

2007 DRY BEAN YIELD TRIALS

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Nineteen yield trials were conducted in 2007 in Saginaw, Montcalm, Kalamazoo and Gratiot counties in addition to 20 acres of early generation nurseries under development in 10 different market classes. At the Saginaw Valley Bean & Beet Research Farm, 10 yield trials were planted. These included the standard nurseries in small and medium-sized market classes, the Cooperative Dry Bean, and the Midwest Regional Performance Nurseries. All yield trials at Saginaw were direct harvested, except vine cranberry and bush tebo tests. The large-seeded kidney, cranberry and white mold trials at Montcalm were rod-pulled. The yield trials included 42-entry navy test; one 36-entry standard black test; 100-entry black test from 115M/Jaguar cross; 42-entry black test from 26-11M, 48-21M, 39-11M lines crossed to Jaguar; 56-entry GN test; 56-entry pinto test; 30-entry red/pink test; Otebo test with 16 lines with BCMV resistance; 36-entry coop and regional test that includes pinto, GN, red and pinks; and 16-entry vine cranberry test. At Montcalm Research farm tests included: 42-entry bush cranberry test; two kidney tests with 30 and 64-entries; three white mold tests one with 64-entries and two 96-entry pinto trials including the National *Sclerotinia* Dry Bean Nursery. Two certified organic trials one 32-entry test at the Kellogg Biological Station - KBS and second 32-entry test in Gratiot county were planted. All trials except kidney, cranberry, Otebo and the organic trials were direct harvested.

Despite a favorable planting season, the lack of precipitation in June following planting severely reduced plant growth in Saginaw but there was excellent recovery in the longer season small-seeded classes such as navy and black beans due to more favorable rainfall amounts in late July and August. Yields averaged 25 cwt/acre and the best lines exceeded 30 cwt/acre, but yields were overall lower in the earlier season pinto, great northern, red and pink beans. No major disease problems were encountered in 2007. Higher temperatures limited the spread of white mold despite access to irrigation at Montcalm. Rainfall (June-September) averaged 10.24" at Montcalm with only 1.3" in September. Overall trials at Montcalm were excellent in 2007 and yields were high, exceeding 33 cwt/acre in cranberry and kidney tests and 42 cwt/acre in the white mold test, where the overall mean yield exceeded 32 cwt/acre.

Two companion nurseries of 32-entries each were planted one in certified organic and one in conventional plots to compare genotypic response to the different management systems. Trials planted in certified grower's field in Gratiot county received favorable rains but severe drought at the KBS site in June delayed maturity and resulted in very significant regrowth in some plots. Weeds were controlled by cultivation and insects (potato leaf hoppers) were controlled with multiple sprays of pyganic in the organic plots. The conventional plots received normal recommended rates of fertilizer, herbicides and insecticides, otherwise all other practices were similar between plots. The organic plots in Gratiot had received animal (turkey) manure in the fall prior to planting whereas any residual N in the organic plots at KBS would have come from forage legumes in the rotation. Every attempt was made to handle the plots in a similar fashion so that valid comparisons could be made between treatments.

The data for all tests are included in an attached section. Procedures and details on nursery establishment and harvest methods are outlined on the first page. Since the data collected on each test are basically the same, a brief discussion of each variable measured is presented below for clarification purposes.

1. Yield is clean seed weight reported in hundredweight per acre (cwt/acre) standardized to 18% moisture content. Dry beans are commercially marketed in units of 100 pounds (cwt).
2. Seed weight is a measure of seed size, determined by weighing in grams a pre-counted sample of 100 seeds, known as the 100-seed weight. To convert to seeds per 100g (10,000/100 seed wt); for example 100-seed weight of 50 converts to 200 seeds per 100 g (used in marketing).
3. Days to flower is the number of days from planting to when 50% of plants in a plot have one or more open flowers.
4. Days to maturity is the actual number of days from planting until date when all the plants in a plot have reached harvest maturity.
5. Lodging is scored from 1 to 5 where 1 is erect while 5 is prostrate or 100% lodged.
6. Height is determined at physiological maturity, from soil surface to the top of plant canopy, and is recorded in centimeters (cm).
7. Desirability score is a visual score given the plot at maturity that takes into consideration such plant traits as; moderate height, lodging resistance, good pod load, favorable pod to ground distance, uniformity of maturity, and absence of disease, if present in the nursery. The higher the score (from 1 to 9) the more desirable the variety, hence DS serves as a subjective selection index.

At the bottom of each table, the mean or average of all entries in a test is given to facilitate comparisons between varieties. In order to better interpret data, certain statistical factors are used. The LSD values refer to the Least Significant Difference between entries in a test at two levels of probability. The LSD value is the minimum difference by which two entries must differ before they can be considered significantly different. Two entries differing in yield by 1 cwt/acre cannot be considered as performing significantly different if the LSD value is greater than 1 cwt/ acre. Such a statement is actually a statement of "probable" difference. We could be wrong once in 20 times ($p=0.05$), on the average, or once in 100 times ($p=0.01$) depending on the level of probability. The other statistic, Coefficient of Variation (CV), indicates how good the test was in terms of controlling error variance due to soil or other differences within a location. Since it is impossible to control all variability, a CV value of 10% or less implies excellent error control and is reflected in lower LSD values. Under the pedigree column, all released or named varieties are **bolded** and always preceded by a comma (,); when preceded by a slash (/), the variety was used only as a parent to produce that particular breeding line.

Expt. 7101: Standard Navy Bean Yield Trial

This 42-entry trial included standard commercial navy bean varieties, and advanced lines from the MSU breeding program, which carry the N-prefix. Yields ranged from 18 to 30 cwt/acre with a mean of 24 cwt/acre. The trial was fairly uniform and variability was moderate (CV=8.2%) and the LSD needed for significance was 2.8 cwt/acre. Eight entries significantly out-yielded the test mean and included N05324 which ranked 1st and 2nd in 2006 and exhibited upright architecture, and high DS score, followed by N05311 and Vista. The top-yielding navy entry N06701 in test 6103 is a sib of N05324 and ranked 7th in this test. Only one new line N07009 appeared in the top group with an old line N01453 which had a very low DS score as it had a decumbent growth habit. The two check varieties Seahawk and Mayflower ranked above the mean.

