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#### 2007 Precision Planted Performance Trials: Corn

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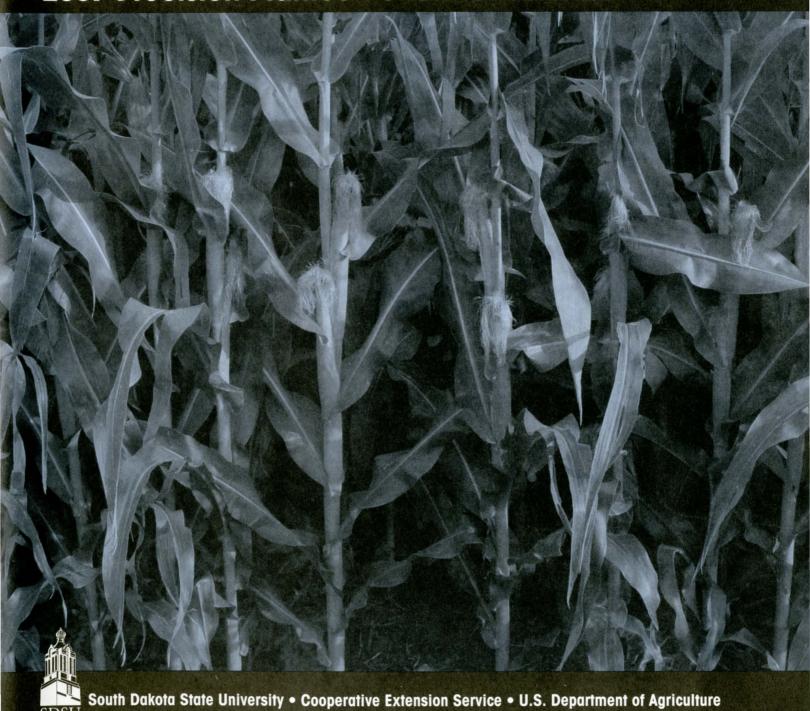
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**2007 Precision Planted Performance Trials** 



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#### C253—Precision Planted Corn 2007 Crop Performance Results is available electronically on the internet

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## 2007 Precision Planted Corn Performance Trials

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This publication reports the performance of entries in the 2007 South Dakota corn hybrid performance trials for both non-Roundup-Ready™ and Roundup-Ready™ hybrids. Information includes the most recent two-year and one-year grain yield averages, in bushels per acre, and one-year averages for bushel weight, grain moisture at harvest, percent stand at harvest, and stalk lodging 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 tables C and D, and mailing addresses for seed companies are listed in table E.

#### Test Trial Locations

Trial locations, soil types, seedbed, previous crop history, soil fertility yield goals, and seeding dates are indicated in Table A. The participation and efforts of our cooperators Allen and Inel Ryckman at Warner, Al Heuer at South Shore (Northeast Research Farm), Erland Weerts 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

Weather data (Table B) was obtained through the efforts of D. Todey and C. Shukla, South Dakota Office of Climate and Weather, and they are gratefully acknowledged. Average daily temperatures were 1 to 4°F below average across test locations in April; however, by May all locations were 2 to 4°F above average in temperature. Thereafter, temperatures ranged from about 0 o 2°F above average from June through August and from average to about 4°F above average in September. Heat unit totals varied across locations, ranging from a high of 3,168 GDD at the Beresford research farm to a low of 2,493 GDD at the South Shore research farm. Heat unit accumulations were below average only at Aberdeen (-55), South Shore research farm (-40), De Smet (-18), and Brookings (-16) in August; otherwise, they were average to above average across locations. The total GDD accumulations though September were about 10% above average across all locations.

Precipitation varied across test locations. On average, seasonal

moisture varied from a deficit of -2.91" at the Beresford research farm to a high of 7.77" above normal in the Aberdeen area. All locations experienced moisture deficits during the growing season. Moisture in April or May or both apparently was able to compensate for moisture deficits at some locations later in the season. In July, Brookings and the Beresford research farm received little or no rainfall.

#### 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 their relative maturity ratings, which are reported by the participating seed company. This testing program does not guarantee that all 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 cross over 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 2007 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. The center two rows were harvested for yield. A Monosem precision row crop planter was used for seeding plots at all locations. In 2007, 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 are 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 (2X2) 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 for both the non-Roundup Ready<sup>TM</sup> and the Roundup Ready<sup>TM</sup> hybrid corn trials.

#### Measurements of Performance

Yields are obtained from the South Dakota Crop Performance Testing Program. Current-year and two-year yield averages are included where hybrids have been tested in 2007 and for the past two years. In 2007, two-year yield means were not calculated at Warner, South Shore, and Geddes. The yield data for 2006 at these locations was not used in the calculation of 2007 yields averages because the 2006 data contained high levels of experimental error. The high levels of experimental error in the 2006 data resulted when temperatures in the high 90s and above resulted in very poor or no pollination, which severely reduced yield. Therefore, the performance data at Warner, South Shore, and Geddes only includes data for 2007.

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 2007, the coefficient of variation (CV) values (a measure of experimental error) for yield was relatively low over the six test locations. The highest CV value (13%) was obtained in the early non-Roundup Ready trial at Geddes, while the remaining test trial CV values were generally in the 5 to 10% range. Experimental error may be the result of several factors, including test methods, or factors such as moisture, temperature, and soil variations, or agronomic factors such as seeding date, reseeding, or seed quality factors—all of which may or may not be controllable in a given year. Clearly, in 2007, seasonal moisture distribution and/or subsoil moisture conditions, along with elevated high temperatures, were the factors that affected the yielding potential of the corn hybrids tested. All test locations likely were exposed to some degree of moisture stress; however, Beresford was particularly dry in July (Table B).

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, then the LSD value is reported as non-significant (NS).

The LSD values reported in this publication can be used in several ways. Here, the LSD value is used primarily to identify

not only the top performance group (TPG) for current-year and two-year yields, but also bushel weight, grain moisture at harvest, and lodging (below the ear) 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. Subtract the column LSD value from the highest yield (155 - 15 =140) to obtain the minimum value for the TPG for yield—or 140 bu/a. Technically, a yield value of 141 bu/a should be included in the TPG, while a value of 140 bu/a should not. However, because all yields and LSD values are rounded to the nearest whole number, we can say 140 bu/a, because of rounding, is the more appropriate minimum value for the TPG for yield. 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 to or higher than the minimum TPG value reported at the bottom of each yield column (2007 or two-year yield averages). If hybrid yield differences are not significant (NS) and the CV values are 20% 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 20%, 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, do not forget to note that entries tested for two years may also have a yield value that qualifies for the TPG in the 2007 yield column.

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 if 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, then the yield difference between hybrids A and C is 18 bu/a (132 - 114 = 18). In this case, the yield difference of 18 bu/a 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 test trial grain moisture LSD value equals 2%, and if hybrid A measures 18% and hybrid B measures 16, then their yield 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 reported 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 difference of 3%is more than the reported LSD value 2%; therefore, hybrid A is significantly higher in grain moisture than hybrid C.

The TPG for other performance factors like 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 percent of stand value that is equal to or greater than the minimum reported TPG value for bushel weight or percent of stand. Likewise, in order to qualify for the TPG, a hybrid must have grain moisture and lodging values that are equal to or less than the maximum reported TPG value for grain moisture or lodging percentage. Note that yield, bushel weight, and percent stand TPG values are greater than a mini-

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

#### PERFORMANCE TRIAL RESULTS BY LOCATIONS

The performance trial results for one year (2007) and for two years (2006-07) follow:

#### **Northern Locations**

**Note:** In 2007, two-year yield means were not calculated at Warner and South Shore. The yield data for 2006 at these locations was not used in the calculation of 2007 yields means because the 2006 data contained high levels of experimental error. The high levels of experimental error in the 2006 data resulted when temperatures in the high 90s and above resulted in very poor or no pollination, which severely reduced yields. Thus, the performance data at Warner and South Shore only includes 2007 data.

#### Warner

Early maturity trial – Non-Roundup Ready™, Tables 1a: The test trial yield average was 174 bu/a in 2007. Yield differences among hybrids were non-significant in 2007. Therefore, all entries tested were in the TPG for yield, even the lowest yield value of 166 bu/a. In 2007, bushel weights averaged 56 lbs, grain moisture averaged 17%, lodging averaged 1%, and percent stand averaged 99%. In order for hybrids to be in the TPG for all performance factors, they had to average 166 bu/a or more in yield, 56 lbs or more in bushel weight, 17% or less in grain moisture, 2% or less in lodging, and 97% or more for percent stand.

Late maturity trial – Non-Roundup Ready™, Tables 1b:
The test trial yield average was 180 bu/a in 2007. Yield differences among hybrids were non-significant in 2007. Therefore, all entries tested were in the TPG for yield, even the lowest yield value of 169 bu/a. In 2007, bushel weights averaged 54 lbs, grain moisture averaged 24%, lodging averaged slightly more than 0%, and percent stand averaged 99%. In order for hybrids to be in the TPG for all performance factors, they had to average 169 bu/a or more in yield, 54 lbs or more in bushel weight, 21% or less in grain moisture, 1% or less in lodging, and 98% or more for percent stand.

Early maturity trial – Roundup Ready™, Tables 1c: The test trial yield average was 187 bu/a in 2007. Hybrids that yielded 189 bu/a or more qualified for the TPG for yield. Hybrids had to differ in yield by 12 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 17%, lodging averaged 1%, and percent stand averaged 97%. In order for hybrids to be in the TPG for all performance factors, they had to average 189 bu/a or more in yield, 57 lbs or more in bushel weight, 16% or less in grain moisture, 2% or less in lodg-

ing, and 96% or more for percent stand.

Late maturity trial – Roundup Ready™, Tables 1d: The test trial yield average was 181 bu/a in 2007. Hybrids that yielded 180 bu/a or more qualified for the TPG for yield. Hybrids had to differ in yield by 14 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 19%, lodging averaged slightly more than 0%, and percent stand averaged 98%. In order for hybrids to be in the TPG for all performance factors, they had to average 180 bu/a or more in yield, 58 lbs or more in bushel weight, 18% or less in grain moisture, 2% or less in lodging, and 97% or more for percent stand.

#### South Shore

Early maturity trial – Non-Roundup Ready™, Tables 2a: The test trial yield average was 177 bu/a in 2007. Hybrids that yielded 178 bu/a or more qualified for the TPG for yield. Hybrids had to differ in yield by 12 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 55 lbs, grain moisture averaged 19%, lodging averaged 1%, and percent stand averaged 98%. In order for hybrids to be in the TPG for all performance factors, they had to average 178 bu/a or more in yield, 55 lbs or more in bushel weight, 18% or less in grain moisture, 2% or less

in lodging, and 98% or more for percent stand.

Late maturity trial – Non-Roundup Ready™, Tables 2b: The test trial yield average was 174 bu/a in 2007. Hybrids that yielded 168 bu/a or more qualified for the TPG for yield. Hybrids had to differ in yield by 16 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 53 lbs, grain moisture averaged 26%, lodging averaged slightly more than 0%, and percent stand averaged 100%. In order for hybrids to be in the TPG for all performance factors, they had to average 168 bu/a or more in yield, 52 lbs or more in bushel weight, 25% or less in grain moisture, 1% or less in lodging, and 99% or more for percent stand.

Early maturity trial – Roundup Ready™, Tables 2c: The test trial yield average was 179 bu/a in 2007. Hybrids that yielded 182 bu/a or more qualified for the TPG for yield. Hybrids had to differ in yield by 12 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 55 lbs, grain moisture averaged 20%, lodging averaged 1%, and percent stand averaged 99%. In order for hybrids to be in the TPG for all performance factors, they had to average 182 bu/a or more in yield, 57 lbs or more in bushel weight, 18% or less in grain moisture, 3% or less in lodging, and 97% or more for percent stand.

Late maturity trial – Roundup Ready™, Tables 2d: The test trial yield average was 177 bu/a in 2007. Hybrids that yielded 172 bu/a or more qualified for the TPG for yield. Hybrids had to differ in yield by 20 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 54 lbs, grain moisture averaged 22%, lodging averaged 1%, and percent stand averaged 98%. In order for hybrids to be in the TPG for all performance factors, they had to average 172 bu/a or more in yield, 56 lbs or more in bushel weight, 20% or less in grain moisture, 2% or less in lodging, and 96% or more for percent stand.

#### **Central Locations**

#### Bancroft

Early maturity trial – Non-Roundup Ready™, Tables 3a: The test trial yield averages were 191 bu/a in 2007 and 167 bu/a for two years. Hybrids that yielded 186 bu/a or more in 2007 qualified for the TPG for yield. There were no differences in yield average among the three hybrids tested two years, so all three qualified for the TPG. Hybrids had to differ in yield by 18 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 58 lbs, grain moisture averaged 19%, lodging averaged slightly more than 0%, and percent stand averaged 97%. In order for hybrids to be in the TPG for all performance factors, they had to average 186 bu/a for 2007 and 159 bu/a or more in yield for two years, 58 lbs or more in bushel weight, 17% or less in grain moisture, 1% or less in lodging, and 96% or more for percent stand.

Late maturity trial – Non-Roundup Ready™, Tables 3b: The test trial yield averages were 190 bu/a in 2007 and 170 bu/a for two years. Yield differences among hybrids were non-significant in 2007 and for the two-year period. Therefore, all entries were in the TPG for yield, even though the lowest yield value was 179 bu/a in 2007 and 166 bu/a for two years. In 2007, bushel weights averaged 56 lbs, grain moisture averaged 22%, lodging averaged slightly more than 0%, and the final percent stand averaged 98%. In order for hybrids to be in the top performance group for these factors, they had to average 179 bu/a or more for 2007 and 166 bu/a or more for two years, 56 lbs or more in bushel weight, 21% or less in grain moisture, 1% or less in stalk lodging, and 96% or more for percent stand.

Early maturity trial – Roundup Ready™, Tables 3c: The test trial yield averages were 190 bu/a in 2007 and 172 bu/a for two years. Hybrids that yielded 193 bu/a or more in 2007 and 173 bu/a or more for two years qualified for the TPG for yield. Hybrids had to differ in yield by 19 bu/a in 2007 and 17 bu/a for two years to be significantly different. In 2007, bushel weights averaged 58 lbs, grain moisture averaged 19%, lodging averaged 1% and the final percent stand averaged 97%. In order for hybrids to be in the TPG for these factors, they had to average 193 bu/a or more for 2007 and 173 bu/a or more for two years, 58 lbs or more in bushel weight, 18% or less in grain moisture, 1% or less in lodging, and 95% or more for percent stand.

