	127	56	18	**4**	87
Trial avg.:	98	169	152	56	17	3	93
High avg.:	100	177	169	58	20	9	100
Low avg.:	92	156	127	53	15	0	81
[5] LSD(0.05):		NS**	26	1	2	4	6
[6] Min.TPG value:		156	143	57	.	.	94
[7] Max.TPG value:		.	.	.	17	4	.
[8] Coef. of var.:		9	10	2	6	91	4
No. entries:	31	10	31	31	31	31	31

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better.
** Indicates differences between values within a column are non-significant (NS).
Note that additional table footnotes are explained in table D.

Table 3b. Bancroft late maturity glyphosate-resistant corn hybrid test results, 2009-10, E. Weerts Farms Inc. Seeded May 19, 2010 at 28,750 seeds per acre.

Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	Yield Averages*		Other 2010 Averages*			
		2-Yr bu/a	2010 bu/a	Bu.Wt. lb	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
PIONEER/ PIONEER BR.36V53 + Poncho 1250	102	**173**	**172**	**54**	**20**	**1**	**98**
WENSMAN/ W 7455VT3 + Poncho 250	107	**158**	**164**	51	24	**2**	**96**
NUTECH/ 5N-804 GTCBLLRW + Cruiser 250	104	.	**175**	53	22	**0**	**97**
G2 GEN./ 5H-404 RR/HX + Cruiser 250	104	.	**173**	**55**	21	**0**	91
G2 GEN./ 5H-502A RR/HX + Cruiser 250	102	.	**172**	**56**	**20**	**1**	**98**
EPLEY/ E1535GT + Maxim XL,Lorsban Dynasty	104	.	**171**	**54**	**20**	**1**	**96**
SEEDS 2000/ EXP X104G3 + Cruiser 250	104	.	**170**	53	22	**0**	**93**
EPLEY/ E1418GT3000 + Cruiser Extreme 250	104	.	**164**	52	24	**0**	**98**
WENSMAN/ W 7433VT3 + Poncho 250	105	.	**164**	**54**	22	**4**	**96**
EPLEY/ E1479HXTLLRR + Cruiser Extreme 250	104	.	**162**	53	23	**3**	**96**
AGSOURCE/ 5X-500A RR/HXT + Cruiser 250	101	.	**161**	**56**	**18**	**1**	**93**
NUTECH/ 5N-803 GTCBLLRW + Cruiser 250	103	.	**155**	52	21	**2**	91
G2 GEN./ 5H-501A RR/HX + Cruiser 250	101	.	**155**	**55**	**20**	**2**	**98**
G2 GEN./ 5H-105 RR/HX + Cruiser 250	105	.	**155**	**55**	21	**2**	**94**
NUTECH/ 3T-401A VT3 + Cruiser 250	101	.	**152**	**56**	**20**	**4**	**94**
NUTECH/ 5N-102AGTCBLLRW + Cruiser 250	102	.	**152**	**55**	**19**	**1**	92
PIONEER/ PIONEER BR.P0461XR + Poncho 1250	104	.	**151**	**54**	22	**0**	**93**
WENSMAN/ W 8364STX + Acceleron	103	.	141	**55**	21	**4**	**97**
Trial avg.:	103	165	161	54	21	1	95
High avg.:	107	173	175	56	24	4	98
Low avg.:	101	158	141	51	18	0	91
[5] LSD(0.05):		NS**	27	2	2	NS	5
[6] Min.TPG value:		158	148	54	.	.	93
[7] Max.TPG value:		.	.	.	20	4	.
[8] Coef. of var.:		4	10	2	5	150	3
No. entries:	18	2	18	18	18	18	18

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better.
** Indicates differences between values within a column are non-significant (NS).
Note that additional table footnotes are explained in table D.

Table 4a. Brookings early maturity glyphosate-resistant corn hybrid test results, 2009-10, Plant Science Farm. Seeded April 28, 2010 at 28,750 seeds per acre.

Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	Yield Averages*		Other 2010 Averages*			
		2-Yr bu/a	2010 bu/a	Bu.Wt. lb	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
NUTECH/ 3T-401 VT3 + Cruiser 250	100	**250**	**256**	58	17	**1**	**99**
DEKALB/ DKC50-66(VT3) + Poncho 250	100	**239**	**242**	**60**	15	**1**	**97**
G2 GEN./ 5H-501 RR/HX + Cruiser 250	100	**239**	233	58	16	**1**	89
WENSMAN/ W 7267VT3 + Poncho 250	97	229	236	58	16	**0**	**95**
DAIRYLAND/ ST-9597Q + Cruiser Extreme 250	97	226	228	57	16	**2**	**99**
DAIRYLAND/ ST-9500Q + Cruiser Extreme 250	100	224	226	57	18	**2**	93
WENSMAN/ W 7270VT3PRO + Acceleron	97	223	219	57	14	**1**	**96**
NUTECH/ 3T-300 VT3 + Cruiser 250	100	222	234	58	16	**1**	91
EPLEY/ E1315RR + Maxim XL,Lorsban Dynasty	100	222	231	56	17	6	**97**
NUTECH/ 3T-098 VT3 + Cruiser 250	98	222	226	57	16	**0**	**95**
SEEDS 2000/ 9901VT3 + Poncho 250	99	220	221	**59**	16	**0**	90
DEKALB/ DKC43-27(VT3) + Poncho 250	93	203	193	58	**13**	**1**	87
WENSMAN/ W 7273VT3 + Poncho 250	98	.	**256**	57	16	**0**	**97**
CHANNEL/ 199-55VT3 + Acceleron	99	.	**256**	56	16	**0**	**99**
DEKALB/ DKC50-35(VT3) + Poncho 250	100	.	**246**	57	16	**0**	**98**
G2 GEN./ 5H-502 RR/HX + Cruiser 250	100	.	**246**	58	17	**1**	92
HOEGEMEYER/ EX6200GTCBLL + Poncho or Cruiser 250	92	.	**243**	56	14	**2**	93
G2 GEN./ 5H-700 RR/HX + Cruiser 250	100	.	**242**	58	17	**0**	**98**
DEKALB/ DKC45-52(GENVT3P) + Acceleron	95	.	237	58	15	**0**	**99**
NUTECH/ 5N-197 GTCBLLRW + Poncho 250	97	.	236	58	16	4	92
SEEDS 2000/ EXP 9602G3 + Cruiser 250	96	.	234	56	15	**1**	**98**
CHANNEL/ 196-06VT3 + Acceleron	96	.	234	57	16	**0**	93
HOEGEMEYER/ EX68383000GT + Poncho or Cruiser 250	97	.	233	57	16	**0**	85
WENSMAN/ W 7289VT3 + Poncho 250	99	.	232	58	16	**0**	**94**
SEEDS 2000/ 9701SS + Acceleron	97	.	227	54	**12**	**2**	**97**
HOEGEMEYER/ HPT6589HXRR + Poncho or Cruiser 250	96	.	226	57	14	**0**	**95**
NUTECH/ 5N-102 GTCBLLRW + Cruiser 250	100	.	224	56	16	**2**	93
WENSMAN/ W 8180STX + Acceleron	95	.	224	57	16	**0**	**95**
SEEDS 2000/ EXP X299V + Poncho 250	99	.	223	**59**	16	**1**	88
DEKALB/ DKC42-72(VT3) + Poncho 250	92	.	220	57	14	**0**	93
G2 GEN./ 5X-500 RR/HXT + Cruiser 250	100	.	220	57	15	**0**	**94**
PIONEER/ PIONEER BR.P9494XR + Poncho 1250	94	.	219	55	**13**	**0**	92
EPLEY/ E1275RR + Maxim XL,Lorsban Dynasty	97	.	211	58	14	7	**96**
WENSMAN/ W 7230VT3 + Poncho 250	96	.	210	56	15	**2**	**95**
DEKALB/ DKC48-37(VT3) + Poncho 250	98	.	208	**59**	15	**0**	89
HOEGEMEYER/ EXP6456HXRR + Poncho or Cruiser 250	94	.	207	56	12	5	82
G2 GEN./ 5X-598 RR/HXT + Cruiser 250	98	.	183	56	15	**0**	79
Trial avg.:	97	226	228	57	15	1	93
High avg.:	100	250	256	60	18	7	99
Low avg.:	92	203	183	54	12	0	79
[5] LSD(0.05):		20	14	1	1	2	5
[6] Min.TPG value:		230	242	59	.	.	94
[7] Max.TPG value:		.	.	.	13	2	.
[8] Coef. of var.:		3	4	1	3	131	3
No. entries:	37	12	37	37	37	37	37

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better. Note that additional table footnotes are explained in table D.

Table 4b. Brookings late maturity glyphosate-resistant corn hybrid test results, 2009-10, Plant Science Farm. Seeded April 28, 2009 at 28,750 seeds per acre.

Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	Yield Averages*		Other 2010 Averages*			
		2-Yr bu/a	2010 bu/a	Bu.Wt. lb	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
HEINE/ 744RRYGCB + Poncho 250	104	**245**	**247**	**58**	18	**0**	**91**
HEINE/ 745VT3 + Poncho 250	104	**243**	**259**	**58**	20	**0**	**96**
G2 GEN./ 5H-905 RR/HX + Cruiser 250	105	**241**	**253**	56	**17**	**1**	**91**
HEINE/ 742VT3 + Poncho 250	102	**235**	228	**59**	**17**	**0**	84
PIONEER/ PIONEER BR.36V53 + Poncho 1250	102	**230**	234	57	**17**	**1**	94
DAIRYLAND/ ST-9703Q + Cruiser Extreme 250	103	221	222	56	19	**0**	85
G2 GEN./ 5H-007 RR/HX + Cruiser 250	105	218	235	56	19	**0**	**89**
WENSMAN/ W 7455VT3 + Poncho 250	107	212	197	56	19	**1**	75
EPLEY/ E1418GT3000 + Cruiser Extreme 250	104	.	**259**	55	18	**1**	**95**
NUTECH/ 5N-803 GTCBLLRW + Cruiser 250	103	.	246	56	16	2	**95**
HEINE/ 723VT3 + Poncho 250	102	.	245	55	19	**0**	**93**
NUTECH/ 5N-804 GTCBLLRW + Cruiser 250	104	.	241	57	**17**	**0**	**93**
WENSMAN/ W 7433VT3 + Poncho 250	105	.	241	56	19	**0**	**91**
EPLEY/ E1479HXTLLRR + Cruiser Extreme 250	104	.	240	56	22	**0**	**95**
WENSMAN/ W 8364STX + Acceleron	103	.	240	57	18	**1**	**96**
NUTECH/ 3T-401A VT3 + Cruiser 250	101	.	238	57	**17**	2	**94**
G2 GEN./ 5H-105 RR/HX + Cruiser 250	105	.	233	57	19	**0**	74
PIONEER/ PIONEER BR.P0461XR + Poncho 1250	104	.	231	57	**17**	**0**	**89**
NUTECH/ 5N-102AGTCBLLRW + Cruiser 250	102	.	231	57	**17**	**0**	**87**
NUTECH/ 3A-804 GT + Cruiser 250	104	.	230	56	**17**	2	**92**
SEEDS 2000/ EXP X104G3 + Cruiser 250	104	.	228	57	**17**	**1**	**90**
G2 GEN./ 5X-007 RR/HXT + Cruiser 250	105	.	221	**58**	19	**0**	**89**
EPLEY/ E1535GT + Maxim XL,Lorsban Dynasty	104	.	221	**58**	**16**	2	**94**
G2 GEN./ 5H-404 RR/HX + Cruiser 250	104	.	218	57	**17**	**0**	81
Trial avg.:	104	231	235	57	18	1	90
High avg.:	107	245	259	59	22	2	96
Low avg.:	101	212	197	55	16	0	74
[5] LSD(0.05):		15	12	1	1	1	10
[6] Min.TPG value:		230	247	58	.	.	86
[7] Max.TPG value:		.	.	.	17	1	.
[8] Coef. of var.:		4	3	1	3	177	7
No. entries:	24	8	24	24	24	24	24

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better.
Note that additional table footnotes are explained in table D.

Table 5a. Geddes early maturity glyphosate-resistant corn hybrid test results, 2009-10, Curtis Sybesma Farm. Seeded May 18, 2010 at 28,750 seeds per acre.

Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	Yield Averages*		Other 2010 Averages*			
		2-Yr bu/a	2010 bu/a	Bu.Wt. lb	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
G2 GEN./ 5H-905 RR/HX + Cruiser 250	105	**242**	**238**	57	17	**0**	**99**
DEKALB/ DKC52-59(VT3) + Poncho 250	102	**239**	**236**	58	**16**	**4**	**97**
NUTECH/ 3T-401 VT3 + Cruiser 250	100	**237**	**228**	59	17	**2**	**96**
PIONEER/ PIONEER BR.36V53 + Poncho 1250	102	**235**	223	57	**16**	**0**	**99**
WENSMAN/ W 7433VT3 + Poncho 250	105	**234**	**227**	58	**16**	**1**	**95**
DEKALB/ DKC50-66(VT3) + Poncho 250	100	**231**	222	59	**15**	**2**	**96**
G2 GEN./ 5H-501 RR/HX + Cruiser 250	100	**231**	220	59	**16**	**3**	**95**
CHANNEL/ 199-55VT3 + Acceleron	99		**237**	57	**15**	**3**	**98**
CHANNEL/ 201-16VT3 + Acceleron	101		**235**	**60**	**16**	**3**	**94**
PIONEER/ PIONEER BR.P0461HR + Poncho 1250	104		**234**	57	17	**2**	**98**
NUTECH/ 5N-803 GTCBLLRW + Cruiser 250	103		**234**	58	17	**3**	**94**
EPLEY/ E1418GT3000 + Cruiser Extreme 250	104		**231**	57	18	**2**	**94**
NUTECH/ 3T-603A VT3 + Cruiser 250	103		**229**	**60**	17	**3**	**94**
EPLEY/ E1479HXTLLRR + Cruiser Extreme 250	104		**226**	58	18	**4**	**97**
PIONEER/ PIONEER BR.37K11 + Poncho 1250	99		224	58	**15**	**3**	**99**
G2 GEN./ 5H-502 RR/HX + Cruiser 250	100		223	59	17	**2**	85
SEEDS 2000/ EXP X104G3 + Cruiser 250	104		223	59	**16**	**3**	89
WENSMAN/ W 8364STX + Acceleron	103		221	58	17	**3**	**94**
MASTERS CHOICE/ MCT-527 + Poncho 250	105		220	58	17	**3**	**96**
EPLEY/ E1535GT + Maxim XL,Lorsban Dynasty	104		220	58	17	**1**	**94**
NUTECH/ 5N-804 GTCBLLRW + Cruiser 250	104		219	57	17	**1**	88
G2 GEN./ 5H-105 RR/HX + Cruiser 250	105		218	58	17	**2**	**97**
WENSMAN/ W 7289VT3 + Poncho 250	99		215	**61**	**16**	**1**	**99**
DEKALB/ DKC45-52(GENVT3P) + Acceleron	95		213	59	**15**	**0**	**99**
NUTECH/ 5N-102 GTCBLLRW + Cruiser 250	100		209	59	**15**	**4**	**95**
G2 GEN./ 5X-007 RR/HXT + Cruiser 250	105		202	59	17	**1**	90
EPLEY/ E1315RR + Maxim XL,Lorsban Dynasty	100		202	57	**16**	**6**	**96**
DEKALB/ DKC48-37(VT3) + Poncho 250	98		201	59	**15**	**1**	**95**
Trial avg.:	102	236	223	58	16	2	95
High avg.:	105	242	238	61	18	6	99
Low avg.:	95	231	201	57	15	0	85
[5] LSD(0.05):		NS**	12	1	1	NS	5
[6] Min.TPG value:		231	226	60			94
[7] Max.TPG value:					16	6	
[8] Coef. of var.:		4	3	1	4	133	3
No. entries:	28	7	28	28	28	28	28

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better.
** Indicates differences between values within a column are non-significant (NS).
Note that additional table footnotes are explained in table D.

Table 5b. Geddes late maturity glyphosate-resistant corn hybrid test results, 2009-10, Curtis Sybesma Farm. Seeded May 18, 2010 at 28,750 seeds per acre.

Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	Yield Averages*		Other 2010 Averages*			
		2-Yr bu/a	2010 bu/a	Bu.Wt. lb	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
G2 GEN./ 5H-210 RR/HX + Cruiser 250	110	**235**	**238**	58	**16**	**4**	89
G2 GEN./ 5H-511 RR/HX + Cruiser 250	110	**230**	**235**	**59**	**18**	6	**95**
DEKALB/ DKC61-69(VT3) + Poncho 250	111	**223**	**233**	58	19	**2**	**95**
WENSMAN/ W 7455VT3 + Poncho 250	107	**210**	200	57	**17**	**4**	**95**
WENSMAN/ W 7562VT3 + Poncho 250	111	.	**243**	56	**18**	**3**	**98**
WENSMAN/ W 7473VT3 + Poncho 250	109	.	**243**	56	20	**3**	**97**
DEKALB/ DKC59-35(VT3) + Poncho 250	109	.	**240**	**59**	19	**1**	**96**
NUTECH/ 5B-612 GT/CB/LL + Poncho 250	112	.	**239**	54	**18**	**4**	93
DEKALB/ DKC58-83(GENVT3P) + Acceleron	108	.	**237**	**60**	**16**	**3**	**95**
NUTECH/ 3T-810 VT3 + Poncho 250	110	.	**232**	56	19	5	88
SEEDS 2000/ 3172RR + Poncho 250	107	.	**231**	56	**16**	7	**99**
NUTECH/ 3A-406 GT + Cruiser 250	106	.	**229**	56	**16**	**0**	**96**
G2 GEN./ 5X-411A RR/HXT + Cruiser 250	110	.	**228**	58	21	**2**	90
NUTECH/ 3T-713 VT3 + Poncho 250	113	.	**224**	57	21	5	**94**
G2 GEN./ 5X-411 RR/HXT + Cruiser 250	110	.	**223**	**59**	20	5	92
G2 GEN./ 5H-509 RR/HX + Cruiser 250	109	.	217	**59**	**18**	**1**	**95**
NUTECH/ 3A-710 GT + Poncho 250	110	.	211	57	**17**	7	**98**
DEKALB/ DKC59-88(VT3) + Poncho 250	109	.	201	58	19	**0**	90
Trial avg.:	110	224	228	57	18	4	94
High avg.:	113	235	243	60	21	7	99
Low avg.:	106	210	200	54	16	0	88
[5] LSD(0.05):		NS**	22	1	2	4	5
[6] Min.TPG value:		210	221	59	.	.	94
[7] Max.TPG value:		.	.	.	18	4	.
[8] Coef. of var.:		5	6	1	8	63	3
No. entries:	18	4	18	18	18	18	18

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better.
** Indicates differences between values within a column are non-significant (NS).
Note that additional table footnotes are explained in table D.

Table 6a. Beresford early maturity glyphosate-resistant corn hybrid test results, 2009-10, Southeast Experiment Station. Seeded May 3, 2010 at 28,750 seeds per acre.

Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	Yield Averages*		Other 2010 Averages*			
		2-Yr bu/a	2010 bu/a	Bu.Wt. lb	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
G2 GEN./ 5H-210 RR/HX + Cruiser 250	110	**242**	**248**	58	20	**1**	**98**
WENSMAN/ W 7455VT3 + Poncho 250	107	**240**	**239**	59	17	**1**	96
G2 GEN./ 5H-511 RR/HX + Cruiser 250	110	**239**	230	57	20	**0**	96
DAIRYLAND/ ST9206Q + Cruiser Extreme 250	106	**235**	**238**	57	18	**0**	**99**
DEKALB/ DKC52-59(VT3) + Poncho 250	102	**228**	224	58	**14**	**0**	**100**
HOEGEMEYER/ HPT7757HXTRR + Poncho or Cruiser 250	106	**220**	219	**61**	18	**0**	**100**
WENSMAN/ W 7473VT3 + Poncho 250	109		**251**	56	18	**0**	**98**
NUTECH/ 3A-710 GT + Poncho 250	110		**250**	59	18	**1**	**100**
HEINE/ 810VT3 PRO + Acceleron	109		**249**	58	19	**0**	**100**
NUTECH/ 3A-109 GT + Poncho 250	109		**248**	57	17	**1**	**99**
DEKALB/ DKC59-35(VT3) + Poncho 250	109		**245**	57	19	**1**	**100**
G2 GEN./ 5H-509 RR/HX + Cruiser 250	109		**243**	58	18	**0**	**100**
DAIRYLAND/ ST-9208Q + Cruiser Extreme 250	108		**241**	58	18	**1**	**100**
HOEGEMEYER/ HPT8041HXRR + Poncho or Cruiser 250	109		**241**	**60**	20	**0**	**98**
HOEGEMEYER/ HPT7584HXTRR + Poncho or Cruiser 250	105		235	57	17	**0**	**100**
EPLEY/ E1479HXTLLRR + Cruiser Extreme 250	104		233	58	18	**0**	**99**
DEKALB/ DKC58-83(GENVT3P) + Acceleron	108		232	**60**	17	**0**	**100**
PIONEER/ PIONEER BR.P0461XR + Poncho 1250	104		231	58	16	**0**	**100**
G2 GEN./ 5X-411 RR/HXT + Cruiser 250	110		231	58	20	**0**	92
DEKALB/ DKC59-88(VT3) + Poncho 250	109		230	59	19	**1**	**99**
PIONEER/ PIONEER BR.36V53 + Poncho 1250	102		227	59	**15**	**0**	**99**
HOEGEMEYER/ EXP7998HXRR + Poncho or Cruiser 250	109		226	58	18	**0**	**98**
WENSMAN/ W 7433VT3 + Poncho 250	105		226	59	**15**	3	**100**
DAIRYLAND/ ST-6310 + Cruiser Extreme 250	110		225	59	17	**0**	**99**
NUTECH/ 3T-810 VT3 + Poncho 250	110		224	54	22	**0**	89
G2 GEN./ 5X-411A RR/HXT + Cruiser 250	110		224	58	20	**0**	**98**
EPLEY/ E1535GT + Maxim XL,Lorsban Dynasty	104		223	58	**15**	**1**	**98**
WENSMAN/ W 8364STX + Acceleron	103		219	59	16	**0**	**98**
DEKALB/ DKC51-86(GENVT3P) + Acceleron	101		214	58	**14**	**2**	**100**
DEKALB/ DKC50-35(VT3) + Poncho 250	100		212	**60**	**14**	**1**	**100**
EPLEY/ E2404VT3PRO + Cruiser Extreme 250	107		210	58	16	**0**	88
DEKALB/ DKC50-66(VT3) + Poncho 250	100		203	59	**14**	**1**	**100**
CHANNEL/ 201-16VT3 + Acceleron	101		197	59	**14**	**1**	**99**
Trial avg.:	107	234	230	58	17	0	98
High avg.:	110	242	251	61	22	3	100
Low avg.:	100	220	197	54	14	0	88
[5] LSD(0.05):		NS**	15	1	1	2	3
[6] Min.TPG value:		220	236	60			97
[7] Max.TPG value:					15	2	
[8] Coef. of var.:		3	4	1	4	226	2
No. entries:	33	6	33	33	33	33	33