Expt. 7102: Standard Black Bean Yield Trial

This 36-entry trial included the standard commercial black bean varieties and advanced breeding lines. Yields ranged from 21 to 31 cwt/acre with a test mean of 27 cwt/acre. Variability was very well controlled in this test, (CV=6.7%) and the LSD was 2.5 cwt/acre. Seven breeding lines significantly out-yielded the test mean and included the varieties Shania and Jaguar. B04554 that topped the test in 2005 was 3rd in 2006 and ranked 2nd in this test continues to show potential. Two new lines B06309 and B06311 (sibs) ranked 1st and 3rd and were derived from B01741 that previously topped tests in 2002 and 2003, and ranked 2nd in 2006. B04316 was in the top group whereas none of the CBB resistant lines were in the elite group. Among the top yielding varieties were Condor (27.9) and Domino (26.9), whereas Bandit (26.4) and T-39 (23.1) were below the test mean. Since the trial was direct harvested, the data suggest that there exists significant yield potential in upright black beans adapted to the current conditions of mid-Michigan. Future advances will largely depend on canning quality of the entries.

Expts. 7103: Black Bean-115MYield Trial

This trial was established to study inheritance of high yield in black beans derived from an original cross with the Mexican black bean Tacana and a wild bean G24423 from Colombia. The most consistent high yielding line 115-11M was crossed with Jaguar and advanced using SSD to the F5 generation and the recombinant inbred lines (RILs) from this cross entered the fourth year of yield testing in 2007. Test 7103 derived from cross 115-11M/Jaguar had 100 entries and ranged in yield from 21 to 33 cwt/acre with a mean of 27 cwt/acre. Variability was very well controlled in this 3-rep test (CV=6.9%) despite being direct harvested and the LSD was 3.1 cwt/acre resulting in 6 lines that significantly outyielded the test mean. The top yielding entries B04391 ranked 1st as in 2006 and B04431 ranked 2nd as in 2006 and B04404 that ranked 6th previously ranked 1st and 4th in 2004 and 2005, respectively. Varieties ranged in yield 115M (28.5), Jaguar and Tacana (27.0) were equivalent to the test mean whereas T-39 (24.5) was below the test mean.

Expts. 7104: Combined Black Bean Yield Trial

Three trials were established to study inheritance of high yield in black beans derived from an original cross with the Mexican black bean Tacana and a wild bean G24423 from Colombia. Four high yielding lines were identified in this cross: 48-21M (MSU accession I01891), 26-11M

(I01893), and 39-11M (I01894). The three lines were crossed with Jaguar and advanced using SSD to the F5 generation and only the best recombinant inbred lines (RILs) from these crosses entered fourth year of yield testing in 2007. The combined test 7104 had 42 entries and ranged in yield from 24 to 31 cwt/acre with a mean of 28 cwt/acre. Variability was very well controlled in this 3-rep test (CV=5.7%) despite being direct harvested and the LSD was 2.6 cwt/acre resulting in only two lines that significantly outyielded the test mean. The two top entries B04265 and B04492 ranked 5th and 11th in 2006, followed by B04301 (11th in 2006). The anthracnose resistant line B04587 ranked 4th and continues to perform well. Only Jaguar and 115M with yields of 28.8 and 27.9 cwt/acre, respectively and B04554 that ranked 8th outyielded the test mean whereas the other three parents including the original parent Tacana yielded below the test mean.

Expt. 7105: Standard Great Northern Bean Yield Trial

This 56-entry trial included MSU great northern breeding lines and standard commercial check varieties. The test ranged in yield from 17 to 24 cwt/acre with a mean yield of 20 cwt/acre. Variability was well controlled (CV= 7.9%) resulting in a low LSD value (2.3 cwt/acre) for significance. Eight breeding lines significantly outperformed the test mean. The group included four new lines (coded G07-), two lines G05239 and G05220 that had very large seeds, and G06207 that ranked 1st in 2006. This was the first year that Matterhorn did not yield in the top group and only performed equal to the test mean (20.4). The lower yield may be a reflection that the trial was direct harvested. We plan to continue to direct harvest this trial in future years to determine which lines are best suited for this harvest method. A group of entries with seed size under 30g that were derived from crosses with navy beans will be trailed with Tebo bean entries in future years. Only those entries with larger seed size, improved dry seed quality and cracking resistance over Matterhorn will be advanced in 2008.

Expt. 7106: Standard Pinto Bean Yield Trial

This 56-entry trial included standard commercial pinto bean varieties, breeding lines from USDA program in WA, and advanced lines from the MSU breeding program that carry the P-prefix. The trial ranged in yield from 8 to 27 cwt/acre with a mean of 21 cwt/acre. There was greater variability (CV=10.7%) in this trial than in past years and the LSD needed for significance was 3.2 cwt/acre. The trial was direct harvested which would explain the higher variability and lower yield of the more prostrate check varieties, Buster and Othello. Only four entries significantly out-yielded the test mean and these included the new La Paz variety. La Paz was among the latest maturing entries and had small seed (35.3g). Top entry P06125 derived from cross of two very erect MSU lines (P02646/P02630) had above average desirability based on plant height, lodging resistance and uniform maturity and larger seed. This cross produced a number of attractive, high-yielding, upright lines. The top-yielding entry P06131 in 2006 is a member of family but all lines will require continued testing before any decision will be made on release. P04205 is a member of family (P04202-P04206) that continue to show potential both in yield and large seed size (~38g) and is a candidate for release if it continues to perform well in white mold trials. Many of the entries from USDA-WA were very viny, prostrate and did not perform well in 2007 and one line was late maturing (>98d) which resulted in lower yield. Only those entries with more upright architecture and equivalent canning quality to Othello will be advanced in 2008.

Expt. 7107: Standard Pink and Small Red Bean Yield Trial

This 30-entry trial included small red and pink breeding lines from the USDA program at Prosser, Washington (USWA) and new pink lines from MSU (S-prefix), standard commercial check varieties. The test ranged in yield from 13 to 28 cwt/acre with a mean yield of 21 cwt/acre. Variability was high (CV=9.6%) due to direct harvesting resulting in a LSD value (2.8 cwt/acre) for significance. Six lines significantly outperformed the test mean and these represented the same family. Despite the higher yield, all lines in this family were more prostrate and longer maturing and are unlikely to have the stature needed of a new variety. Check varieties such as Merlot, Sedona and Brooks were lower yielding in 2007. A few new lines R06420 and R06422 exhibited nice dry down in the small red class but lacked seed quality of Merlot. Merlot continues to exhibit late maturing plants and it did produce 'buckskin' seed color following wet fall conditions. Only those small red entries equivalent to Merlot and pink lines equivalent to Sedona in canning quality will be advanced in 2008.