Late maturity trial – Roundup Ready™, Tables 3d: The test trial yield averages were 193 bu/a in 2007 and 176 bu/a for two years. Hybrids that yielded 192 bu/a or more in 2007 and 168 bu/a or more for two years qualified for the TPG for yield. Hybrids had to differ in yield by 18 bu/a in 2007 and 19 bu/a for two years to be significantly different. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 21%, lodging averaged slightly more than 0%, and the final percent stand averaged 96%. In order for

hybrids to be in the TPG for these factors, they had to average 192 bu/a or more for 2007 and 168 bu/a or more for two years, 57 lbs or more in bushel weight, 20% or less in grain moisture, 1% or less in lodging, and 92% or more for percent stand.

#### Brookings

Early maturity trial – Non-Roundup Ready™, Tables 4a: The test trial yield averages were 151 bu/a in 2007 and 166 bu/a for two years. Yield differences among hybrids were non-significant in 2007 and for the two-year period. Therefore, all entries were in the TPG for yield, even though the lowest yield value was 151 bu/a in 2007 and 166 bu/a for two years. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 19%, lodging averaged slightly more than 0%, and the final percent stand averaged 97%. In order for hybrids to be in the TPG for these factors, they had to average 151 bu/a or more for 2007 and 166 bu/a or more for two years, 58 lbs or more in bushel weight, 17% or less in grain moisture, 1% or less in lodging, and 96% or more for percent stand.

Late maturity trial – Non-Roundup Ready™, Tables 4b: The test trial yield averages were 192 bu/a in 2007 and 187 bu/a for two years. Hybrids that yielded 204 bu/a or more in 2007 qualified for the TPG for yield. There were no differences in yield average among the four hybrids tested two years, so all four qualified for the TPG. Hybrids had to differ in yield by 16 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 56 lbs, grain moisture averaged 20%, lodging averaged slightly more than 0%, and percent stand averaged 98%. In order for hybrids to be in the TPG for all performance factors, they had to average 204 bu/a for 2007 and 165 bu/a or more in yield for two years, 58 lbs or more in bushel weight, 19% or less in grain moisture, 2% or less in lodging, and 96% or more for percent stand.

Early maturity trial – Roundup Ready™, Tables 4c: The test trial yield averages were 186 bu/a in 2007 and 175 bu/a for two years. Hybrids that yielded 188 bu/a or more in 2007 and 170 bu/a or more for two years qualified for the TPG for yield. Hybrids had to differ in yield by 20 bu/a in 2007 and 21 bu/a for two years to be significantly different. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 17%, lodging averaged slightly more than 0%, and the final percent stand averaged 98%. In order for hybrids to be in the TPG for these factors, they had to average 188 bu/a or more for 2007 and 170 bu/a or more for two years, 59 lbs or more in bushel weight, 16% or less in grain moisture, 1% or less in lodging, and 97% or more for percent stand.

Late maturity trial – Roundup Ready™, Tables 4d: The test trial yield averages were 199 bu/a in 2007 and 198 bu/a for two years. Hybrids that yielded 204 bu/a or more in 2007 and 185 bu/a or more for two years qualified for the TPG for yield. Hybrids had to differ in yield by 16 bu/a in 2007 and 31 bu/a for two years to be significantly different. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 20%, lodging averaged slightly more than 0%, and percent stand averaged 97%. In order for hybrids to be in the TPG for these factors, they had to average 204 bu/a or more for 2007 and 185 bu/a or more for two years, 58 lbs or more in bushel weight, 18% or less in grain moisture, 1% or less in lodging, and 96% or more for percent stand.

#### **Southern Locations**

**Note:** In 2007, two-year yield means were not calculated at Geddes. The yield data for 2006 at this location was not used

in the calculation of 2007 yields means because the 2006 data contained high levels of experimental error. The high levels of experimental error in the 2006 data resulted when temperatures in the high 90s and above resulted in very poor or no pollination, which severely reduced yields. Therefore, the performance data at Geddes only includes data for this year.

#### Geddes

Early maturity trial – Non-Roundup Ready™, Tables 5a:

The test trial yield average was 163 bu/a in 2007. Yield differences among hybrids were non-significant in 2007. Therefore, all entries tested were in the TPG for yield, even the lowest yield value of 155 bu/a. In 2007, bushel weights averaged 59 lbs, grain moisture averaged 17%, lodging averaged slightly more than 0%, and percent stand averaged 97%. In order for hybrids to be in the TPG for all performance factors, they had to average 155 bu/a or more in yield, 60 lbs or more in bushel weight, 17% or less in grain moisture, 1% or less in lodging, and 96% or more for percent stand.

Late maturity trial – Non-Roundup Ready™, Tables 5b:
The test trial yield average was 166 bu/a in 2007. Yield differences among hybrids were non-significant in 2007. Therefore, all entries tested were in the TPG for yield, even the lowest yield value of 160 bu/a. In 2007, bushel weights averaged 59 lbs, grain moisture averaged 19%, lodging averaged slightly more than 0%, and percent stand averaged 96%. In order for hybrids to be in the TPG for all performance factors, they had to average 160 bu/a or more in yield, 59 lbs or more in bushel weight, 20% or less in grain moisture, 1% or less in lodging, and 96% or more for percent stand.

Early maturity trial – Roundup Ready™, Tables 5c: The test trial yield average was 177 bu/a in 2007. Hybrids that yielded 183 bu/a or more in 2007 qualified for the TPG for yield. Hybrids had to differ in yield by 19 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 60 lbs, grain moisture averaged 15%, lodging averaged slightly more than 0%, and percent stand averaged 92%. In order for hybrids to be in the TPG for these factors, they had to average 183 bu/a or more in yield for 2007, 60 lbs or more in bushel weight, 15% or less in grain moisture, 2% or less in lodging, and 94% or more for percent stand.

Late maturity trial – Roundup Ready™, Tables 5d: The test trial yield average was 191 bu/a in 2007. Hybrids that yielded 198 bu/a or more in 2007 qualified for the TPG for yield. Hybrids had to differ in yield by 18 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 58 lbs, grain moisture averaged 19%, lodging averaged 1%, and percent stand averaged 90%. In order for hybrids to be in the TPG for these factors, they had to average 198 bu/a or more in yield for 2007, 58 lbs or more in bushel weight, 18% or less in grain moisture, 2% or less in lodging, and 91% or more for percent stand.

#### Beresford

Early maturity trial – Non-Roundup Ready™, Tables 6a:

The test trial yield averages were 192 bu/a in 2007 and 189 bu/a for two years. Hybrids that yielded 195 bu/a or more in 2007 qualified for the TPG for yield. There were no differences in yield average between the two hybrids tested two years, so both qualified for the TPG. Hybrids had to differ in yield by 17 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 17%, lodging averaged 0%, and percent stand averaged 97%. In order for hybrids to be in the TPG for all performance factors, they had to average 195 bu/a for 2007 and 178 bu/a or more in yield for two years, 58 lbs or more in bushel weight, 15% or less in grain moisture, 0% in lodging, and 97% or more for percent stand.

Late maturity trial – Non-Roundup Ready™, Tables 6b:

The test trial yield averages were 190 bu/a in both 2007 and for two years. Yield differences among hybrids were non-significant in 2007 and for the two-year period. Therefore, all entries were in the TPG for yield, even though the lowest yield value was 173 bu/a in 2007 and 174 bu/a for two years. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 19%, lodging averaged 0%, and percent stand averaged 97%. In order for hybrids to be in the top performance group for these factors, they had to average 173 bu/a or more for 2007 and 174 bu/a or more for two years, 58 lbs or more in bushel weight, 18% or less in grain moisture, 1% or less in stalk lodging, and 95% or more for percent stand.

Early maturity trial – Roundup Ready™, Tables 6c: The test trial yield averages were 183 bu/a in 2007 and 182 bu/a for two years. Hybrids that yielded 182 bu/a or more in 2007 qualified for the TPG for yield. There were no differences in yield average between the three hybrids tested two years, so all three qualified for the TPG. Hybrids had to differ in yield by 24 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 17%, lodging averaged slightly more than 0%, and percent stand averaged 96%. In order for hybrids to be in the TPG for all performance factors, they had to average 182 bu/a for 2007 and 170 bu/a or more in yield for two years, 57 lbs or more in bushel weight, 15% or less in grain moisture, 1% or less in lodging, and 96% or more for percent stand.

Late maturity trial – Roundup Ready™, Tables 6d: The test trial yield average was 189 bu/a in 2007. Hybrids that yielded 195 bu/a or more in 2007 qualified for the TPG for yield. Hybrids had to differ in yield by 24 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 59 lbs, grain moisture averaged 19%, lodging averaged 0%, and percent stand averaged 97%. In order for hybrids to be in the TPG for these factors, they had to average 195 bu/a or more in yield for 2007, 59 lbs or more in bushel weight, 18% or less in grain moisture, 0% or less in lodging, and 96% or more for percent stand.

Table A. Description of 2007 corn hybrid trial locations- soil type, tillage type, prior crop, herbicides and insecticides used, and seeding dates

	Soils & Ma	Herbi	cides - App	rates	Fertility				
Location (County)		Tillage	Prior	Roundu	p Ready	Non- Rour	dup Ready	Yield Goal	Date Seeded
(oddinty)	Туре	Туре	crop	Pre	Post	Pre	Post	bu/a	Secueu
Warner (Brown)	Harmony-Aberdeen silty clay loam, 0-2% slope	Conven- tional	Spring Wheat	Harness Xtra	Roundup once	Harness Xtra	Accent/ Buctril	200	May 18
South Shore (Codington)	Kransburg silty clay loam, 3-6% slope	Conven- tional	Oat	Dual II Magnum	Roundup once	Dual II Magnum	Accent/ Buctril	180	May 14
Bancroft (Kingsbury)	Houdek-Stickney- Tetonka loam, 0-3% slope	Conven- tional	Soybean	Balance Pro	Roundup once	Balance Pro	Accent/ Buctril	180	May 19
Brookings (Brookings)	Barnes clay loam, 0-2% slope	Conven- tional	Soybean	Dual II Magnum	Roundup once	Dual II Magnum	Accent/ Buctril	200	May 10
Geddess (Chas. Mix)	Highmore-Walke silt loam, 0-2% slope	No-till	Winter Wheat	None	Roundup once	None	Stead- fast/ Callisto/ Atrazine	200	May 15
Beresford (Clay)	Egan-Clarno-Trent silty clay loam, 0-2% slope	Conven- tional	Soybean	None	Roundup once	None	Prowl/ Clarity	210	May 2

All plots were seeded at 27,878 seeds per acre. Force insecticide was applied in-furrow at label rate at seeding

Table B. Monthly nearest weather station totals for precipitation and growing degree days (GDD); and average temperatures; and their departures from normal (DFN) for the 2007 growing season Source: South Dakota Office of Climate and Weather. 2007. D. Todey and C. Shukla.

Station	Variable		Monthly data beginning April 1 and ending September 30								
(Test site)			April	May	June	July	Aug	Sept	Totals		
	Precip inches	'07 DFN*	3.42 1.83	12.23 9.54	2.43 -1.06	0.79 -2.13	2.20 -0.22	1.61 -0.19	22.68 7.77		
Aberdeen Airport	Avg.Temp°F	ʻ07 DFN	41 -4.1	60 2.5	69 2.1	74 1.6	68 -2.1	60 0.5			
(Warner)	Accum. GDD's	ʻ07 DFN	152 41	404 88	583 85	727 36	589 -55	434 72	2,889 267		
	Precip inches	ʻ07 DFN	4.23 2.20	3.70 0.87	2.08 -1.57	0.85 -2.79	0.51 -2.72	4.14 2.08	15.51 -1.93		
South Shore Shore (NE Farm)	Avg.Temp°F	'07 DFN	40 -3.4	58 2.6	66 1.2	71 0.7	68 0.2	61 3.0			
(INE FAIIII)	Accum. GDD's	'07 DFN	124 51	325 49	507 68	640 12	518 -40	379 72	2,493 212		
	Precip inches	ʻ07 DFN	3.42 1.21	4.25 1.17	2.27 -1.65	1.05 -2.50	4.27 1.41	2.16 -0.20	17.42 -0.56		
DeSmet/ (Bancroft)	Avg.Temp°F	ʻ07 DFN	44 -1.8	62 4.0	69 1.6	74 2.2	70 -0.1	62 2.0			
	Accum. GDD's	ʻ07 DFN	162 61	390 90	570 51	733 48	601 -18	420 78	2,876 310		
	Precip inches	ʻ07 DFN	3.62 1.59	1.86 -1.09	2.99 -1.24	0.14 -2.97	6.45 3.51	1.00 -1.28	16.06 -0.39		
Brookings 2NE	Avg.Temp°F	ʻ07 DFN	41 -3.3	61 4.0	68 2.1	72 0.8	68 -0.2	61 1.6			
ZINC	Accum. GDD's	ʻ07 DFN	146 61	385 91	544 61	653 14	561 -16	409 79	2,698 290		
	Precip inches	ʻ07 DFN	3.04 0.57	3.49 -0.16	2.16 -1.79	0.00 -3.35	4.95 2.12	1.96 -0.30	15.60 -2.91		
Centerville "(SE Farm," Beresford)	Avg.Temp°F	ʻ07 DFN	46 -1.6	64 4.5	70 0.5	75 1.6	73 0.8	64 1.4			
Deresional	Accum. GDD's	ʻ07 DFN	187 51	457 449	606 25	750 14	706 38	462 69	3,168 646		
	Precip inches	ʻ07 DFN	1.76 -0.85	5.68 1.88	6.24 2.83	1.47 -1.69	4.78 2.31	1.51 -0.88	21.44 3.60		
Platte**/ Academy*** (Geddes)	Avg.Temp°F	'07 DFN	44 -1.3	62 4.2	69 1.5	76 2.3	72 0.7	65 3.5			
(Gennes)	Accum. GDD's	ʻ07 DFN	159 41	406 101	566 44	727 9	660	465 72	2,983 266		