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better.
** Indicates differences between values within a column are non-significant (NS).
Note that additional table footnotes are explained in table D.

Table 6b. Beresford late maturity glyphosate-resistant corn hybrid test results, 2009-10, Southeast Experiment Station. Seeded May 3, 2010 at 28,750 seeds per acre.

Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	Yield Averages*		Other 2010 Averages*			
		2-Yr bu/a	2010 bu/a	Bu.Wt. lb	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
NUTECH/ 3T-413 VT3 + Cruiser 250	113	**237**	**228**	57	23	**1**	94
DEKALB/ DKC61-69(VT3) + Poncho 250	111	**234**	**237**	58	**18**	**0**	**95**
NUTECH/ 3T-713 VT3 + Poncho 250	113	**234**	**234**	57	21	**0**	**98**
G2 GEN./ 5H-511A RR/HX + Cruiser 250	111	**234**	**226**	58	20	**1**	**96**
DEKALB/ DKC62-54(VT3) + Poncho 250	112	**226**	203	**59**	**18**	**1**	**96**
DEKALB/ DKC63-84(VT3) + Poncho 250	113		**244**	56	20	**0**	**100**
NUTECH/ 3T-415 VT3 + Poncho 250	115		**241**	57	22	**0**	**99**
WENSMAN/ W 7562VT3 + Poncho 250	111		**241**	57	**19**	**1**	**100**
PIONEER/ PIONEER BR.33P83 + Poncho 1250	111		**239**	**59**	**19**	**1**	**99**
G2 GEN./ 5H-513 RR/HX + Cruiser 250	113		**231**	57	23	**1**	**98**
G2 GEN./ 5H-812 RR/HX + Cruiser 250	112		**228**	**60**	22	**1**	**99**
NUTECH/ 5B-612 GT/CB/LL + Poncho 250	112		**224**	53	20	5	**98**
NUTECH/ 5N-215 GTCBLLRW + Poncho 250	115		**224**	57	23	**1**	**98**
G2 GEN./ 5X-411B RR/HXT + Cruiser 250	111		215	**60**	20	**1**	92
G2 GEN./ 5X-512 RR/HXT + Cruiser 250	112		214	56	23	**0**	87
AGSOURCE/ 3T-914 VT3 + Poncho 250	114		193	54	24	17	**98**
AGSOURCE/ 5N-813GTCBLLRW + Poncho 250	113		181	55	22	4	93
Trial avg.:	112	233	224	57	21	2	96
High avg.:	115	237	244	60	24	17	100
Low avg.:	111	226	181	53	18	0	87
[5] LSD(0.05):		NS**	20	1	1	3	5
[6] Min.TPG value:		226	224	59			95
[7] Max.TPG value:					19	3	
[8] Coef. of var.:		3	5	1	3	88	3
No. entries:	17	5	17	17	17	17	17

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better.
** Indicates differences between values within a column are non-significant (NS).
Note that additional table footnotes are explained in table D.