Expt. 7108: Standard Tebo Bean Yield Trial

This 16-entry trial is the part of the program to develop a Tebo (Otebo) medium white bean with resistance to Bean Common Mosaic Virus (BCMV). Tebo is a specialty class that is exported to Japan for preparation of 'An' paste. Included in the test are both third backcross (BC3; G04-Prefix), and fourth backcross (BC4; G05-Prefix) lines similar to Tebo with resistance to BCMV. Virus resistance came from Matterhorn parent and was backcrossed either 3 or 4-times to the Hime Tebo parent to recover Tebo plant and seed type. The test ranged in yield from 15 to 23 cwt/acre with a mean yield of 19 cwt/acre. Variability was high (CV=11.5%) resulting in a LSD value (3.1 cwt/acre) for significance, so only one line G05922 significantly outperformed the test mean. G05922 ranked 2nd in 2006, but it was not significantly higher than the Tebo check either year. Among the other G05-lines, G05915 that ranked 6th in 2006, yielded below the test mean in 2007. A high incidence of CBB in the trial may have contributed to lower yields and increased variability in this test. Most lines were similar in seed size (27g) and were a few days earlier in maturity (89 days) compared to the Tebo parent. Otherwise the lines resembled the Tebo parent in plant type, height and lodging resistance. A select group of the highest-yielding lines will be evaluated for their suitability in making An paste and any decision on lines to advance will depend on those results.

Expt. 7109: Combined Midwest Regional Performance Nursery (MRPN) & Cooperative Dry Bean Nursery (CDBN) Yield Trial

In 2007 the MRPN and CDBN nurseries were combined with the expectation of pulling the trial at harvest as many of the entries are not suitable for direct harvest. The decision to direct harvest the trial was based on overall limited plant growth and narrow maturity range. The MRPN is conducted annually in cooperation with North Dakota (ND-prefix), Nebraska (NE-prefix) and Colorado (CO-prefix) in order to test new pinto and great northern lines from all four programs and assess their potential in the different regions. The CDBN is national and includes all classes but only medium-sized entries were included in this trial. The 36-entry trial ranged in yield from 11 to 29 cwt/acre with a mean of 21 cwt/acre. Variability was moderate (CV=8.1%) resulting in a LSD value (2.7 cwt/acre) for significance. As a result only six lines were significantly higher in yield than the test mean. The top yielding entries were all pintos and included two MSU lines P04204 and P06131, two lines from Colorado CO 33546 and CO 23704, new variety Stampede from North Dakota and an

erect pinto PT 7-8 from USWA. With the exception of the pink line PK 7-4 from Washington all entries above the test mean were pinto beans. The check varieties, Matterhorn, Buster and Othello yielding below the test mean as the trial was direct harvested. The exceptions were the two decumbent varieties, Kimberly and Montrose which yielded above the test mean. This cooperative trial continues to be valuable as it allows an evaluation of potential new lines prior to release in other states.

Expt. 7110: Standard Vine Cranberry Bean Yield Trial

This 16-entry trial was grown in Saginaw to identify those lines with improved performance over the check, Michigan Improved Vine Cranberry (Micran). The test included lines (coded C03-) from MSU developed from backcrossing bush cranberry line C97407 with NSL, a high-yielding root rot resistance vine black bean from Mexico. Included in the test were new lines (coded C05-, C06-), bush cranberry variety Capri and the check was the vine cranberry variety Chianti. Yields ranged from 15 to 25 cwt/acre with a mean of 19 cwt/acre. Variability was high in this test (CV=11.5%) and LSD value of 3.1cwt/acre was needed for significance. Only two lines significantly outyielded the test mean and the Chianti and Micran checks. The top entries had decumbent plant type and small seed size (39g). Capri continues to be the best bush cranberry bean in this non-irrigated trial. It was the largest seeded entry and has exhibited canning quality equivalent to Micran in contrast to the traditional bush cranberry varieties that do not can satisfactorily. The check varieties performed poorly and the mediocre performance of Chianti raises concerns over its future potential. One new line C06808 with a more upright habit and larger seed showed the best potential in 2007. C05625, the top-yielding entry in Montcalm in 2006, ranked 6th in this test. Only those entries with equivalent canning quality to Micran will be advanced in 2008.

Expt. 7211: Standard Bush Cranberry Bean Yield Trial

This 42-entry trial was conducted on the Montcalm Research Farm to compare new and standard bush cranberry bean varieties under supplemental irrigation. Yields ranged from 16 to 34 cwt/acre with a mean of 23 cwt/acre. Variability was high (CV=14.6%) in this test and the LSD needed for significance was high (4.7 cwt/acre). Only two lines significantly outyielded the test mean and these included the new breeding line C07403 and USCR-CBB-20 line from USWA. Capri ranked third. The best new MSU entry C06814 that showed both yield potential and larger seed size in 2006 ranked 4th in this test and continues to show promise. The very large difference in yield (>6cwt) between the first and second entries might be reflective of the full season maturity (97d) of C07403. A few new breeding lines (C07-) in the test exhibited very favorable bush habit and maturity based on high DS scores >5.5 compared to Capri (3.5). Lines with seed weight under 50g may not have acceptable seed size. Only those entries equivalent to Capri in seed size and canning quality will be advanced in 2008.

Expt. 7212: Standard Kidney Bean Yield Trial

This 30-entry trial was conducted on the Montcalm Research Farm to compare the performance of standard and new light red kidney (LRK), dark red kidney (DRK) and white kidney (WK) bean varieties from MSU and CDBN under supplemental irrigation (3x total 1.5"). Yields ranged from 13 to 25 cwt/acre with a mean of 19 cwt/acre. Variability was high (CV=16.6%) resulting in a large

LSD value (4.4 cwt/acre) needed for significance. Only three entries significantly outyielded the test mean and these included new LRK line K05602, WK line CBB-17 from USWA, and LRK line 773-V98 from Cornell. All three lines had small seed (42-46g) compared to commercial checks. LRK breeding line K03601, Chinook Select ranked 4th and outperformed Chinook 2000 in 2007. Other checks, CELRK, Red Hawk, Redcoat and Beluga were lower yielding and fell below the test mean. The new CBB resistant line (CBB-15) also fell below the test mean in 2007. Similar to 2006, the LRK class showed the best potential over WK which had performed well in previous years. Since canning quality is vital in kidney beans, only those DRK lines equivalent in canning quality to Red Hawk, LRK lines equal or better than CELRK and WK lines equivalent to Beluga will be advanced in 2008.

Expt. 7213: Preliminary Kidney Bean Yield Trial

This 64-entry trial was conducted to compare the performance of DRK, LRK and WK-kidney varieties with new kidney bean lines (K07-prefix), entries with (K06-prefix) that were damaged by wet weather in 2006, and lines from North Dakota under same supplemental irrigation at the Montcalm Research Farm. Yields ranged from 18 to 33 cwt/acre with a mean of 25 cwt/acre. Variability was very high (CV=17.5%) resulting in a large LSD value (7.1 cwt/acre) needed for significance. Four entries significantly outyielded the test mean and these included two new LRK-lines, and two WK-lines USWK-CBB-16 and K07921. Seed size of CBB-16 was small (44g). Montcalm Select outperformed Montcalm, Red Hawk and Beluga all of which yielded above the test mean. The two LRK-lines from North Dakota performed below the test mean due to long-season maturity. A major breeding effort is underway to incorporate the resistance in the CBB-lines into MSU kidney bean lines. Caution will be exercised in the advance of any of the lines in this test due to their susceptibility to CBB and the high variability present in the test. All entries will be canned prior to advance in 2008.