<sup>\*</sup> DFN - how much a variable for the current year is greater or less (-) than the long-term average

<sup>\*\*</sup> Precipitation data

<sup>\*\*\*</sup> Temperature and GDD accumulation data

Table C. 2007 Non-Roundup Ready corn hybrid entries by brand/hybrid and performance table number(s)

Brand / Hybrid	Table No.	Brand / Hybrid	Table No.		
AGVENTURE/ EX268275CBLL	1a	KRUGER/ 5504YGCB	3b, 4b, 5a		
EPLEY/ E1231	3a, 4a, 5a	KRUGER/ 8112HX	6b		
EPLEY/ E12L50YGCB	3a, 4a, 5a	KRUGER/ 8308HX	5b, 6a		
EPLEY/ E1430YGCB	3b, 4b, 5a	KRUGER/ 8310HX	5b		
EPLEY/ E1522YGPL	3b, 4b, 5a	KRUGER/ 8502HX	1b, 2b, 3b, 4b, 5a		
EPLEY/ E2207HXLL	3b, 4b, 5a	KRUGER/ 8602HX	1b, 2b, 3b, 4b, 5a		
EPLEY/ E2474	4b, 5b	KRUGER/ 8616HX	6b		
FARM ADVANTAGE/ 86X06	5b, 6a	KRUGER/ 9414HXT	6b		
FARM ADVANTAGE/ 87X00	3b, 4b	KRUGER/ EXP8199HX	1b, 2b		
FARM ADVANTAGE/ 9690L	1a, 2a	KRUGER/ EXP9010HXT	5b, 6a		
FARM ADVANTAGE/ 9699L	1b, 2b, 3a, 4a	KRUGER/ EXP9106HXT	3b, 4b, 5a, 6a		
GOLD COUNTRY/ 95-03CB	1a, 2a, 3a, 4a	KRUGER/ EXP9502HXT	1b, 2b, 3b, 4b, 5a		
HEINE/ H734	6a	KRUGER/ EXP9504HXT	3b, 4b, 5a		
HEINE/ H818	6a	MYCOGEN/ 2C597	6a		
HEINE/ H818YGCB	6a	MYCOGEN/ 2C727	6b		
HEINE/ H819	6a	MYCOGEN/ 2D675	6a		
HOEGEMEYER/ 9326HX	6a	MYCOGEN/ 2K718	6 b		
HOEGEMEYER/ HB+651	6a	MYCOGEN/ 2R572	6 a		
KING SEED/ X7871CBLL	1a	MYCOGEN/ 2T787	6 b		
KING SEED/ X7901	1a	RENK/ RK442LLYGCB	1 a, 2 a		
KRUGER/ 0401	1b, 2b, 3b, 4b, 5a	RENK/ RK852LLYGCB	5b, 6a		
KRUGER/ 5006YGCB	3b, 4b, 5b	RENK/ RK884YGCB	5b, 6b		
KRUGER/ 5013YGCB	6b	SEEDS 2000/ 2953BT	1a, 2a, 3a, 4a		
KRUGER/ 5111	5b, 6b	WENSMAN/ 5343BT	3b, 4b, 5a, 6a		
KRUGER/ 5114YGCB	6b	WENSMAN/ W4141	1a, 2a		
KRUGER/ 5210YGCB	5b, 6a	WENSMAN/ W5105BT	1a, 2a		

Table D. 2007 Roundup Ready corn hybrid entries by brand/hybrid and performance table numbers (s)

Brand / Hybrid	Table No.	Brand / Hybrid	Table No.		
AGSOURCE/ 3A-090RR	1c	DEKALB/ DKC58-16(VT3) DEKALB/ DKC61-69(VT3) DEKALB/ DKC62-33RR2YGCB DEKALB/ DKC63-42(VT3) DEKALB/ RX715VT3	5d, 6c		
AGSOURCE/ 3A-093RR	1c		5d, 6d		
AGSOURCE/ 3A-391RR	1c		6d		
AGSOURCE/ 3C-007RR/YGCB	3d, 4d, 5d, 6c		6d		
AGSOURCE/ 3C-009RR/YGCB	5d		6d		
AGSOURCE/ 3C-101RR/YGCB 5c  AGSOURCE/ 3C-310RR/YGCB 5d, 6c  AGSOURCE/ 3C-504ARRYGCB 2d, 3c, 4c, 6c  AGSOURCE/ 3C-504RR/YGCB 5c  AGSOURCE/ 3C-799RR/YGCB 2d, 3c, 4c		EPLEY/ E1165RR EPLEY/ E1195RR EPLEY/ E1205RR EPLEY/ E1225RR EPLEY/ E12R34YGPL	3c, 4c, 5c 3c, 4c, 5c 3c, 4c, 5c 3c, 4c, 5c 3d, 4d, 5c		
AGSOURCE/ 3P-191RR/YGPL	2c	EPLEY/ E1525RR EPLEY/ E16R12YGPL EPLEY/ E24R32YGPL EPLEY/ E25R52YGPL EPLEY/ E3245RR	3d, 4d, 5c		
AGSOURCE/ 3P-300RR/YGPL	1d		3d, 4d, 5c		
AGSOURCE/ 3P-302ARRYGPL	3d, 4d, 5c		4d, 5d, 6c		
AGSOURCE/ 3P-902RR/YGPL	2d, 3c, 4c, 5c		4d, 5d, 6c		
AGSOURCE/ 3P-910RR/YGPL	5d		5d, 6d		
AGSOURCE/ 3T-006A VT3	3d	FARM/ ADVANTAGE 6504	6c		
AGSOURCE/ 3T-096 VT3	1c, 2c	FARM/ ADVANTAGE 9503GL	5c		
AGSOURCE/ 3T-099 VT3	1d, 2d, 3c, 4c	FIELDERS/ CHOICE E640HX	5c		
AGSOURCE/ 3T-799 VT3	1d, 2d, 3c, 4c	FIELDERS/ CHOICE NG6402	1c, 2c		
AGSOURCE/ 3T-808 VT3	4d, 5d, 6c	FIELDERS/ CHOICE NG6490	1d, 2d, 3c, 4c		
AGSOURCE/ 3T-995 VT3	1c, 2c	FIELDERS/ CHOICE NG6510	1d, 2d, 3c, 4c		
AGSOURCE/ 5H-008 RR/HX	3d, 4d, 6c	FIELDERS/ CHOICE NG6580	3d, 4d, 5c		
AGSOURCE/ 5H-403 RR/HX	4d, 5c	FIELDERS/ CHOICE NG6686	5d, 6c		
AGVENTURE/ AV4006YPRR	1c	FIELDERS/ CHOICE NG6721	5d, 6c		
AGVENTURE/ AV4883YPRR	1c, 2c, 4c	FIELDERS/ CHOICE NG6745	6c		
AGVENTURE/ AV5016R2CB	1c	FIELDERS/ CHOICE NG6780	5d, 6d		
AGVENTURE/ AV5480R2CB	2d, 4c	FIELDERS/ CHOICE NG6785	6d		
AGVENTURE/ AV5480V3R	1d	FONTANELLE/ 2R144	1c, 2c		
AGVENTURE/ AV6323R2CB	4d	FONTANELLE/ 4N627	1d, 2d		
CROWS/ 2121S	2d, 4d	FONTANELLE/ 5N503	1d, 2d, 5c		
CROWS/ 3846T	6c	FONTANELLE/ 6T226	5d, 6c		
CROWS/ 4846T	6c	FONTANELLE/ 7K456	5d, 6c		
CROWS/ 4S502	2d, 4c	FONTANELLE/ 7N866	5d, 6c		
DAIRYLAND/ STEALTH-7196	1d, 2d, 3c	FONTANELLE/ 7T683	5d, 6c		
DAIRYLAND/ STEALTH-7204	3d, 4d, 5c	FOUR/ STAR 6880VT3	6d		
DAIRYLAND/ STEALTH-9194	1c, 2c	FOUR/ STAR EX9744RRBT	6c		
DAIRYLAND/ STEALTH-9196	1d, 2d	FOUR/ STAR EX9762RRYGPL	6c		
DAIRYLAND/ STEALTH-9201	1d, 2d, 3d, 4d	GCS/ 100-07CBR	2d, 3c, 4c		
DAIRYLAND/ STEALTH-9497	1d, 2d, 3c	GCS/ 102-04CBR	2d, 3d, 4d		
DAIRYLAND/ STEALTH-9799	1d, 2d, 3c	GCS/ 107-01CBRCRW	5d, 6c		
DEKALB/ DKC42-95RR2YGCB DEKALB/ DKC43-31RR2YGCB DEKALB/ DKC46-22RR2YGPL DEKALB/ DKC46-60(VT3) DEKALB/ DKC49-35(RR2)	1c, 2c	GCS/ 89-02R	1c, 2c		
	1c, 2c, 3c, 4c	GCS/ 98-10VT3	1d, 2d, 3c, 4c		
	2d, 4c	GCS/ 99-02CBR	2d, 3c, 4c		
	1d, 2d, 3c, 4c, 5c	HEINE/ H645RRYGPL	5c		
	1d, 2d, 3c, 4c, 5c	HEINE/ H711RRYGPL	5c, 6c		
DEKALB/ DKC50-20RR2YGCB DEKALB/ DKC50-48RR2YGCB DEKALB/ DKC51-39RR2YGPL DEKALB/ DKC52-63RR2YGCB DEKALB/ DKC53-18(RR2) DEKALB/ DKC57-47(RR2)	3c, 4c	HEINE/ H713RRYGPL	5c		
	3c, 4c, 5c, 6c	HEINE/ H726RR	5c, 6c		
	1d, 2d, 3d, 4d, 5c	HEINE/ H727RRYGPL	5c, 6c		
	1d, 2d, 3d, 4d, 5c, 6c	HEINE/ H751RRYG	5c, 6c		
	3d, 4d, 5c, 6c	HEINE/ H764RRYGPL	5c, 6c		
	5d, 6c	HEINE/ H792RR	6c		

Table D. 2007 Roundup Ready corn hybrid entries by brand/hybrid and performance table numbers (s) (continued)

Brand / Hybrid	Table No.	Brand / Hybrid	Table No.
HEINE/ H798RRYG	6c	NUTECH/ 3P-302 RR/YGPL	2d, 3d, 4d, 6c
HEINE/ H818RRYG	6c	NUTECH/ 3P-494 RR/YGPL	1c, 2c
HOEGEMEYER/ 4373	6c	NUTECH/ 3P-612 RR/YGPL	6d
HOEGEMEYER/ EXP 3005	4c	NUTECH/ 3P-703 RR/YGPL	3d, 4d, 5c
HOEGEMEYER/ EXP 708	6c	NUTECH/ 3P-905 RR/YGPL	3d
KALTENBERG/ K4012RRBT	2c, 4c	NUTECH/ 3T-006 VT3	4d, 5c
KALTENBERG/ K4263RRPLUS	4c	NUTECH/ 3T-098 VT3	1d, 2d
KALTENBERG/ K4663RRPLUS	2d	NUTECH/ 3T-098A VT3	1c, 2c
KALTENBERG/ K5243RRPLUS	5c	NUTECH/ 3T-393 VT3	1c, 2c
KALTENBERG/ K5683RRPLUS	5c	NUTECH/ 3T-595 VT3	1c, 2c
KALTENBERG/ K5685RRBT	6c	NUTECH/ 3T-808A VT3	3d, 6c
KALTENBERG/ K6235RRBT	6c	NUTECH/ 3W-099 RR/YGRW	1d, 2d, 3c, 4c
KRUGER/ 1008RR	5d, 6c	NUTECH/ 5H-312 RR/HX	5d, 6d
KRUGER/ 1490RR	1c, 2c	NUTECH/ 5X-402 RR/HXT	4d, 5c
KRUGER/ 1500RR	1d, 2d, 3c, 4c	PANNAR/ 4D-255VT3	1c, 2c
KRUGER/ 1606RR	3d, 4d, 5d	PANNAR/ 4E-705VT3 PANNAR/ 5A-125RR2 PANNAR/ 5A-155VT3 PANNAR/ 5D-303RR/YG+ PANNAR/ 5E-900RR/YG+	1c, 2c
KRUGER/ 2090RR/YGCB	1c, 2c		1c, 2c
KRUGER/ 2094RR/YGCB	1c, 2c		1c, 2c
KRUGER/ 2097RR/YGCB	3c, 4c		1d, 2d, 3c, 4c
KRUGER/ 2114RR/YGCB	6d		1d, 2d, 3c, 4c, 5c
KRUGER/ 2298RR/YGCB	1d, 2d, 3c, 4c	PANNAR/ 6C-260RR/BT	2d, 3d, 4d, 5c
KRUGER/ 6006VT3	3d, 4d, 5d	PANNAR/ 6D-409RR2	3d, 4d, 5c
KRUGER/ 6007VT3	5d, 6c	PANNAR/ 7B880RR/YG+	5d
KRUGER/ 6011TS	6d	PANNAR/ 8A-410RR/BT	5d, 6c
KRUGER/ 6015VT3	6d	RENK/ 7-692-LLYGCB	5d, 6c
KRUGER/ 6111VT3	5d, 6d	RENK/ RK488RRYGPL	1d, 2d, 3c, 4c
KRUGER/ 6208VT3	5d, 6c	RENK/ RK570VT3	1c, 2c, 3c, 4c
KRUGER/ 6210TS	5d, 6c	RENK/ RK618VT3	1d, 2d, 3c, 4c
KRUGER/ 6314TS	6d	RENK/ RK670VT3	3d, 4d, 5c
KRUGER/ 6401TS	1d, 2d, 3d, 4d, 5c	RENK/ RK888RRYGPL	5d, 6d
KRUGER/ 6412VT3	6d	SEEDS/ 2000 2953RRYGPL	1c, 2c
KRUGER/ 6499VT3	1d, 2d, 3c, 4c	SEEDS/ 2000 3122RR/BT	1d, 2d, 3d, 4d
KRUGER/ 6503TS	3d, 4d, 5c	SEEDS/ 2000 9501VT3	2c
KRUGER/ 6603TS	3d, 4d, 5c	SEEDS/ 2000 9501VT3	4c
KRUGER/ 6697TS	1d, 2d, 3c, 4c	SEEDS/ 2000 EXP9901VT3	1d, 2d, 4c
KRUGER/ 9392TS	1 c, 2 c	SEEDS/ 2000 EXP9902VT3 WENSMAN/ W6117BTRR WENSMAN/ W6194BTRR WENSMAN/ W6266BTRR WENSMAN/ W6271RR	1d, 3c
KRUGER/ 9496TS	1 c, 2 c		1c, 2c
NUTECH/ 3A-113 RR	6 d		1c, 2c, 3c, 4c
NUTECH/ 3A-113A RR	5 d, 6 d		1d, 2d, 3c, 4c, 5c
NUTECH/ 3C-303A RR/YGCB	3 d, 4 d, 5 c		1d, 2d, 3c, 4c, 5c
NUTECH/ 3C-312 RR/YGCB	6c	WENSMAN/ W6307RR WENSMAN/ W6374BTRR WENSMAN/ W6431RR WENSMAN/ W7118VT3 WENSMAN/ W7195VT3	1d, 2d, 3c, 4c, 5c
NUTECH/ 3C-409 RR/YGCB	5d, 6c		3d, 4d, 5c, 6c
NUTECH/ 3C-712 RR/YGCB	5d, 6d		3d, 4d, 5d, 6c
NUTECH/ 3C-907 RR/YGCB	3d, 4d		1c, 2c
NUTECH/ 3C-908 RR/YGCB	5d, 6c		1c, 2c, 3c, 4c
NUTECH/ 3P-098 RR/YGPL NUTECH/ 3P-098A RR/YGPL NUTECH/ 3P-196 RR/YGPL NUTECH/ 3P-300 RR/YGPL NUTECH/ 3P-300A RR/YGPL	1d, 2d, 3c, 4c 1c, 2c, 3c, 4c 1d 2d, 3c, 4c, 5c	WENSMAN/ W7267VT3 WENSMAN/ W7289VT3 WENSMAN/ W7309VT3 WENSMAN/ W7375BTRWRR	1d, 2d, 3c, 4c, 5c 1d, 2d, 3c, 4c, 5c 1d, 2d, 3d, 4d, 5c, 6c 3d, 4d, 5c, 6c

Table 1a. Early maturity Non-Roundup Ready corn hybrid test trial results - Allen & Inel Ryckman Farm. Warner, SD, 2007

0 1/11 1 1 1	Brand		Hybrid	performance	variable at	harvest	vest		
Brand/Hybrid (By '07 yield)	Rel Mat	2-year Yield bu/a	ʻ07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Mst %	'07 Lodging %	'07 Pct* Stand		
WENSMAN/ W5105BT	91	745	185	56	17	0	100		
AGVENTURE/ EX268275CBLL	87	(200)	179	56	16	1	97		
RENK/ RK442LLYGCB	95	225	177	54	17	1	96		
FARM ADVANTAGE/ 9690L	90	160	175	56	17	0	100		
WENSMAN/ W4141	93	123	174	58	17	1	100		
GOLD COUNTRY/ 95-03CB	95	123	172	57	19	0	100		
KING SEED/ X7901	90	-	171	53	17	3	99		
KING SEED/ X7871CBLL	87	2.4	170	56	18	2	95		
SEEDS 2000/ 2953BT	95	132	166	55	19	1	93		
Trial avg.:	91	1.00	174	56	17	1	98		
Highest (H)-avg.:	95		185	58	19	3	100		
Lowest (L)-avg.:	87	192	166	53	16	0	93		
H-L avg. difference:	8		19	4	2	3	7		
** Lsd (.05):			NS	2	1	2	3		
# Min. TPG-value:			166	56	-	.	97		
## Max. TPG-value:				-	17	2	-		
+ Coef. of var.:			7	2	3	100	2		
No. of entries:	9	0	9	9	9	9	9		

<sup>\*</sup> Seeded May 18, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 1b. Late maturity Non-Roundup Ready corn hybrid test trial results - Allen & Inel Ryckman Farm, Warner, SD, 2007

D 1/11 1 : 1	Brand		Hybrid pe	erformance va	ariable at h	arvest	
Brand/Hybrid (By '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
KRUGER/ EXP9502HXT	102	2	188	52	32	0	99
KRUGER/ 8602HX	102	14.	182	53	25	1	98
KRUGER/ EXP8502HX	102	72	181	53	24	0	99
FARM ADVANTAGE/ 9699L	99	(2)	180	54	24	1	100
KRUGER/ EXP8199HX	99	- 2	177	54	20	0	100
KRUGER/ 0401	101	#	169	56	21	1	100
Trial avg.:	101	4	180	54	24	>0	99
Highest (H)-avg:	102	- 2	188	56	32	1	100
Lowest (L)-avg.:	99		169	52	20	0	98
H-L avg. difference:	3	1	19	4	12	1	2
** Lsd (.05):			NS	2	1	NS	NS
# Min. TPG-value:			169	54	-	-	98
## Max. TPG-value:			-		21	1	
+ Coef. of var.:			6	2	3	177	2
No. of entries:	6	0	6	6	6	6	6

<sup>\*</sup> Seeded May 18, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 1c. Early maturity Roundup Ready corn hybrid test trial results- Allen & Inel Ryckman Farm, Warner, SD, 2007

Note: Data for 2006 was excluded due to the high level of experimental error in these plots as the result

of high temperatures that caused very poor or no pollination that reduced grain yield.

B 1/11 1 11	Brand	Test trial variable at harvest							
Brand/Hybrid (By '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	'07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand		
NUTECH/ 3T-098A VT3 KRUGER/ 2094RR/YGCB KRUGER/ 9496TS WENSMAN/ W6194BTRR WENSMAN/ W7195VT3	95 94 93 95 95	****	201 198 197 197 197	59 56 57 58 57	19 18 19 20 19	0 1 1 2 0	97 97 100 96 97		
NUTECH/ 3P-098A RR/YGPL DEKALB/ DKC42-95RR2YGCB AGSOURCE/ 3T-995 VT3 PANNAR/ 5A-155VT3 AGVENTURE/ AV5016R2CB	95 92 95 95 95		196 195 195 194 193	58 56 57 55 56	19 17 20 18 17	0 0 1 1 0	99 100 95 100 95		
WENSMAN/ W7118VT3 AGVENTURE/ AV4006YPRR NUTECH/ 3T-393 VT3 PANNAR/ 4E-705VT3 NUTECH/ 3P-494 RR/YGPL	92 91 93 94 94	1 1 1	193 192 192 192 191	56 58 56 56 54	17 17 17 17 17	3 1 0 0	96 98 99 99		
NUTECH/ 3T-595 VT3 DAIRYLAND/ STEALTH-9194 DEKALB/ DKC43-31RR2YGCB PANNAR/ 5A-125RR2 PANNAR/ 4D-255VT3	95 94 93 95 93		191 190 189 189 188	57 57 57 56 55	18 17 16 17 17	0 1 0 2	99 100 99 100 96		
AGSOURCE/ 3T-096 VT3 AGVENTURE/ AV4883YPRR WENSMAN/ W6117BTRR FIELDERS/ CHOICE NG6402 RENK/ RK570VT3	95 95 92 92 95	1.4.4	188 187 186 185 185	57 57 56 55 56	20 19 17 15 18	0 0 1 2	97 99 99 93 100		
SEEDS/ 2000 2953RRYGPL KRUGER/ 9392TS KRUGER/ 2090RR/YGCB FONTANELLE/ 2R144 KRUGER/ 1490RR	95 92 90 92 90		184 183 181 180 177	57 57 58 59 59	19 17 17 16 16	0 0 1 1	94 100 95 100 97		
AGSOURCE/ 3A-093RR AGSOURCE/ 3A-090RR GCS/ 89-02R AGSOURCE/ 3A-391RR	93 90 89 91	7.0	173 172 162 159	57 58 59 56	16 15 16 17	1 4 1 1	96 95 91 92		
Trial avg.: Highest (H)-avg.: Lowest (L)-avg.: H-L avg. difference: ** Lsd (.05): # Min. TPG-value: ## Max. TPG-value: + Coef. of var.:	93 95 89 6	7	187 201 159 42 12 189	57 59 54 5 2 57	17 20 15 6 1 -	1 4 0 4 2 - 2 174	97 100 91 9 4 96		
No. of entries:	34	0	4 34	2 34	4 34	34	3 34		

<sup>\*</sup> Seeded May 18, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 1d. Late maturity Roundup Ready corn hybrid test trial results- Allen & Inel Ryckman Farm, Warner, SD, 2007

Note: Data for 2006 was excluded due to the high level of experimental error in these plots as the result
of high temperatures that caused very poor or no pollination that reduced grain yield.

D 1/01 1 - 1 1	Brand	Test trial variable at harvest							
Brand/Hybrid (By '07 yield)	Rel. Mat.	2-year Yield bu/a	ʻ07 Yield bu/a	'07 Bu.Wt. lb	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand		
DEKALB/ DKC52-63RR2YGCB FIELDERS/ CHOICE NG6510 DEKALB/ DKC51-39RR2YGPL WENSMAN/ W6271RR WENSMAN/ W7267VT3	102 98 101 97 97	***	194 194 193 190 189	58 58 58 56 56	20 17 18 17 17	0 0 1 1 0	99 100 99 99 100		
DAIRYLAND/ STEALTH-9201 NUTECH/ 3T-098 VT3 KRUGER/ 6499VT3 WENSMAN/ W6307RR WENSMAN/ W7289VT3	101 98 99 100 99	F14.5 E1.E	188 188 188 188 186	57 58 57 56 57	17 19 17 19 20	0 0 1 0	98 98 97 100 97		
SEEDS/ 2000 3122RR/BT DEKALB/ DKC46-60(VT3) KRUGER/ 6401TS WENSMAN/ W7309VT3 SEEDS/ 2000 EXP9901VT3	102 96 101 101 99		186 185 185 185 185	56 56 60 57 59	20 17 21 19 19	3 0 0 1	100 100 100 99 99		
PANNAR/ 5D-303RR/YG+ WENSMAN/ W6266BTRR AGSOURCE/ 3T-099 VT3 FONTANELLE/ 4N627 AGSOURCE/ 3T-799 VT3	98 97 99 98 99	***	184 184 184 183 183	59 58 59 57 56	18 19 18 20 20	0 0 0 1	100 98 100 98 98		
PANNAR/ 5E-900RR/YG+ GCS/ 98-10VT3 DEKALB/ DKC49-35(RR2) DAIRYLAND/ STEALTH-7196 DAIRYLAND/ STEALTH-9799	99 98 99 96 99	0	182 181 180 180 180	56 58 56 58 57	20 18 16 20 19	0 0 1 0	99 97 97 97 100		
DAIRYLAND/ STEALTH-9196 AGVENTURE/ AV5480V3R DAIRYLAND/ STEALTH-9497 NUTECH/ 3P-098 RR/YGPL KRUGER/ 2298RR/YGCB	96 98 98 98 98		179 178 178 178 178	57 57 57 58 59	20 18 18 18 18	0 0 1 1 0	99 99 100 97 99		
FONTANELLE/ 5N503 SEEDS/ 2000 EXP9902VT3 KRUGER/ 6697TS NUTECH/ 3P-300A RR/YGPL RENK/ RK488RRYGPL	101 99 97 99 97	+ + + +	178 177 176 175 173	57 56 56 56 57	17 19 19 19 18	0 1 0 1	99 95 97 94 98		
RENK/ RK618VT3 AGSOURCE/ 3P-300RR/YGPL NUTECH/ 3W-099 RR/YGRW NUTECH/ 3P-196 RR/YGPL FIELDERS/ CHOICE NG6490	100 100 99 96 97		173 169 168 167 167	59 56 60 58 57	18 19 19 17 19	1 1 0 2 0	98 97 99 92 92		
KRUGER/ 1500RR	100		165	56	18	2	94		
Trial avg.: Highest (H)-avg.: Lowest (L)-avg.: H-L avg. difference: ** Lsd (.05): # Min. TPG-value: ## Max. TPG-value:	99 102 96 6	10 THE 60	181 194 165 29 14 180	57 60 56 4 2 58	19 21 16 5 2 -	>0 3 0 3 2 -	98 100 92 8 3 97		
+ Coef. of var.: No. of entries:	41	0	5 41	2 41	6 41	232 41	2 41		

<sup>\*</sup> Seeded May 18, 2007 at 28,750 seeds per acre

 $<sup>^{**}</sup>$  LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 2a. Early maturity Non-Roundup Ready corn hybrid test trial results - Northeast Research Farm, South Shore, SD, 2007

D - 1/0 L 14	Brand	Hybrid performance variable at harvest							
Brand/Hybrid (By '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand		
WENSMAN/ W5105BT	91	- 0.0	190	56	18	0	100		
RENK/ RK442LLYGCB	95	167	186	54	19	1	100		
SEEDS 2000/ 2953BT	95		175	56	20	0	95		
GOLD COUNTRY/ 95-03CB	95		171	56	21	0	99		
WENSMAN/ W4141	93	2	169	56	18	2	96		
FARM ADVANTAGE/ 9690L	90		168	55	16	1	100		
Trial avg.:	93		177	55	19	1	98		
Highest (H)-avg.:	95	100	190	56	21	2	100		
Lowest (L)-avg.:	90	100	168	54	16	0	95		
H-L avg. difference:	5		22	3	5	2	5		
** Lsd (.05):		1 100	12	1	2	NS	3		
# Min. TPG-value:			178	55	54	+:	97		
## Max. TPG-value:			22	-	18	2	-		
+ Coef. of var.:			4	1	5	151	1		
No. of entries:	6	0	6	6	6	6	6		

<sup>\*</sup> Seeded May 14, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 2b. Late maturity Non-Roundup Ready corn hybrid test trial results - Northeast Research Farm, South Shore, SD, 2007

D 1/11 1- 1-1	Brand		Hybrid	performance	variable at l	narvest	
Brand/Hybrid (By '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.' Stand
KRUGER/ 0401	101	411	184	53	25	0	100
FARM ADVANTAGE/ 9699L	99	+	181	54	23	0	100
KRUGER/ EXP8199HX	99	THE	179	54	22	1	100
KRUGER/ EXP8502HX	102	+0	174	52	25	1	99
KRUGER/ 8602HX	102	4	167	50	26	0	99
KRUGER/ EXP9502HXT	102		161	51	33	. 1	100
Trial avg.:	101	V.	174	53	26	>0	100
Highest (H)-avg.:	102	¥6	184	54	33	1	100
Lowest (L)-avg.:	99		161	50	22	0	99
H-L avg. difference:	3	70	23	4	10	1	2
** Lsd (.05):		200	16	2	1	NS	NS
# Min. TPG-value:			168	52	-	-	99
## Max. TPG-value:				-	25	1	-
+ Coef. of var.:			5	2	2	245	1
No. of entries:	6	0	6	6	6	6	6