Expt. 7214: White Mold Variety Yield Trial

This 64-entry trial was conducted at Montcalm to evaluate a range of diverse dry bean varieties and breeding lines for reaction to white mold under natural field conditions. Genotypes included commercial navy and black bean cultivars, elite MSU lines, and new sources of white mold resistance entered as part of the National *Sclerotinia* Bean Trial and 13 putative transgenic genotypes (coded G07300) of Matterhorn great northern. Lines in the National trial were developed at MSU, OSU, CSU, Cornell, NDSU and USDA-WA. Entries were planted in two row plots with two rows of susceptible spreader variety Beryl between plots. Supplemental overhead irrigation was applied 13 times for a total of 6.5" to maintain adequate levels of moisture for favorable disease development at the critical flowering period. Natural white mold infection occurred across the entire trial and was extremely severe in certain plots. White mold was rated on a per plot basis on a scale of 1 to 9 based on disease incidence and severity where 9 had 90+% incidence and high severity index. White mold ranged from 11 to 90%. The test ranged in yield from 18 to 43 cwt/acre with a mean yield of 32 cwt/acre. Variability was high due to white mold pressure (CV=12.5%), thus a high LSD value (6.6 cwt/acre) was needed for significance. Despite the high disease pressure, seven lines significantly outyielded the test mean and the results are similar to data collected in 2006. Two black lines B05055 and B04316 that topped trial in 2006 and exceeded 40 cwt/acre were among the top entries with similar yields in 2007. Both black lines exhibited CBB resistance and continued to grow

when other entries had succumbed to disease. Two other entries, B05040 and N05357 in the top group have CBB resistance, suggesting that resistance is contributing to yield performance as the additional overhead irrigation promotes the development and spread of CBB in the trial. The highest yielding entry B07104 came from an inbred backcross line (IBL) population developed from the cross of Tacana*2/PI 318695. PI 318695 is a wild accession from Mexico. These lines have been screened for 4-years for resistance to white mold and appear to have improved levels of resistance. The two black lines in the top group were B03622 that topped yield trial in Saginaw in 2006 but has been inconsistent in yield and the high-yielding line 115M. The best small red was Merlot, followed by pinto P06131, GN line PS02-037-7-B2 from USWA, Capri cranberry and Sedona pink, all exceeded the test mean. Among the MSU varieties that produced disappointing yields below the mean were B04554, Jaguar, Condor, and Bunsu. Beryl GN that was used as a spreader and had the highest mold rating (90%) with a yield (26 cwt) which was over 8 cwt less than Matterhorn. Only one of the transgenic GN lines G07326 exceeded the yield of Matterhorn, and none showed enhanced levels of resistance over Matterhorn. The oxalate oxidase resistance gene does not appear to be expressed in these lines. Four lines [VA-19, G122, WM67, and Cornell 604] from the National *Sclerotinia* trial had lower white mold ratings but produced disappointing yields (<26 cwt). The best entry was MSU black line B05055. Past experience using low yielding resistant germplasm as parents has not proved useful in breeding for white mold resistance. Overall the trial confirmed results from previous years and this trial will continue to be a vital part of the breeding effort to improve tolerance to white mold in dry beans.

Expts. 7215, 7216, 7221: White Mold Genetic Yield Trials

Two 96-entry trials were conducted at Montcalm to evaluate the genetic resistance to white mold in two recombinant inbred line (RIL) pinto populations [AP647 and AP630] developed from the crosses: AN 37/P02647 [test 7215] and AN 37/P02630 [test 7216]. A third 24-entry study [test 7221] included extra entries from the same crosses that could not be included in the two larger experiments. Crosses were made to introduce white mold resistance from AN 37 into the two upright pinto lines P02630 and P02647 from the MSU program. Natural white mold infection occurred across the entire trial and was extremely severe in certain plots, and ranged from 11 to 94% (test 7215); 11-89% (test 7216); 17 to 83% (test 7221). There did not appear to be an association between % white mold and yield. Test 7215 ranged in yield from 26 to 42 cwt/acre with a mean yield of 34 cwt/acre. Variability was high due to white mold pressure, only 2-reps experiment (CV=11.5%), so a high LSD value (7.7 cwt/acre) was needed for significance and only one line significantly outyielded the test mean. Test 7216 ranged in yield from 29 to 46 cwt/acre with a mean yield of 37 cwt/acre. Variability was high due to white mold pressure, only 2-reps experiment (CV=10.4%), so a high LSD value (7.7 cwt/acre) was needed for significance and only two lines significantly outyielded the test mean. Test 7221 ranged in yield from 26 to 44 cwt/acre with a mean yield of 34 cwt/acre. Variability was high due to white mold pressure, only 2-reps experiment (CV=12.4%), so a high LSD value (8.4 cwt/acre) was needed for significance and only one line significantly outyielded the test mean. Overall yields were highest in test 7216 and this population was chosen for more in-depth study. A genetic mapping experiment to find markers associated with white mold resistance in this population will be initiated. Elite lines from all three tests will be included in pinto bean yield tests in 2008.

Expts. 7817, 7818, 7919, 7920: Organic Dry Bean Yield Trials, KBS & Gratiot County

Four 16-entry trials were conducted in certified organic fields at KBS and in commercial grower's fields near Alma in Gratiot County with the primary focus of identifying different bean genotypes with better adaptation to the organic production system. For control purposes an exact experiment was planted in an adjacent field using standard conventional practices of fertilization, chemical weed and insect controls. Severe early drought damaged trial at KBS and resulted in regrowth and increased variation. Growing conditions were generally favorable in Alma in 2007 with good harvest conditions in the fall. KSB experiment (tests 7817A & 7818A) and Alma experiment (tests 7919A & 7920A) consisted of small-seeded black and navy bean genotypes that included a non-nodulating genotype and an ineffective nodulating genotype derived from Bunsil/Ex Rico. These genotypes were included to estimate the level of nitrogen-fixation in the standard genotypes in the organic trial where no artificial fertilizer was added. The second experiment (tests 7817B & 7818B – KBS; 7919B & 7920B -Alma) consisted of 16 large-seeded genotypes that included pinto, pink, small red, great northern, cranberry and kidney seed types. Yield in tests 7817A & 7818A ranged from 5 to 22 cwt/acre with a mean yield of 18 cwt/acre in the organic, compared to 14 to 25 cwt/acre with a mean yield of 20 cwt/acre in the conventional treatment. Variability was high in both tests ranged (CV=18.6%) resulting in LSD values (4.7 and 5.2 cwt/acre) needed for significance. Yield in tests 7919A & 7920A ranged from 5 to 20 cwt/acre with a mean yield of 16 cwt/acre in the organic, compared to 10 to 19 cwt/acre with a mean yield of 16 cwt/acre in the conventional treatment. Variability was high in both tests ranged (CV=17.5 - 16%) resulting in LSD values (4.0 and 3.5 cwt/acre) needed for significance. As a result no entry exceeded the test mean for either experiment. Overall means showed no difference between treatments but individual genotypes differed. Greater range in yield was observed in the organic treatment. The lowest yielding entries in both treatments were the non-nod types. As expected, yields were significantly lower in the organic treatment indicating that fertility was limiting. The normal varieties appeared to compensate for lower fertility through N-fixation and overall higher yields were observed in the organic treatment.