<sup>\*</sup> Seeded May 14, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 2c. Early maturity Roundup Ready corn hybrid test trial results- Northeast Research Farm, South Shore, SD, 2007

	Brand		Te	st trial variabl	e at harvest		
Brand/Hybrid (By '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.' Stand
NUTECH/ 3P-098A RR/YGPL	95	5.0	194	56	23	1	99
KRUGER/ 9496TS	93	200	194	55	22	1	100
NUTECH/ 3P-494 RR/YGPL	94	35	193	53	18	1	100
PANNAR/ 5A-155VT3	95	100	189	53	21	4	100
AGSOURCE/ 3T-096 VT3	95	374	189	56	23	3	100
WENSMAN/ W7118VT3	92	(9	187	54	21	1	100
NUTECH/ 3T-595 VT3	95	73.	186	56	20	1	98
NUTECH/ 3T-393 VT3	93	13	184	56	21	0	100
KRUGER/ 2090RR/YGCB	90	14	183	56	19	1	100
KRUGER/ 2094RR/YGCB	94		183	55	21	3	100
SEEDS/ 2000 9501VT3	96	72	182	54	20	1	100
AGSOURCE/ 3P-191RR/YGPL	91	127	182	55	21	1 1	97
NUTECH/ 3T-098A VT3	95	- 34	181	57	21	1	100
PANNAR/ 4E-705VT3	94	52	181	53	22	0	100
WENSMAN/ W7195VT3	95	- 4 0	181	55	21	0	100
DEKALB/ DKC43-31RR2YGCB	93		180	54	21	0	99
AGVENTURE/ AV4883YPRR	95	1.0	180	56	22	1	95
DAIRYLAND/ STEALTH-9194	94	1.4	179	55	20	1	99
SEEDS/ 2000 2953RRYGPL	95		179	56	22	1 1	96
KRUGER/ 9392TS	92		176	55	20	1	100
FONTANELLE/ 2R144	92	1.39	176	58	18	0	100
WENSMAN/ W6117BTRR	92	2	176	56	19	1	100
WENSMAN/ W6194BTRR	95	8	173	58	21	2	100
AGSOURCE/ 3T-995 VT3	95	2	173	55	21	2	99
DEKALB/ DKC42-95RR2YGCB	92	- 54	171	56	19	. 1	100
KRUGER/ 1490RR	90	- 55	171	58	18	2	99
RENK/ RK570VT3	95	- 23	170	54	21	0	96
KALTENBERG/ K4012RRBT	94	54	168	54	22	2	100
PANNAR/ 4D-255VT3	93	1.5	167	55	20	4	100
FIELDERS/ CHOICE NG6402	92		163	54	17	3	99
GCS/ 89-02R PANNAR/ 5A-125RR2	89 95	1 St 1	163 159	56 55	20 18	2 2	93
	_			_	_	_	_
Trial avg.: Highest (H)-avg.:	93 96	3	179 194	55 58	20 23	1 4	99 100
Lowest (L)-avg:	89	100	159	53	17	0	93
H-L avg. difference:	7	11 11	35	5	6	4	7
** Lsd (.05):		- 23	12	1	1	3	3
# Min. TPG-value:			182	57		] -	97
## Max. TPG-value:			102	- 37	18	3	3,
+ Coef. of var.:			4	2	4	122	2
No. of entries:	32	0	32	32	32	32	32

<sup>\*</sup> Seeded May 14, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 2d. Late maturity Roundup Ready corn hybrid test trial results- Northeast Research Farm, South Shore, SD, 2007

B 1/11 1 : 1	Brand	_ 750	1	est trial varia	ble at harves	t	
Brand/Hybrid (By '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. lb	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
NUTECH/ 3P-302 RR/YGPL RENK/ RK488RRYGPL KRUGEN/ 6401TS	102 97 101	4	192 192 192	54 54 55	25 22 25	1 1 1 2	100 98 97
WENSMAN/ W7289VT3 AGSOURCE/ 3C-799RR/YGCB	99 100	- 1	191 191	55 52	23 24	2 1	100 100
FONTANELLE/ 5N503 WENSMAN/ W6271RR DEKALB/ DKC46-22RR2YGPL FIELDERS/ CHOICE NG6490 GOLD COUNTRY/ 98-10CBR	101 97 96 97 98	3 7 7 3 3	190 190 188 187 185	53 54 56 55 54	22 20 20 20 20 21	0 3 0 1	100 98 100 97 99
DEKALB/ DKC46-60(VT3) KRUGER/ 6697TS CROWS/ 2121S WENSMAN/ W7309VT3 NUTECH/ 3T-098 VT3	96 97 101 101 98	0.00	184 184 184 184 183	54 55 56 53 55	21 21 24 23 22	0 1 1 2 0	99 97 92 100 99
FIELDERS/ CHOICE NG6510 DAIRYLAND/ STEALTH-9196 DAIRYLAND/ STEALTH-9497 DAIRYLAND/ STEALTH-9201 NUTECH/ 3P-098 RR/YGPL	98 96 98 101 98		182 181 181 181 181	54 56 54 55 55	20 20 22 23 20	1 0 2 1	99 96 100 95 100
WENSMAN/ W6266BTRR AGSOURCE/ 3P-902RR/YGPL DEKALB/ DKC51-39RR2YGPL KALTENBERG/ K4663RRPLUS AGSOURCE/ 3C-504ARRYGCB	97 100 101 96 100	*	181 180 179 179 179	54 56 53 54 53	23 20 23 22 25	1 0 1 1 5	94 100 100 99 100
NUTECH/ 3W-099 RR/YGRW GCS/ 100-07CBR DEKALB/ DKC52-63RR2YGCB DAIRYLAND/ STEALTH-9799 WENSMAN/ W7267VT3	99 100 102 99 97		177 177 176 176 176	57 56 55 54 55	21 22 22 20 22	2 0 1 0	98 100 97 100 100
DAIRYLAND/ STEALTH-7196 GCS/ 99-02CBR CROWS/ 4S502 AGSOURCE/ 3T-799 VT3 RENK/ RK618VT3	96 99 97 99 100	+ + + + + + + + + + + + + + + + + + + +	175 175 174 174 173	55 53 56 53 55	22 22 22 23 22	1 0 2 1	98 100 98 99 100
KRUGER/ 6499VT3 PANNAR/ 5E-900RR/YG+ GCS/ 102-04CBR NUTECH/ 3P-300 RR/YGPL SEEDS/ 2000 EXP9901VT3	99 99 102 99		172 171 171 170 170	55 54 55 54 55	21 21 24 24 22	1 2 0 1	99 99 97 96 99

Table 2d. Late maturity Roundup Ready corn hybrid test trial results- Northeast Research Farm, South Shore, SD, 2007

D	Brand		T	est trial varia	ble at harves	g	
Brand/Hybrid (By '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	'07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
AGSOURCE/ 3T-099 VT3	99	+	168	55	21	1	98
PANNAR/ 5D-303RR/YG+	98	- F	165	56	22	0	100
KRUGER/ 2298RR/YGCB	98	27	159	55	21	0	100
PANNAR/ 6C-260RR/BT	102	411	157	51	24	3	99
SEEDS/ 2000 3122RR/BT	102	33	157	52	20	2	100
DEKALB/ DKC49-35(RR2)	99		154	54	18	. 1	95
Trial avg.:	99	- 20	177	54	22	1	98
Highest (H)-avg.:	102	411	192	57	25	5	100
Lowest (L)-avg.:	96	\$30 °	154	51	18	0	92
H-L avg. difference:	6	23	38	6	7	5	8
** Lsd (.05):			20	1	2	2	4
# Min. TPG-value:			172	56	-	-	96
## Max. TPG-value:			-	-	20	2	-
+ Coef. of var.:			7	1	6	150	2
No. of entries:	50	0	50	50	50	50	50

<sup>\*</sup> Seeded May 14, 2007 at 28,750 seeds per acre

 $<sup>^{**}</sup>$  LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 3a. Early maturity Non-Roundup Ready corn hybrid test trial results - Erland Weerts Farm, Bancroft, SD, 2006-2007

D 1/11 1 - 1 1	Brand	: 3	Hybrid	performance	variable at	harvest	
Brand/Hybrid (By 2-year then '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt.	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
TWO-YEAR ENTRIES:	-			+1	19	- 4	
FARM ADVANTAGE/ 9699L	99	182	204	58	20	0	99
SEEDS 2000/ 2953BT	95	161	178	57	16	1	92
EPLEY/ E1231	100	159	175	58	20	1	98
ONE-YEAR ENTRIES:	48	12	<b>4</b>	4.7	116		
GOLD COUNTRY/ 95-03CB	95		203	60	17	0	99
EPLEY/ E12L50YGCB	100		193	57	20	0	98
Trial avg.:	98	167	191	58	19	>0	97
Highest (H)-avg.:	100	182	204	60	20	1	99
Lowest (L)-avg.:	95	159	175	57	16	0	92
H-L avg. difference:	5	23	29	3	4	1	7
** Lsd (.05):		NS	18	1	1	NS	3
# Min. TPG-value:		159	186	58			96
## Max. TPG-value:		-	-		17	1 1	-
+ Coef. of var.:		4	5	1	3	295	2
No. of entries:	5	3	5	5	5	5	5

<sup>\*</sup> Seeded May 19, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value = minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 3b. Late maturity Non-Roundup Ready corn hybrid test trial results - Erland Weerts Farm, Bancroft, SD, 2006-2007

	Brand		Hybrid	performance	variable at	harvest	
Brand/Hybrid (By 2-year then '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
TWO-YEAR ENTRIES:	-	+	-		61	24	
EPLEY/ E1430YGCB	103	173	189	55	24	0	97
KRUGER/ 8602HX	102	172	202	56	22	0	99
KRUGER/ 5504YGCB	102	166	193	56	20	0	100
ONE-YEAR ENTRIES:	17	1	33		37	12	14
KRUGER/ 5006YGCB	106	91	204	57	22	0	100
KRUGER/ EXP9502HXT	102	4	199	53	28	0	100
FARM ADVANTAGE/ 87X00	103	1	198	55	21	0	97
KRUGER/ EXP9106HXT	105	+-	188	57	20	0	99
KRUGER/ 0401	101	*	186	57	22	0	100
KRUGER/ EXP9504HXT	102	£	183	57	21	0	99
EPLEY/ E1522YGPL	105	12	183	57	23	0	98
WENSMAN/ 5343BT	105	. v.	181	54	22	0	93
KRUGER/ 8502HX	102	- 33	180	56	20	1 1	98
EPLEY/ E2207HXLL	105		179	54	23	. 1 .	95
Trial avg.:	103	170	190	56	22	>0	98
Highest (H)-avg.:	106	173	204	57	28	1 1	100
Lowest (L)-avg.:	101	166	179	53	20	0	93
H-L avg. difference:	5	7	25	4	8	1	7
** Lsd (.05):		NS	NS	1	1	NS	4
# Min. TPG-value:		166	179	56	-	49	96
## Max. TPG-value:			- 23		21	1	-
+ Coef. of var.:		9	6	1	4	451	2
No. of entries:	13	3	13	13	13	13	13

<sup>\*</sup> Seeded May 19, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

 $<sup>\</sup>hbox{\it \#\# Max.} \ TPG-value=\ maximum\ value\ required\ for\ the\ top\ performance\ group$ 

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 3c. Early maturity Roundup Ready corn hybrid test trial results- Erland Weerts Farm, Bancroft, SD, 2006-2007

Brand/Hybrid	Brand		To	est trial varia	ble at harves	st	00
(By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	ʻ07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.' Stand
TWO-YEAR ENTRIES:			- 04		47	417	
WENSMAN/ W6307RR	100	190	208	57	21	0	100
DEKALB/ DKC50-48RR2YGCB	100	187	202	56	22	0	96
WENSMAN/ W6266BTRR	97	182	199	58	20	0	98
DEKALB/ DKC50-20RR2YGCB	100	179	189	57	20	0	98
DAIRYLAND/ STEALTH-7196	96	177	198	58	19	0	94
WENSMAN/ W6194BTRR	95	176	188	59	19	0	95
GOLD COUNTRY/ 98-10CBR	98	175	187	58	19	0	97
EPLEY/ E1165RR	95	163	192	56	17	1 1	98
RENK/ RK488RRYGPL	97	162	183	57	18	0	96
KRUGER/ 1500RR	100	162	179	58	19	0	91
EPLEY/ E1195RR	98	141	158	59	18	0	100
ONE-YEAR ENTRIES:		- 2	14	12		¥9	65
DAIRYLAND/ STEALTH-9799	99		212	58	19	0	98
NUTECH/ 3P-098 RR/YGPL	98		210	59	18	0	98
KRUGER/ 6697TS	97		208	57	19	0	97
KRUGER/ 6499VT3	99		207	59	18	0	97
WENSMAN/ W7267VT3	97		207	59	18	0	100
DAIRYLAND/ STEALTH-9497	98	177	204	58	19	1 1	98
SEEDS/ 2000 EXP9902VT3	99	30	203	58	19	0	98
RENK/ RK618VT3	100		201	60	19	1	100
AGSOURCE/ 3T-799 VT3	99		201	57	19	0	96
WENSMAN/ W6271RR	97	24	199	56	19	0	94
DEKALB/ DKC43-31RR2YGCB	93	12	198	57	17	0	97
DEKALB/ DKC46-60(VT3)	96		198	58	19	0	99
KRUGER/ 2097RR/YGCB	97		198	57	18	0	96
WENSMAN/ W7195VT3	95	14	196	58	18	0	95
GCS/ 99-02CBR	99	52	194	58	19	0	98
FIELDERS/ CHOICE NG6510	98		193	57	20	0	97
AGSOURCE/ 3P-902RR/YGPL	100	34	193	59	18	0	99
AGSOURCE/3C-799RR/YGCB	100	100	193	57	19	0	99
FIELDERS/ CHOICE NG6490	97	0.0	190	58	18	0	92
EPLEY/ E1225RR	98	1	190	57	19	1	95
AGSOURCE/3C-504ARRYGCB	100	3,4	186	56	24	0	99
PANNAR/ 5E-900RR/YG+	99	- 42	185	56	22	1	100
NUTECH/ 3P-098A RR/YGPL	95		183	57	19	0	92
DEKALB/ DKC49-35(RR2)	99	1 12	182	57	18	1	97
PANNAR/ 5D-303RR/YG+	98		181	59	20	0	99

Table 3c. Early maturity Roundup Ready corn hybrid test trial results- Erland Weerts Farm, Bancroft, SD, 2006-2007 (continued)

D 1/11 1 - 1 1	Brand		Te	est trial varia	ble at harves	st	
Brand/Hybrid (By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
KRUGER/ 2298RR/YGCB	98	F1	175	58	20	0	98
AGSOURCE/3T-099 VT3	99		172	58	21	0	100
EPLEY/ E1205RR	95	F.:	167	56	19	0	97
GCS/ 100-07CBR	100	100	167	58	21	0	96
NUTECH/ 3W-099 RR/YGRW	99	1 12	164	59	19	0	96
Trial avg.:	98	172	190	58	19	>0	97
Highest (H)-avg.:	100	190	212	60	24	1	100
Lowest (L)-avg.:	93	141	158	56	16	0	91
H-L avg. difference:	7	49	54	4	8	1	9
** Lsd (.05):		17	19	2	2	NS	5
# Min. TPG-value:		173	193	58	1.00	-	95
## Max. TPG-value:		-	-		18	1	-
+ Coef. of var.:		9	6	2	5	434	3
No. of entries:	44	11	44	44	44	44	44

<sup>\*</sup> Seeded May 19, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 3d. Late maturity Roundup Ready corn hybrid test trial results- Erland Weerts Farm, Bancroft, SD, 2006-2007

	Brand			Test trial varial	ole at harvest		
Brand/Hybrid (By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
TWO-YEAR ENTRIES:	ii.	14	-		15.	-	33
DEKALB/ DKC52-63RR2YGCB	102	186	197	57	20	1	92
NUTECH/ 5005 RR/YGCB	104	179	188	57	23	0	94
WENSMAN/ W6374BTRR	104	177	202	58	22	0	96
KRUGER/ 6603TS	103	177	189	57	23	0	94
NUTECH/ 9003 RR/YGPL	102	177	187	57	22	0	96
SEEDS/ 2000 3122RR/BT	102	173	184	55	20	0	96
GOLD COUNTRY/ 102-04CBR	102	170	191	58	21	0	95
KRUGER/ 6503TS	103	165	179	59	18	0	95
ONE-YEAR ENTRIES:		5.52	100	28	1:4	142	(3)
KRUGER/ 6006VT3	106	172	210	57	24	0	99
NUTECH/ 3T-808A VT3	108	574	209	57	25	0	99
EPLEY/ E16R12YGPL	103	72	206	57	20	0	96
AGSOURCE/ 3T-006A VT3	106		206	56	23	0	97
AGSOURCE/ 3C-007RR/YGCB	107		206	57	25	1	99
WENSMAN/W7309VT3	101		204	58	19	0	100
AGSOURCE/ 5H-008 RR/HX	108	1	203	55	24	0	94
DEKALB/ DKC51-39RR2YGPL	101		202	58	19	1	98
DEKALB/ DKC53-18(RR2)	103		201	58	18	Ö	98
KRUGER/ 1606RR	106		201	54	24	ő	97
PANNAR/ 6D-409RR2	103		199	57	19	0	99
NUTECH/ 3C-303A RR/YGCB	103		198	57	22	1 1	98
PANNAR/ 6C-260RR/BT	102		195	54	23	0	95
RENK/ RK670VT3	103		193	57	18	0	92
WENSMAN/ W7375BTRWRR	104		192	57	21	i	99
WENSMAN/ W6431RR	107	- 3	192	55	24	0	96
EPLEY/ E1525RR	104		189	56	21	0	96
KRUGER/ 6401TS	101	- 2	188	58	21	0	97
AGSOURCE/ 3P-302ARRYGPL	102	8	185	58	22	1 1	98
DAIRYLAND/ STEALTH-7204	104		181	56	21	Ö	98
NUTECH/ 3C-907 RR/YGCB	107		181	56	23	0	97
EPLEY/ E12R34YGPL	101	1 51	180	58	18	0	93
DAIRYLAND/ STEALTH-9201	101	1 1	176	58	19	0	95
NUTECH/ 3P-703 RR/YGPL	103	0 39 1	176	58	20	0	96
Trial avg.:	104	176	193	57	21	>0	96
Highest (H)-avg.:	108	186	210	59	25	1	100
Lowest (L)-avg.:	101	165	176	54	18	0	92
H-L avg. difference:	7	21	34	5	6	1	8
** Lsd (.05):	,	19	18	2	2	NS	NS
# Min. TPG-value:		168	192	57	-	Q	92
## Max. TPG-value:		-		] -	20	1	"-
+ Coef. of var.:		7	6	2	5	397	3
				. 4			

<sup>\*</sup> Seeded May 19, 2007 at 28,750 seeds per acre

 $<sup>^{**}</sup>$  LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value = minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 4a. Early maturity Non-Roundup Ready corn hybrid test trial results - SDSU Plant Science Research Farm, Brookings, SD, 2006-2007

04/11-14	Brand		Hybrid	performance	variable at l	arvest	
Brand/Hybrid (By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	ʻ07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
TWO-YEAR ENTRIES:	- (4	54	114	- 14	41	43	- 04
FARM ADVANTAGE/ 9699L	99	175	171	56	20	0	98
GOLD COUNTRY/ 95-03CB	95	169	178	59	19	0	98
EPLEY/ E1231	100	166	173	57	19	1	100
SEEDS 2000/ 2953BT	95	166	159	57	16	1	92
ONE-YEAR ENTRIES:							
EPLEY/ E12L50YGCB	100	- 8	151	56	21	0	98
Trial avg.:	98	169	166	57	19	>0	97
Highest (H)-avg.:	100	175	178	59	21	1 1	100
Lowest (L)-avg.:	95	166	151	56	16	0	92
H-L avg. difference:	5	9	27	3	5	1 1	8
** Lsd (.05):		NS	NS	1	1	NS	4
# Min. TPG-value:		166	151	58	- 1	-	96
## Max. TPG-value:		C-4	0.4	-	17	1	
+ Coef. of var.:		6	8	1	2	295	2
No. of entries:	5	4	5	5	5	5	5

<sup>\*</sup> Seeded May 10, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 4b. Late maturity Non-Roundup Ready corn hybrid test trial results - SDSU Plant Science Research, Farm, Brookings, SD, 2006-2007

	Brand		Hybrid	performance	variable at h	arvest	
Brand/Hybrid (By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
TWO-YEAR ENTRIES:	174	4	+11	+			574
KRUGER/ EXP8502HX	102	197	210	56	19	0	97
EPLEY/ E1430YGCB	103	196	192	56	23	0	100
KRUGER/ 8602HX	102	189	191	56	19	1	98
KRUGER/ 5504YGCB	102	165	146	57	22	2	96
ONE-YEAR ENTRIES:							
KRUGER/ EXP9502HXT	102		220	56	25	0	100
EPLEY/ E2207HXLL	105	4	214	55	23	1	99
FARM ADVANTAGE/ 87X00	103	-	202	56	19	0	94
WENSMAN/ 5343BT	105	- 1	195	55	19	1	93
KRUGER/ 5006YGCB	106	1	193	57	22	0	99
KRUGER/ EXP9106HXT	105		190	58	19	0	99
EPLEY/ E2474	109	4	190	56	19	1	99
KRUGER/ 0401	101	<u>a</u>	185	58	19	0	100
KRUGER/ EXP9504HXT	102	140	185	57	18	0	98
EPLEY/ E1522YGPL	105	- V	177	59	19	0	96
Trial avg.:	104	187	192	56	20	>0	98
Highest (H)-avg.:	109	197	220	59	25	2	100
Lowest (L)-avg.:	101	165	146	55	18	0	93
H-L avg. difference:	8	32	74	4	7	2	7
** Lsd (.05):		NS	16	1	1	NS	4
# Min. TPG-value:		165	204	58			96
## Max. TPG-value:		.	-		19	2	-
+ Coef. of var.:		7	5	1	3	306	2
No. of entries:	14	4	14	14	14	14	14

<sup>\*</sup> Seeded May 10, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 4c. Early maturity Roundup Ready corn hybrid test trial results- SDSU Plant Science Farm, Brookings, SD., 2006-2007

Danad/Unibaid	Brand			Test trial va	riable at harve	est	
Brand/Hybrid (By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
TWO-YEAR ENTRIES:	200				- 60	-	1+
RENK/ RK488RRYGPL	97	191	204	59	16	0	98
DEKALB/ DKC50-48RR2YGCB	100	189	208	57	21	0	100
WENSMAN/ W6194BTRR	95	184	192	58	17	1 1	99
DEKALB/ DKC46-22RR2YGPL	96	183	186	59	16	0	100
DEKALB/ DKC50-20RR2YGCB	100	180	188	57	17	0	98
CROWS/ 4S502	97	180	182	59	18	0	99
GOLD COUNTRY/ 98-10CBR	98	177	201	58	17	0	98
WENSMAN/ W6307RR	100	176	195	56	19	0	100
WENSMAN/ W6266BTRR	97	168	172	58	18		97
KRUGER/ 1500RR	100	161	175	58	17	i	98
EPLEY/ E1165RR	95	161	172	56	16	1	100
EPLEY/ E1195RR	98	144	154	59	19	0	96
ONE-YEAR ENTRIES:	1 22		99	7.2	- (4		18
KRUGER/ 6697TS	97		203	56	15	0	99
KRUGER/ 2097RR/YGCB	97		200	55	17		99
AGSOURCE/ 3T-799 VT3	99		199	56	17		97
WENSMAN/ W7289VT3	99		198	58	18		97
HOEGEMEYER/ 3113 BTRR	94		197	59	16	0	100
RENK/ RK618VT3	100		196	59	18	0	100
DEKALB/ DKC43-31RR2YGCB	93		195	57	15		99
DEKALB/ DKC45-511112100B	96		195	57	18		98
	97	8 4	195	57	17		98
FIELDERS/ CHOICE NG6490 WENSMAN/ W7267VT3	97		195	57	17		100
	-	-					
WENSMAN/ W6271RR	97	- 3	192	57	16	0	93
AGSOURCE/ 3C-799RR/YGCB	100		192	57	18	0	98
WENSMAN/ W7195VT3	95	(F)	191	57	16	0	95
NUTECH/ 3P-300 RR/YGPL	99	2	190	56	20	1	95
FIELDERS/ CHOICE NG6510	98		190	58	17	0	100
GCS/ 99-02CBR	99		190	58	17	0	100
EPLEY/ E1225RR	98	100	189	57	18		97
PANNAR/ 5D-303RR/YG+	98	170	188	59	18	1 1	99
NUTECH/ 3P-098A RR/YGPL	95	(a)	187	57	17	0	94
AGSOURCE/ 3T-099 VT3	99	-	186	59	19	0	100
AGSOURCE/ 3P-902RR/YGPL	100	4	186	60	18	0	99
SEEDS/ 2000 9501VT3	96	18	185	55	14	0	96
PANNAR/ 5E-900RR/YG+	99	9	184	57	19	0	100
SEEDS/ 2000 EXP9901VT3	99	- 1	183	59	19	1	99
KALTENBERG/ K4012RRBT	94		182	54	15	0	96
KRUGER/ 6499VT3	99	100	181	58	17	0	98
EPLEY/ E1205RR	95	+	181	57	17	0	98
NUTECH/ 3P-098 RR/YGPL	98	₩ 1	178	56	17	0	97
RENK/ RK570VT3	95		178	54	15	0	95
GCS/ 100-07CBR	100		178	59	19	0	98

Table 4c. Early maturity Roundup Ready corn hybrid test trial results- SDSU Plant Science Farm, Brookings, SD., 2006-2007 (continued)

D 1/11	Brand	Test trial vari	able at harv	est			
Brand/Hybrid (By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
KALTENBERG/ K4263RRPLUS	99	• • • • • • • • • • • • • • • • • • • •	173	59	18	0	97
KRUGER/ 2298RR/YGCB	98	- (1)	169	58	18	0	97
AGSOURCE/ 3C-504ARRYGCB	100	2	169	56	22	0	99
AGVENTURE/ AV5480R2CB	98	41	168	59	18	0	96
Trial avg.:	98	175	186	57	17	>0	98
Highest (H)-avg.:	100	191	208	60	22	1	100
Lowest (L)-avg.:	93	144	154	54	14	0	93
H-L avg. difference:	7	47	54	6	8	1	7
** Lsd (.05):		21	20	1	2	NS	3
# Min. TPG-value:		170	188	59	-		97
## Max. TPG-value:			-		16	1	
+ Coef. of var.:		7	7	1	7	469	2
No. of entries:	49	12	49	49	49	49	49

<sup>\*</sup> Seeded May 10, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> Lsd= the amount values in a column must differ to be significantly different

If Lsd = NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 4d. Late maturity Roundup Ready corn hybrid test trial results- SDSU Plant Science Research Farm, Brookings, SD., 2006-2007