Yield in tests 7817B & 7819B ranged from 11 to 17 cwt/acre with a mean yield of 14 cwt/acre in the organic, compared to 9 to 23 cwt/acre with a mean yield of 13 cwt/acre in the conventional treatment. Variability was high in both tests (CV=23-25%) resulting in LSD values (4.9 and 4.4 cwt/acre) needed for significance. Yield in tests 7919B & 7920B ranged from 7 to 22 cwt/acre with a mean yield of 15 cwt/acre in the organic, compared to 7 to 25 cwt/acre with a mean yield of 16 cwt/acre in the conventional treatment. Variability was high in both tests (CV=20.3%) resulting in LSD values (4.3 and 4.7 cwt/acre) needed for significance. A negative value in the difference column for yield and seed size in both experiments indicates lower values in the organic treatment and a positive value indicates lower values in the conventional treatment. Large differences in yield were observed between treatments at KBS and were due in part to regrowth in specific plots rather than to the treatment effect. Four lines significantly exceeded the test mean in the organic versus five lines under conventional in Alma. Merlot, Buster and P06131 exceeded the mean in both treatments. Overall slightly lower yields were observed in the organic but significantly lower yields for Buster, Othello, P06131 and P04205 pintos, Capri and Matterhorn were observed in the organic treatment. Plans exist to continue this experiment in 2008 to verify genotypic response to the different treatments. The traditional county trial in northern Michigan was discontinued in 2007 due to a lack of interest.

Early Generation Breeding Material grown in Michigan in 2007

F3 through F5 lines

Navy and Black - 485 lines
Pinto - 440 lines
GN - 229 lines
Pinks and Reds - 250 lines
Kidneys (DR, LR, White) - 277 lines
Cranberry (bush, vine) - 58 lines
Yellow Eye – 4 lines

F2 populations

Navy and Black -125 populations
Pinto - 104 populations
GN - 23 populations
Pinks and Reds - 90 populations
Kidneys (DR, LR, White) – 106 populations
Cranberry (bush, vine) – 26 populations
Yellow Eye - 4 populations
Flor de Mayo – 49 populations

F1 populations: 742 different crosses among seven contrasting seed types.

2007 DRY BEAN YIELD TRIALS

EXPERIMENT	TITLE	PLANTING DATE	LOCATION	ENTRIES	DESIGN	REPS	HARVEST METHOD
7101	STANDARD NAVY BEAN YIELD TRIAL	05/31/07	B&B FARM SAGINAW	42	REC. LATTICE	4	DIRECT HARVESTED
7102	STANDARD BLACK BEAN YIELD TRIAL	05/31/07	B&B FARM SAGINAW	36	SQ. LATTICE	4	DIRECT HARVESTED
7103	PRELIMINARY BLACK BEAN YIELD TRIAL	05/31/07	B&B FARM SAGINAW	100	SQ. LATTICE	3	DIRECT HARVESTED
7104	PRELIMINARY BLACK BEAN YIELD TRIAL	05/31/07	B&B FARM SAGINAW	42	REC. LATTICE	3	DIRECT HARVESTED
7105	STANDARD GREAT NORTHERN YIELD TRIAL	06/01/07	B&B FARM SAGINAW	56	REC. LATTICE	4	DIRECT HARVESTED
7106	STANDARD PINTO BEAN YIELD TRIAL	06/02/07	B&B FARM SAGINAW	56	REC. LATTICE	4	DIRECT HARVESTED
7107	STANDARD PINK & SMALL RED YLD TRIAL	06/02/07	B&B FARM SAGINAW	30	REC. LATTICE	4	DIRECT HARVESTED
7108	STANDARD TEBO BEAN YIELD TRIAL	06/02/07	B&B FARM SAGINAW	16	SQ. LATTICE	4	ROD PULLED
7109	MIDWEST & CO-OP VARITEY YIELD TRIAL	06/02/07	B&B FARM SAGINAW	42	REC. LATTICE	3	DIRECT HARVESTED
7110	STANDARD VINE RANBERRY YIELD TRIAL	06/02/07	B&B FARM SAGINAW	16	SQ. LATTICE	4	ROD PULLED
7211	STANDARD BUSH CRANBERRY YIELD TRIAL	06/08/05	ENTRICAN MONTCALM	42	REC. LATTICE	4	ROD PULLED
7212	STANDARD BUSH KIDNEY YIELD TRIAL	06/08/07	ENTRICAN MONTCALM	30	REC. LATTICE	3	ROD PULLED
7213	PRELIMINARY KIDNEY BEAN YIELD TRIAL	06/08/07	ENTRICAN MONTCALM	64	SQ. LATTICE	3	ROD PULLED
7214	WHITE MOLD VARIETY YIELD TRIAL	06/08/07	ENTRICAN MONTCALM	64	SQ. LATTICE	3	ROD PULLED
7215	WHITE MOLD GENETIC TRIAL-POP 1	06/08/07	ENTRICAN MONTCALM	96	RCBD	2	ROD PULLED
7216	WHITE MOLD GENETIC TRIAL-POP 2	06/08/07	ENTRICAN MONTCALM	96	RCBD	2	ROD PULLED
7221	WHITE MOLD GENETIC TRIAL-POP 3	06/09/07	ENTRICAN MONTCALM	24	RCBD	2	ROD PULLED
7817	ORGANIC YIELD TRIAL	05/30/07	KBS KALAMAZOO	32	SQ. LATTICE	4	HAND PULLED
7818	CONVENTIONAL YIELD TRIAL	05/30/07	KBS KALAMAZOO	32	SQ. LATTICE	4	HAND PULLED
7919	ORGANIC YIELD TRIAL	06/14/07	ST. LOUIS GRATIOT	32	SQ. LATTICE	4	HAND PULLED
7920	CONVENTIONAL YIELD TRIAL	06/14/07	ST. LOUIS GRATIOT	32	SQ. LATTICE	4	HAND PULLED

PROCEDURE: PLANTED IN 4 ROW PLOTS, 21 FEET LONG, 20 INCH ROW WIDTH, 4 SEEDS/FOOT, 15 FOOT SECTION OF CENTER 2 ROWS WAS HARVESTED AT MATURITY.