Brand/Hybrid	Brand		To	est trial varia	ble at harvest	(A	
(By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	ʻ07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
TWO-YEAR ENTRIES: DEKALB/ DKC52-63RR2YGCB NUTECH/ 5006A RR/YGCB NUTECH/ 9003 RR/YGPL WENSMAN/ W6374BTRR KRUGER/ 6503TS	102 105 102 104 103	216 216 202 198 196	220 217 201 215 196	56 57 57 56 58	18 22 21 20 18	1 1 0 0	95 98 98 99
KRUGER/ 6603TS CROWS/ 2121S GOLD COUNTRY/ 102-04CBR ONE-YEAR ENTRIES: NUTECH/ 3C-907 RR/YGCB KRUGER/ 6006VT3 AGSOURCE/ 3C-007RR/YGCB AGSOURCE/ 3P-302ARRYGPL AGSOURCE/ 5H-008 RR/HX	103 101 102 107 106 107 102 108	193 184 182	212 175 187 212 210 210 209 209	56 58 58 56 57 56 58 56	23 20 19 19 23 23 20 22	0 1 0 0 1 0 0 0	97 91 97 99 98 98 98 98
KRUGER/ 1606RR WENSMAN/ W6431RR WENSMAN/ W7375BTRWRR AGVENTURE/ AV6323R2CB NUTECH/ 3C-303A RR/YGCB	106 107 104 102 103	1.00	208 208 205 204 204	54 55 57 58 56	22 22 19 17 20	3 1 0 1	96 93 100 97 99
SEEDS/ 2000 3122RR/BT DEKALB/ DKC51-39RR2YGPL DEKALB/ DKC53-18(RR2) EPLEY/ E16R12YGPL AGSOURCE/ 3T-808 VT3	102 101 103 103 108	11.0	204 203 203 203 203	55 58 58 56 55	20 17 18 19 25	0 0 1 0	100 98 98 99
WENSMAN/ W7309VT3 AGSOURCE/ 5H-403 RR/HX EPLEY/ E24R32YGPL EPLEY/ E12R34YGPL EPLEY/ E25R52YGPL	101 103 108 101 110	+0+	202 200 198 197 196	58 56 57 58 57	21 21 18 18 21	0 1 0 0	99 98 98 99
DAIRYLAND/ STEALTH-9201 RENK/ RK670VT3 NUTECH/ 5X-402 RR/HXT EPLEY/ E1525RR PANNAR/ 6D-409RR2	101 103 102 104 103	111 111 111 111	195 195 193 193 192	59 56 57 56 54	17 19 21 20 18	0 1 0 1	98 93 94 97 92
PANNAR/ 6C-260RR/BT KRUGER/ 6401TS NUTECH/ 3P-703 RR/YGPL DAIRYLAND/ STEALTH-7204	102 101 103 104	1	189 186 185 136	54 59 58 57	21 20 21 22	0 0 0 0	95 99 96 95
Trial avg.: Highest (H)-avg.: Lowest (L)-avg.: H-L avg. difference: ** Lsd (.05): # Min. TPG-value: ## Max. TPG-value: + Coef. of var.: No. of entries:	104 110 101 9	198 216 182 34 31 185 - 4	199 220 136 84 16 204 - 5	57 59 54 5 1 58 - 1 37	20 25 17 8 1 	>0 3 0 3 1 - 1 270 37	97 100 91 9 4 96 - 2 37

<sup>\*</sup> Seeded May 10, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 5a. Early maturity Non-Roundup Ready corn hybrid test trial results - Curtis Sybesma Farm, Geddes, SD, 2007

D 1/11 1 - 11	Brand		Hybrid	performance	variable at h	arvest	
Brand/Hybrid (By '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
KRUGER/ EXP9502HXT	102	+/	174	58	21	0	100
KRUGER/ 5504YGCB	102	1 3	172	59	15	0	99
EPLEY/ E12L50YGCB	100	+1	172	60	16	0	92
KRUGER/ EXP9504HXT	102	4.	171	60	16	0	98
EPLEY/ E1430YGCB	103	J 1	170	57	19	0	99
KRUGER/ EXP9106HXT	105	41	167	61	16	1	97
WENSMAN/ 5343BT	105	4.0	158	57	16	0	93
KRUGER/ 8602HX	102	1	157	59	16	1 1	100
EPLEY/ E1231	100	70	157	60	15	0	96
EPLEY/ E2207HXLL	105		156	59	17	0	95
KRUGER/ EXP8502HX	102		155	59	17	0	99
KRUGER/ 0401	101	1	155	61	17	0	96
EPLEY/ E1522YGPL	105	4	155	62	16	0	96
Trial avg.:	103	- 83	163	59	17	>0	97
Highest (H)-avg.:	105	100	174	62	21	1	100
Lowest (L)-avg.:	100	+0	155	57	15	0	92
H-L avg. difference:	5	15	19	5	6	1	8
** Lsd (.05):			NS	2	2	NS	4
# Min. TPG-value:			155	60	-		96
## Max. TPG-value:				-	17	1	-
+ Coef. of var.:			13	2	6	451	3
No. of entries:	13	0	13	13	13	13	13

<sup>\*</sup> Seeded May 15, 2007 at 28,750 seeds per acre

 $<sup>^{**}</sup>$  LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value = minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 5b. Late maturity Non-Roundup Ready corn hybrid test trial results - Curtis Sybesma Farm, Geddes, SD, 2007

D 1/11 1 11	Brand		Hybrid performance variable at harvest								
Brand/Hybrid (By '07 yield)	Rel. Mat.	2-year Yield bu/a	ʻ07 Yield bu/a	ʻ07 Bu.Wt. lb	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand				
KRUGER/ 5111	111	# 1	176	60	19	0	96				
RENK/ RK852LLYGCB	110	1.0	172	57	19	0	94				
KRUGER/ 8310HX	110	-	172	58	17	1	99				
FARM ADVANTAGE/ 86X06	106	12	168	58	20	0	95				
KRUGER/ 5006YGCB	106		168	61	18	0	98				
RENK/ RK884YGCB	112		161	57	22	0	95				
KRUGER/ 8308HX	108	4.	161	59	20	0	93				
KRUGER/ 5210YGCB	110	2	161	60	20	0	97				
KRUGER/ EXP9010HXT	110	12	160	59	20	0	100				
EPLEY/ E2474	109		160	59	17	1	97				
Trial avg.:	109	3	166	59	19	>0	96				
Highest (H)-avg.:	112		176	61	22	1	100				
Lowest (L)-avg.:	106		160	57	17	0	93				
H-L avg. difference:	6	4 1	16	4	6	1	6				
** Lsd (.05):			NS	2	3	NS	4				
# Min. TPG-value:			160	59	.	-	96				
## Max. TPG-value:					20	1	-				
+ Coef. of var.:			10	2	8	398	2				
No. of entries:	10	0	10	10	10	10	10				

<sup>\*</sup> Seeded May 15, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 5c. Early maturity Roundup Ready corn hybrid test trial results- Curtis Sybesma Farm, Geddes, SD, 2007

Note: Data for 2006 was excluded due to the high level of experimental error in these plots as the result of high temperatures that caused very poor or no pollination that reduced grain yield.

D-0-1/11-1-1-1	Brand		Test trial variable at harvest							
Brand/Hybrid	Rel.	2-year Yield	'07 Yield	'07 Bu.Wt.	'07 Grain	'07 Lodging	'07 Pct.'			
(By '07 yield)	Mat.	bu/a	bu/a	lb	Moist. %	%	Stand			
HEINE/ H751RRYG	105	· · · · · · · · · · · · · · · · · · ·	202	58	18	1	91			
WENSMAN/ W6271RR	97		200	60	14	0	93			
DEKALB/ DKC50-48RR2YGCB	100		196	59	15	1	95			
WENSMAN/ W7267VT3	97		194	60	15	0	96			
DEKALB/ DKC51-39RR2YGPL	101		193	61	15	0	94			
PANNAR/ 6D-409RR2	103	+ + + + + + + + + + + + + + + + + + + +	193	59	15	1	93			
DAIRYLAND/ STEALTH-7204	104		192	60	15	0	98			
NUTECH/ 5006A RR/YGCB	105		192	60	17	2	97			
HEINE/ H726RR	103		189	59	15	1	96			
NUTECH/ 5X-402 RR/HXT	102		188	61	17	0	94			
WENSMAN/ W6374BTRR HEINE/ H711RRYGPL NUTECH/ 3C-303A RR/YGCB EPLEY/ E16R12YGPL EPLEY/ E1525RR	104 100 103 103 104	***	188 188 187 186 186	60 59 61 59 61	14 15 15 15 16	1 0 0 1	95 90 90 93 93			
EPLEY/ E1225RR	98		185	60	15	1	93			
DEKALB/ DKC52-63RR2YGCB	102		184	59	15	0	88			
FIELDERS/ CHOICE E640HX	104		184	59	16	0	93			
DEKALB/ DKC53-18(RR2)	103		183	60	15	0	88			
KRUGER/ 6603TS	103		183	61	17	0	97			
WENSMAN/ W7309VT3 AGSOURCE/ 3P-302ARRYGPL FONTANELLE/ 5N503 WENSMAN/ W7289VT3 RENK/ RK670VT3	101 102 101 99 103	100	181 181 179 179 178	62 61 59 61 59	16 18 15 15	0 0 0 0 0	100 93 97 94 88			
WENSMAN/ W6307RR	100		177	59	14	1	90			
DEKALB/ DKC46-60(VT3)	96		176	59	14	0	93			
FARM/ ADVANTAGE 9503GL	103		176	60	17	0	87			
KRUGER/ 6503TS	103		176	61	15	0	95			
EPLEY/ E1165RR	95		176	59	14	0	95			
PANNAR/ 5E-900RR/YG+	99	7	174	59	16	0	92			
HEINE/ H764RRYGPL	105		174	60	16	0	93			
KALTENBERG/ K5243RRPLUS	102		173	59	16	0	93			
KRUGER/ 6401TS	101		172	62	16	0	91			
HEINE/ H645RRYGPL	98		172	61	15	1	96			
EPLEY/ E12R34YGPL AGSOURCE/ 3C-504RR/YGCB PANNAR/ 6C-260RR/BT EPLEY/ E1205RR WENSMAN/ W7375BTRWRR	101 104 102 95 104	1	171 171 168 168 168	61 61 59 59 61	15 18 17 14 14	0 2 1 0	94 90 84 95 91			
AGSOURCE/ 3C-101RR/YGCB DEKALB/ DKC49-35(RR2) HEINE/ H727RRYGPL AGSOURCE/ 5H-403 RR/HX HEINE/ H713RRYGPL	101 99 103 103 102	* + + + + + + + + + + + + + + + + + + +	166 165 162 160 159	58 58 59 61 61	15 14 14 16 14	1 1 0 0	97 89 91 92 91			

Table 5c. Early maturity Roundup Ready corn hybrid test trial results- Geddes, SD (continued)

Drond/Unbrid	Brand			Test trial var	iable at harv	est	
Brand/Hybrid (By '07 yield)	Rel. Mat.	2-year Yield bu/a	ʻ07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
NUTECH/ 3P-703 RR/YGPL	103	3	158	61	15	0	92
NUTECH/ 3P-300 RR/YGPL	99		152	58	15	1	86
EPLEY/ E1195RR	98		152	60	16	0	92
WENSMAN/ W6266BTRR	97	-	152	60	15	0	87
KALTENBERG/ K5683RRPLUS	105		151	61	16	1	89
AGSOURCE/ 3P-902RR/YGPL	100		151	62	15	0	87
Trial avg.:	101	F 44 1	177	60	15	>0	92
Highest (H)-avg.:	105	12	202	62	18	2	100
Lowest (L)-avg.:	95	35 1	151	58	14	0	84
H-L avg. difference:	10	12	51	4	4	2	16
** Lsd (.05):			19	2	1	NS	6
# Min. TPG-value:			183	60	-		94
## Max. TPG-value:			-	-	15	2	-
+ Coef. of var.:			7	2	5	306	4
No. of entries:	51	0	51	51	51	51	51

<sup>\*</sup> Seeded May 15, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 5d. Late maturity Roundup Ready corn hybrid test trial results- Curtis Sybesma Farm, Geddes, SD, 2007

Note: Data for 2006 was excluded due to the high level of experimental error in these plots as the result of high temperatures that caused very poor or no pollination that reduced grain yield.

D 1/11 1 - : 1	Brand		-	Test trial var	iable at harv	est	
Brand/Hybrid (By '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
DEKALB/ DKC58-16(VT3)	108	12	216	58	18	0	95
KRUGER/ 6208VT3	108		216	58	20	1	95
FONTANELLE/ 7N866	108		215	58	18	0	86
KRUGER/ 6007VT3	107		213	58	18	0	93
NUTECH/ 3C-712 RR/YGCB	112		200	59	23	0	93
AGSOURCE/ 3C-007RR/YGCB	107		199	59	20	0	93
DEKALB/ DKC61-69(VT3)	111	32	198	58	19	1 1	84
FIELDERS/ CHOICE NG6686	107	200	198	60	18	0	88
GCS/ 107-01CBRCRW	107		198	58	17	1 1	88
FONTANELLE/ 7T683	108	1 1	197	59	19	l i l	91
FIELDERS/ CHOICE NG6721	110	113 E-1	196	57	19	0	90
WENSMAN/ W6431RR	107	1 1	196	57	17	1 1	86
PANNAR/ 8A-410RR/BT	110		193	58	18	i	89
KRUGER/ 1606RR	106		193	57	16	Ö	87
NUTECH/ 5H-312 RR/HX	112	ALC: NO	192	57	17	1	97
KRUGER/ 6006VT3	106		192	59	18	0	90
KRUGER/ 6111VT3	111		192	58	20	2	92
AGSOURCE/ 3T-808 VT3		8	192	60	19		85
NUTECH/ 5210 RR/YGCB	108 110	(A)	191	59	18	0 1	96
FONTANELLE/ 6T226	106		191	60	17	o l	90
NUTECH/ 3A-113A RR	112	_	189	59	21	1	88
KRUGER/ 1008RR	107		186	58	18	Ö	91
DEKALB/ DKC57-47(RR2)	107	2	184	59	17	3	87
FIELDERS/ CHOICE NG6780	111		184	60	20	1 1	87
AGSOURCE/ 3C-310RR/YGCB	110	1	184	58	18	2	86
RENK/ RK888RRYGPL	112		182	57	20	1	93
AGSOURCE/ 3C-009RR/YGCB	109	- 65	182	58	18	l i I	87
EPLEY/ E24R32YGPL	108	7.4	181	59	18	Ö	93
NUTECH/ 3C-409 RR/YGCB	100	(8	179	59	20		91
FONTANELLE/ 7K456	110	12	173	60	19	2	89
KRUGER/ 6210TS	110		178	60	21	4	90
AGSOURCE/ 3P-910RR/YGPL	111		178	58	22	1	86
PANNAR/ 7B880RR/YG+	106		175	59	17	1	85
EPLEY/ E3245RR	112	3	172	58	19	Ö	90
EPLEY/ E25R52YGPL	110		171	59	16	2	85
Trial avg.:	109		191	58	19	1	90
Highest (H)-avg.:	112	155	216	60	23	4	97
Lowest (L)-avg.:	106	- 55	171	57	16	0	84
H-L avg. difference:	6		45	3	7	4	13
** Lsd (.05):	"	8.8	18	2	2	2	6
# Min. TPG-value:			198	58	\$	.	91
## Max. TPG-value:			- 130	30	18	2	-
+ Coef. of var.:			6	2	6	180	4
No. of entries:	35	0	35	35	35	35	35