SAGINAW: FERTILIZER BANDED: 200 POUNDS OF 33-11-0 + 4% MN + 1% ZN ZT PLANTING.

HERBICIDES APPLIED: 1.25 QT DUAL + 2 QT. EPTAM APPLIED PPI.

PESTICIDES APPLIED: 9.6 OZ. ASANA ON JUNE 14 + JULY 6 + JULY 29.

ENTRICAN: FERTILIZER BANDED: 200 POUNDS OF 19-19-19 AT PLANTING. 30 LBS. NITROGEN SIDE DRESSED ON JULY 5.

HERBICIDES APPLIED: 2 PT. SONALAN + 1.25 QT EPTAM + 2PT. DUAL APPLIED PPI.

HERBICIDES APPLIED: 1 PT. REFLEZ + 6 OZ. SELECT POST EMERGENCE APPLIED ON JUNE 25.

HERBICIDES APPLIED: 8 OZ. ASSURE II ON JULY 12.

PESTICIDES APPLIED: 9.6 OZ. ASANA ON JULY 12.

IRRIGATION APPLIED: 6.5 INCHES ON WHITE MOLD TRIALS - 13 APPLICATIONS; 1.5 INCHES ON STANDARD YIELD TRIALS - 3 APPLICATIONS

KALAMAZOO: CONVENTIONAL

HERBICIDES APPLIED: 2 PT. SONALAN + 2 PT. EPTAM + 20 OZ. DUAL APPLIED PPI

FERTILIZER BANDED: 200 POUNDS OF 19-19-19 AT PLANTING. 30 LBS. NITROGEN SIDE DRESSED ON JULY 26.

PESTICIDES APPLIED: 9.6 OZ. ASANA ON JUNE 22 + JULY 16.

IRRIGATION APPLIED: 1.6 INCHES - 2 APPLICATIONS.

ORGANIC

PESTICIDES APPLIED: 8.0 OZ. PYGANIC ON JUNE 22 + JUNE 26 + JULY 10 + JULY 16.

IRRIGATION APPLIED: 1.5 INCHES - 2 APPLICATIONS.

EXPERIMENT 7101 STANDARD NAVY YIELD TEST

PLANTING DATE 05/31/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
N05324	N00838/N00809//N00792	2	29.5	17.3	53.1	98.0	1.5	53.6	6.0
N05311	N03611/B01749	14	28.4	18.0	54.5	98.5	2.0	51.5	5.5
I92002	C-20*6/CN49-242 NAVY GENTEC, VISTA	23	28.3	18.8	51.4	97.4	3.0	47.6	3.5
N01453	B98301/N97772	16	28.0	17.6	49.5	98.0	4.5	40.6	1.0
N07009	N03614/N00844	37	27.7	18.3	54.0	98.9	2.5	52.4	4.0
N05310	N03611/B01749	3	27.5	16.0	54.1	100.0	2.0	53.5	5.5
N06701	N00838/N00809//N00729	27	27.1	19.4	53.4	98.5	1.5	50.2	4.5
N06702	N00809//B95556*2/I93154	41	27.1	18.8	54.5	100.0	2.4	53.0	3.5
N04571	N00809//B95556*2/I93154	12	26.9	17.8	53.5	98.0	2.1	50.3	5.0
N05070	5-15/PHANTOM*2/SEL 1308//HR45/KABOON	28	26.9	18.3	50.0	98.6	3.0	47.0	3.5
N04164	N94080 // N98118 / N93296	8	26.9	19.4	52.0	98.6	2.1	49.0	4.5
I07115	N3467	39	26.7	22.3	47.0	97.4	3.0	44.4	3.0
N04158	N00820 / I00758	11	26.7	19.6	52.4	98.0	1.1	49.1	6.0
N05320	29-1/JAGUAR*2/SEL1308//HR45/KABOON	6	26.0	19.6	49.0	97.6	2.0	49.9	5.0
N07007	N03614/N00844	35	26.0	15.8	46.0	97.0	2.0	49.1	5.0
N04124	N00809 // B95556 *2/I93154	20	25.7	18.5	52.5	98.6	2.0	50.6	5.0
N05319	29-1/JAGUAR*2/SEL1308//HR45/KABOON	1	25.6	19.1	49.0	97.9	1.5	47.3	5.0
N06703	N00809//B95556*2/I93154	42	25.5	18.0	54.5	98.4	2.0	49.5	4.5
N97774	BUNSI/HURON, SEAHAWK	21	25.4	19.9	42.5	99.1	3.6	43.5	2.0
N04152	N99250 / I00758	4	25.0	17.4	52.0	96.0	2.0	48.1	4.5
N07008	N03614/N00844	36	25.0	16.0	53.5	97.9	1.4	48.5	5.5
N91401	61627/2W33-2//C-20, 1990 MAYFLOWER	26	24.9	18.5	52.0	100.4	1.9	52.1	4.0
N04604	X01006/B00136	13	24.7	20.5	53.0	101.0	1.9	53.1	4.0
N00762	VISTA/MACKINAC//N94080	18	24.7	16.7	52.0	99.6	2.5	50.5	3.5
N05305	N00838/B98304//N00792	24	23.9	19.0	52.5	99.4	1.6	52.4	4.0

EXPERIMENT 7101 STANDARD NAVY YIELD TEST

PLANTING DATE 05/31/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
N05328	N99219/X00821	15	23.4	19.7	49.0	98.0	1.0	48.4	5.5
N05357	5-14/PHANTOM*2/SEL1308//HR45/KABOON	5	23.1	18.8	49.0	97.0	2.5	44.5	3.0
N05330	N99219/X00821	25	23.1	18.1	51.0	98.0	1.0	49.1	6.0
N02251	JAGUAR/N97774	7	23.1	19.6	49.5	97.5	2.6	47.3	3.5
N04120	N00838 // N99219 / X00821	9	23.0	18.9	54.5	100.1	1.1	48.4	4.5
N06705	N99219/X00821	40	22.0	14.7	50.0	96.6	1.5	49.0	6.0
N04109	B98306 / X01002	10	21.6	18.0	54.0	99.1	1.0	48.8	4.0
N07004	N02236/N03614	32	21.1	14.9	51.6	96.0	1.0	46.6	5.0
N07001	N02236/N03614	29	21.1	15.7	52.0	96.5	1.0	47.1	4.5
N05355	N03611/B01749	22	21.1	16.7	51.5	97.5	0.9	49.4	5.5
I07114	N33210	38	20.7	20.0	44.0	96.0	1.0	48.0	4.0
N05346	N99219/X00821	17	20.6	16.7	49.5	97.4	2.0	48.5	5.0
N07003	N02236/N03614	31	20.1	16.8	49.4	96.1	1.1	47.1	5.0
N07002	N02236/N03614	30	18.9	15.3	50.5	97.1	1.0	46.9	5.0
N07005	N03614/N02237	33	18.3	16.2	50.0	95.4	1.5	43.6	3.5
N07006	N03614/N02237	34	18.3	15.4	50.0	95.9	1.5	46.0	4.5
N05347	N99219/X00821	19	18.0	16.9	50.5	97.0	0.9	47.2	4.5
AVERAGE OF PRECEDING 42 MEANS			24.2	17.9	51.0	98.0	1.8	48.6	4.4
LSD (P=.05)			2.8	1.1	1.6	0.8	0.3	1.4	0.5
LSD (P=.01)			3.6	1.5	2.1	1.1	0.4	1.9	0.6
COEFFICIENT OF VARIATION			8.2	4.5	2.3	0.6	12.8	2.1	7.4

EXPERIMENT 7102 STANDARD BLACK TEST

PLANTING DATE 05/31/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
B06309	I02525/B01741	28	30.9	16.9	54.5	101.1	2.0	52.8	5.0
B04554	B00103*/ X00822	2	30.8	18.8	55.0	98.9	2.0	50.6	5.5
B06311	I02525/B01741	29	30.6	16.1	55.5	99.1	1.0	50.9	5.0
B04316	I01891/JAGUAR	33	29.9	19.0	56.0	100.4	3.0	49.2	3.0
B04610	B00101// B95556 *2/I93154	9	29.7	19.0	50.5	97.4	1.0	51.3	6.0
I07116	B201240, SHANIA	31	29.5	19.9	53.0	101.5	2.0	51.1	4.0
B95556	B90211/N90616, JAGUAR	8	29.4	17.6	53.0	98.5	1.0	49.6	5.0
B04607	B95204*3/I93154	10	29.2	18.0	52.0	97.0	1.0	49.9	6.0
B04591	B00101 / B95556 *2/I93154	6	29.0	19.5	52.5	96.9	1.0	49.8	5.5
B05055	34-27/JAGUAR*2/SEL 1308//HR45/KABOON	4	28.9	17.1	53.5	99.1	1.0	48.7	5.0
I01892	G24423/2*TACANA, 115-11M	21	28.9	18.3	54.5	100.6	2.5	49.1	3.5
B00101	PHANTOM/BLACKJACK, CONDOR	22	27.9	18.5	54.0	97.5	2.5	48.6	4.0
B05070	5-15/PHANTOM*2/SEL 1308//HR45/KABOON	12	27.8	19.4	51.5	97.0	2.0	49.4	4.0
B05054	34-27/JAGUAR*2/SEL 1308//HR45/KABOON	14	27.3	18.2	54.5	100.0	1.0	49.0	4.5
B05041	35-5/JAGUAR*2/SEL 1308//HR45/KABOON	7	27.3	17.4	53.0	99.1	1.5	49.0	5.0
B05066	B98304//N99216/I00752	16	27.2	16.8	50.5	97.4	1.0	48.6	5.5
B04222	X01001/B98306	17	27.2	19.1	54.0	98.1	1.0	51.1	4.5
B01793	N98123/VAX-5	15	27.0	18.5	54.0	99.4	3.0	51.1	3.5
B76003	N2/BTS, DOMINO	23	26.9	19.7	54.5	101.0	3.0	51.5	3.0
B04585	B98306 // B95556 *2/I93154	13	26.8	18.3	47.0	97.1	1.0	48.5	4.0
B02546	PHANTOM//JAGUAR/TLP-20	20	26.4	17.5	52.5	98.5	1.5	51.0	5.0
I07117	BANDIT	32	26.4	18.7	53.0	97.0	1.5	50.3	3.5
B05040	35-5/JAGUAR*2/SEL 1308//HR45/KABOON	3	26.4	19.3	55.0	100.0	1.0	48.8	4.5
B07101	N02302/X03102	35	26.4	21.4	51.0	96.0	3.0	48.1	3.0
B05065	B98304//N99216/I00752	11	26.1	16.6	51.0	97.5	1.0	49.1	5.5
I06282	DPC-2	26	25.9	20.0	54.5	97.0	2.0	47.1	4.5
B05039	35-5/JAGUAR*2/SEL 1308//HR45/KABOON	5	25.8	19.1	54.0	101.0	1.0	49.0	4.5
B06304	B98306/X01001//B00101	30	25.6	18.5	49.0	97.1	2.0	48.1	4.5
B03622	B98306/X00821	1	25.1	21.5	50.0	99.9	1.0	51.6	5.0
B05004	B00101 // B98306 / X01001	19	24.8	17.4	54.0	101.0	1.0	52.1	5.5
B06303	B98306/X01001//B00101	36	24.5	17.1	49.0	96.3	2.5	47.2	4.5
I06284	DPC-4	27	23.9	18.8	53.5	96.4	1.5	47.5	4.5
I06281	DPC-1	25	23.5	19.0	54.0	98.5	1.5	48.4	4.5
I81066	SEL-BTS, T39	24	23.1	19.6	53.5	96.5	4.5	41.9	2.5
I06283	DPC-3	34	22.7	19.3	54.5	99.5	1.5	49.8	4.0
B04617	B98306 / I00758	18	21.1	20.1	48.0	96.4	1.0	47.0	4.0
AVERAGE OF PRECEDING 36 MEANS			26.9	18.6	52.8	98.5	1.7	49.4	4.5
LSD (P=.05)			2.5	1.1	0.7	0.7	0.3	1.1	0.5
LSD (P=.01)			3.3	1.5	1.0	0.9	0.4	1.4	0.6
COEFFICIENT OF VARIATION			6.7	4.3	1.0	0.5	12.7	1.6	7.7