<sup>\*</sup> Seeded May 15, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 6a. Early maturity Non-Roundup Ready corn hybrid test trial results - Southeast Experiment Station, Beresford, SD, 2006-2007

5 1/11 1 : 1	Brand	Hybrid performance variable at harvest							
Brand/Hybrid (By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	ʻ07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.' Stand		
TWO-YEAR ENTRIES:	×	14			74				
HEINE/ H818YGCB	108	200	209	55	18	0	99		
MYCOGEN/ 2R572	104	178	191	56	15	0	96		
ONE-YEAR ENTRIES:	00		-	411	14	+			
HOEGEMEYER/ HB+651	109	474	212	57	18	0	100		
HEINE/ H818	105	110	208	56	18	0	96		
HEINE/ H819	108	14	198	55	17	0	100		
KRUGER/ 5210YGCB	110	14	196	57	19	0	99		
MYCOGEN/ 2D675	109	100 100	196	56	19	0	100		
KRUGER/ 8308HX	108	1-+	194	58	18	0	95		
HOEGEMEYER/ 9326HX	107	12	191	58	17	0	98		
KRUGER/ EXP9106HXT	105	12	190	57	14	0	97		
KRUGER/ EXP9010HXT	110	114	190	59	17	0	98		
HEINE/ H734	103	24	189	58	15	0	94		
MYCOGEN/ 2C597	107		188	55	16	0	99		
RENK/ RK852LLYGCB	110	17	180	55	16	0	91		
WENSMAN/ 5343BT	105	- 10	179	56	14	0	96		
FARM ADVANTAGE/ 86X06	106	+	160	56	16	0	91		
Trial avg.:	107	189	192	57	17	0	97		
Highest (H)-avg.:	110	200	212	59	19	0	100		
Lowest (L)-avg.:	103	178	160	55	14	0	91		
H-L avg. difference:	7	22	52	3	5	0	9		
** Lsd (.05):		NS	17	1	1	NS	3		
# Min. TPG-value:		178	195	58	2.4	5.7	97		
## Max. TPG-value:		39	-	50.11	15	0	30		
+ Coef. of var.:		2	5	2	4	0	2		
No. of entries:	16	2	16	16	16	16	16		

<sup>\*</sup> Seeded May 2, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 6b. Late maturity Non-Roundup Ready corn hybrid test trial results - Southeast Experiment Station,
Beresford, SD, 2006-2007

D	Brand		Hybrid	performance	variable at l	narvest	
Brand/Hybrid (By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
TWO-YEAR ENTRIES:	4	B			0 00	- 1	74
KRUGER/ 8616HX	115	199	204	56	21	0	99
MYCOGEN/ 2C727	112	199	188	58	19	0	100
MYCOGEN/ 2T787	114	186	193	55	20	0	95
MYCOGEN/ 2K718	111	174	173	58	18	1	100
ONE-YEAR ENTRIES:			54				1.0
KRUGER/ 5013YGCB	113		194	58	18	0	97
KRUGER/ 5114YGCB	114	Y C	194	59	19	1	96
KRUGER/ 9414HXT	114		192	57	20	0	99
KRUGER/ 5111	111		191	59	19	0	99
KRUGER/ 8112HX	112	12	191	57	17	0	95
RENK/ RK884YGCB	112		178	55	21	0	95
Trial avg.:	113	190	190	57	19	0	97
Highest (H)-avg.:	115	199	204	59	21	1 1	100
Lowest (L)-avg.:	111	174	173	55	17	0	95
H-L avg. difference:	4	25	31	4	4	1 1	5
** Lsd (.05):		NS	NS	1	1 2	NS	NS
# Min. TPG-value:		174	173	58			95
## Max. TPG-value:		120	-		18	1	(07
+ Coef. of var.:		8	7	1	3	398	3
No. of entries:	10	4	10	10	10	10	10

<sup>\*</sup> Seeded May 2, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef. of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 6c. Early maturity Roundup Ready corn hybrid test trial results- Southeast Experiment Station, Beresford, SD., 2006-2007

Brand/Hybrid	Brand			Test trial var	variable at harvest			
(By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	'07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct. Stand	
TWO-YEAR ENTRIES:	1 23	2	20	+	2	1.4	09	
NUTECH/ 5210 RR/YGCB	110	190	190	58	19	0	96	
ARM/ ADVANTAGE 6504	104	187	191	56	15	0	100	
VENSMAN/ W6374BTRR	104	170	185	57	14	0	100	
NE-YEAR ENTRIES:	100		100	11 0	1.0			
IELDERS/ CHOICE NG6686	107		206	58	18	0	97	
ONTANELLE/ 7K456	110	4	201	57	18	0	100	
NUTECH/ 3T-808A VT3	108	t	200	58	18	0	99	
DEKALB/ DKC52-63RR2YGCB	102	+	198	55	14	0	92	
CRUGER/ 6208VT3	108	II.	198	57	16	1	100	
DEKALB/ DKC58-16(VT3)	108	Ŧ.	196	57	17	0	99	
(RUGER/ 1008RR	107	1 +1	196	57	17	0	100	
ONTANELLE/7T683	108	170	196	57	18	1	98	
AGSOURCE/ 3C-007RR/YGCB	107	46	195	58	17	0	100	
DEKALB/ DKC53-18(RR2)	103		194	57	14	3	97	
(RUGER/ 6007VT3	107		194	57	16	0	98	
CROWS/ 4846T	110	-	193	57	19	0	98	
OUR/ STAR EX9744RRBT	108	141	192	58	18	0	96	
VENSMAN/ W6431RR	107	+	192	55	15	0	95	
ONTANELLE/ 7N866	108	+	191	58	16	0	98	
AGSOURCE/ 5H-008 RR/HX	108	4	191	58	18	0	96	
CROWS/ 3846T	105	1	190	59	17	0	94	
IEINE/ H818RRYG	108	+:	189	56	19	0	96	
ONTANELLE/ 6T226	106	1	187	59	19	0	99	
HOEGEMEYER/ 5142 RRBT	110	2.	186	57	19	0	96	
AGSOURCE/ 3T-808 VT3	108	T	186	58	19	0	93	
AGSOURCE/3C-310RR/YGCB	110		186	57	19	0	97	
PANNAR/ 8A-410RR/BT	110		184	55	17	0	95	
IEINE/ H711RRYGPL	100	1	184	54	14	0	97	
DEKALB/ DKC50-48RR2YGCB	100	D # 3	183	56	14	0	97	
IELDERS/ CHOICE NG6745	110		182	57	19	0	99	
GCS/ 107-01CBRCRW	107		182	57	16	0	94	
IEINE/ H764RRYGPL	105	- 7	181	57	16	0	94	
TELDERS/ CHOICE NG6721	110	1.0	180	56	16	0	96	
PLEY/ E25R52YGPL	110	<u> </u>	180	58	16	0	96	
AGSOURCE/ 3C-504ARRYGCB	100	+	180	59	16	0	97	
(ALTENBERG/ K5685RRBT	105	4	178	58	15	0	95	
(RUGER/ 6210TS	110	+	178	57	18	1	99	
HEINE/ H727RRYGPL	103		178	56	14	0	91	
VENSMAN/ W7309VT3	101	1	175	57	15	0	99	
PLEY/ E24R32YGPL	108		174	57	15	0	99	
HEINE/ H798RRYG	108		174	56	17	0	91	
VENSMAN/ W7375BTRWRR	104		173	58	14	0	100	
NUTECH/ 3P-302 RR/YGPL	102		172	58	16	0	96	
NUTECH/ 3C-409 RR/YGCB	109		167	59	19	0	91	

Table 6c. Early maturity Roundup Ready corn hybrid test trial results- Southeast Experiment Station, Beresford, SD., 2006-2007 (continued)

D 1/11 1 : 1	Brand	Test trial variable at harvest							
Brand/Hybrid (By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	ʻ07 Yield bu/a	'07 Bu.Wt. lb	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand		
HOEGEMEYER/ 4373	105		164	56	16	0	94		
FOUR/ STAR EX9762RRYGPL	110		158	57	19	0	94		
DEKALB/ DKC57-47(RR2)	107		154	58	16	0	96		
HEINE/ H792RR	108		150	58	15	0	93		
Trial avg.:	107	182	183	57	17	>0	96		
Highest (H)-avg.:	110	190	206	59	19	3	100		
Lowest (L)-avg.:	100	170	150	53	14	0	91		
H-L avg. difference:	10	20	56	6	5	3	9		
** Lsd (.05):		NS	24	2	1	1 1	4		
# Min. TPG-value:		170	182	57	_	-	96		
## Max. TPG-value:			- 36	2.4	15	1 1	-		
+ Coef. of var.:		9	8	2	4	593	3		
No. of entries:	50	3	50	50	50	50	50		

<sup>\*</sup> Seeded May 2, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table 6d. Late maturity Roundup Ready corn hybrid test trial results- Southeast Experiment Station, Beresford, SD., 2007. Note: All late maturity entries were new for 2007

D	Brand		Te	st trial varia	ble at harve:	st	
Brand/Hybrid (By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	ʻ07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	'07 Lodging %	'07 Pct.* Stand
DEKALB/ DKC61-69(VT3)	111		219	58	17	0	100
DEKALB/ RX715VT3	112		217	59	19	0	99
DEKALB/ DKC63-42(VT3)	113	4	203	58	19	0	100
KRUGER/ 6111VT3	111		200	60	19	0	99
EPLEY/ E3245RR	112	+	196	57	18	0	96
KRUGER/ 2114RR/YGCB	114	+5	195	60	20	0	95
KRUGER/ 6314TS	114	1 1	194	59	21	0	95
NUTECH/ 3A-113 RR	113	+	193	61	19	0	98
FIELDERS/ CHOICE NG6780	111	9	193	59	20	0	93
KRUGER/ 6011TS	111	- W	191	59	18	0	98
NUTECH/ 3P-612 RR/YGPL	112	+	186	59	19	0	98
DEKALB/ DKC62-33RR2YGCB	112	4	183	60	19	0	92
FIELDERS/ CHOICE NG6785	112		181	60	18	0	99
RENK/ RK888RRYGPL	112	1	181	58	19	0	95
NUTECH/ 5H-312 RR/HX	112		179	59	18	0	97
NUTECH/ 3A-113A RR	112		177	61	20	0	94
KRUGER/ 6412VT3	112	100	177	60	21	0	100
KRUGER/ 6015VT3	115	1 2	175	60	20	0	96
NUTECH/ 3C-712 RR/YGCB	112	+0	174	59	18	0	96
FOUR/ STAR 6880VT3	112	4	164	59	20	0	95
Trial avg.:	112	45	189	59	19	0	97
Highest (H)-avg.:	115	\$	219	61	21	0	100
Lowest (L)-avg.:	111	+0	164	57	17	0	92
H-L avg. difference:	4	- 9	55	4	4	0	8
** Lsd (.05):			24	2	1	NS	4
# Min. TPG-value:			195	59	-	-	96
## Max. TPG-value:			-	-	18	0	197
+ Coef. of var.:			8	2	5	0	2
No. of entries:	20	0	20	20	20	20	20

<sup>\*</sup> Seeded May 2, 2007 at 28,750 seeds per acre

<sup>\*\*</sup> LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

<sup>#</sup> Min. TPG-value= minimum value required for the top performance group

<sup>##</sup> Max. TPG-value= maximum value required for the top performance group

<sup>+</sup> Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

Table E. Mailing addresses for seed entries in the 2007 corn hybrid trials by seed brand name

Seed brand	Seed company mailing address
AgSource	AgSource Seeds Inc., 1800 L Ave., Nevada, IA 50201
AgVenture	Keltgen Inc. AgVenture, 44449 U.S. Hwy 212, Watertown, SD 57201
AgVenture	Scherr's Seed LLC, 13464 335 Ave., Roscoe, SD 57471
Crows	Crows Hybrid Com Co., PO Box 157, Kentland, IN 47951
Dairyland	Dairyland Seed, PO Box 958, West Bend, WI 53095
Dekalb	Monsanto, 102 W Carol Ave., Cortland, IL 60112
Epley Bros.	Epley Bros. Hybrids Inc., PO Box 310, Shell Rock, IA 50670
Farm Advantage	Farm Advantage, 1275 Hwy 69, Belmond, IA 50421
Fielder's Choice	Grow Direct, 306 N. Main Street, Monticello, IN 47960
Fontanelle	Fontanelle Hybrids, 919 West 23 <sup>th</sup> Street, Freemont, NE 68025
Four Star	Four Star Seed Co., 2929-33 <sup>th</sup> Street, Logan, IA 51546
Gold Country	Gold Country Seed Inc., PO Box 604, Hutchinson, MN 55350
Heine	Heine Hybrid Seed Corn, 1020 E. 320 <sup>th</sup> St., Vermillion, SD 57069
Hoegemeyer	Hoegemeyer Hybrids, 1755 Hoegemeyer Road, Hooper, NE 68031
Kaltenberg	Kaltenberg Seeds, 5506 State Road 19, Box 278, Waunakee, WI 53597
King	Kings Seed Inc., PO Box 939, Huron, SD 57350
Kruger	Kruger Seed Co., Box A, Dike, IA 50624
Mycogen	Mycogen Seeds, 25931 486th Ave., Valley Springs, SD 57068
NuTech	Nutech Seed, LLC, 40321 130 <sup>th</sup> Ave., Leland, IA 50453
Pannar	Pannar Seed Inc., 40329 US Hwy 14 East, Huron, SD 57350
Renk	Renk Seed Co., 6809 Wilburn Rd., Sun Prairie, WI 53590
Seeds 2000	Seeds 2000, PO Box 200, Breckenridge, MN 56520
Wensman	Wensman Seed Co., PO Box 190, Wadena, MN 56482