EXPERIMENT 7103 PYT BLACK'S I01892(115-11M)/JAGUAR

PLANTING DATE 05/31/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
B04391	I01892/JAGUAR	33	33.0	22.2	55.5	103.1	2.1	54.0	3.0
B04431	I01892/JAGUAR	73	32.3	22.3	54.9	101.6	1.5	54.0	3.5
B04384	I01892/JAGUAR	26	31.8	18.8	54.5	101.5	1.1	53.5	5.0
B04423	I01892/JAGUAR	65	30.9	18.9	57.4	102.6	2.0	54.5	3.1
B04411	I01892/JAGUAR	53	30.6	21.1	56.1	101.9	1.9	53.5	4.0
B04404	I01892/JAGUAR	46	30.2	19.2	54.5	101.5	2.6	53.5	3.0
B04429	I01892/JAGUAR	71	29.8	19.3	54.5	101.5	2.0	52.5	3.5
B04445	I01892/JAGUAR	87	29.8	20.6	54.1	101.4	1.5	53.5	3.5
B04366	I01892/JAGUAR	8	29.7	18.7	54.1	101.5	1.5	54.0	3.5
B04394	I01892/JAGUAR	36	29.7	21.3	55.5	100.6	2.6	53.0	3.0
B04443	I01892/JAGUAR	85	29.6	18.7	55.1	101.4	1.5	53.5	4.0
B04444	I01892/JAGUAR	86	29.5	19.2	55.0	101.5	2.0	54.0	3.0
B04400	I01892/JAGUAR	42	29.4	19.5	55.0	100.6	2.1	53.5	3.5
B04360	I01892/JAGUAR	2	29.4	20.4	55.4	102.1	2.5	53.5	3.5
B04385	I01892/JAGUAR	27	29.3	20.7	55.0	101.9	2.1	53.5	3.5
B04413	I01892/JAGUAR	55	29.3	19.7	54.5	101.1	1.1	53.1	4.4
B04414	I01892/JAGUAR	56	29.2	20.3	54.6	101.9	0.9	52.5	4.5
B04430	I01892/JAGUAR	72	29.2	19.9	54.1	101.0	1.7	52.5	3.5
B04440	I01892/JAGUAR	82	29.2	19.0	53.5	100.1	1.1	52.5	4.5
B04452	I01892/JAGUAR	94	29.1	19.2	55.9	101.5	1.9	54.0	3.1
B04405	I01892/JAGUAR	47	29.0	18.8	54.5	99.9	0.9	51.0	5.0
B04421	I01892/JAGUAR	63	28.9	17.8	53.9	101.4	1.9	53.4	4.0
B04439	I01892/JAGUAR	81	28.8	19.8	54.6	101.4	1.5	52.5	3.5
B04446	I01892/JAGUAR	88	28.8	19.3	54.9	100.8	1.9	53.9	3.5
B04387	I01892/JAGUAR	29	28.6	19.7	52.5	100.8	2.6	52.5	3.0

EXPERIMENT 7103 PYT BLACK'S I01892(115-11M)/JAGUAR

PLANTING DATE 05/31/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
B04451	I01892/JAGUAR	93	28.6	20.4	53.4	99.9	1.4	51.5	4.0
B04412	I01892/JAGUAR	54	28.5	18.7	54.9	100.1	1.0	52.0	5.0
I01892	G24423/2*TACANA, 115-11M	100	28.5	20.8	54.0	102.0	1.6	53.5	4.0
B04386	I01892/JAGUAR	28	28.4	19.2	52.9	100.5	1.0	51.5	5.0
B04372	I01892/JAGUAR	14	28.3	18.8	56.1	101.9	1.6	53.0	4.0
B04453	I01892/JAGUAR	95	28.2	22.2	55.5	101.5	2.0	53.5	3.5
B04364	I01892/JAGUAR	6	28.2	19.3	53.0	100.6	1.1	51.6	3.9
B04383	I01892/JAGUAR	25	28.1	18.6	52.6	100.9	1.1	52.5	4.0
B04377	I01892/JAGUAR	19	28.1	18.8	53.6	100.5	0.9	53.0	5.0
B04426	I01892/JAGUAR	68	28.0	19.5	54.4	100.6	1.1	51.1	5.0
B04382	I01892/JAGUAR	24	28.0	19.5	55.4	101.1	1.6	53.6	3.9
B04454	I01892/JAGUAR	96	27.9	20.4	54.5	101.0	1.0	52.0	4.0
B04361	I01892/JAGUAR	3	27.8	18.7	54.5	101.1	1.5	53.0	4.4
B04373	I01892/JAGUAR	15	27.6	20.4	55.1	103.0	2.0	52.6	3.9
B04370	I01892/JAGUAR	12	27.5	19.4	55.0	100.9	2.0	53.0	3.6
B04447	I01892/JAGUAR	89	27.4	20.4	54.0	102.0	1.9	54.0	3.0
B04441	I01892/JAGUAR	83	27.3	20.3	55.0	101.0	1.0	52.5	4.5
B04401	I01892/JAGUAR	43	27.3	19.1	52.5	100.4	1.0	51.9	4.6
B04396	I01892/JAGUAR	38	27.3	18.2	52.0	101.9	0.9	52.9	4.1
B04390	I01892/JAGUAR	32	27.3	21.1	53.4	102.0	0.9	53.5	4.6
B04395	I01892/JAGUAR	37	27.2	20.2	54.1	100.0	1.5	51.5	4.0
B04422	I01892/JAGUAR	64	27.2	19.7	54.9	101.5	1.4	53.5	4.1
B04415	I01892/JAGUAR	57	27.2	20.6	53.0	101.0	2.0	52.5	3.5
B04376	I01892/JAGUAR	97	27.2	17.8	54.5	100.9	0.9	53.5	4.5
B04407	I01892/JAGUAR	49	27.2	18.4	53.6	101.0	1.6	52.5	4.0

EXPERIMENT 7103 PYT BLACK'S I01892(115-11M)/JAGUAR

PLANTING DATE 05/31/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
B95556	B90211/N90616, JAGUAR	4	27.1	18.5	54.0	99.8	0.9	51.5	5.0
B04449	I01892/JAGUAR	91	27.0	18.6	53.4	101.4	2.0	52.9	3.5
B04365	I01892/JAGUAR	7	27.0	18.6	54.5	102.6	1.0	53.5	4.0
B04450	I01892/JAGUAR	92	27.0	19.3	52.0	99.6	1.1	50.5	4.4
I98402	DOR390, TACANA	18	27.0	19.3	51.6	98.9	1.7	52.0	4.0
B04435	I01892/JAGUAR	77	26.9	19.3	55.6	102.6	1.4	54.0	3.0
B04392	I01892/JAGUAR	34	26.8	19.3	54.0	102.0	1.0	53.5	3.0
B04437	I01892/JAGUAR	79	26.8	18.4	55.1	100.5	2.0	52.0	3.5
B04369	I01892/JAGUAR	11	26.7	19.2	52.5	101.1	2.1	52.5	4.0
B04380	I01892/JAGUAR	22	26.6	20.7	54.5	99.5	0.9	51.5	5.0
B04418	I01892/JAGUAR	60	26.6	20.3	55.1	101.9	1.5	53.0	3.5
B04363	I01892/JAGUAR	5	26.5	18.9	55.0	100.0	1.4	52.5	4.5
B04427	I01892/JAGUAR	69	26.5	21.4	54.6	104.1	1.0	51.5	3.0
B04410	I01892/JAGUAR	52	26.4	20.0	55.5	101.6	2.0	54.0	4.0
B04398	I01892/JAGUAR	40	26.4	20.5	55.0	101.6	1.5	54.0	4.0
B04448	I01892/JAGUAR	90	26.3	19.6	53.6	102.0	1.5	53.4	4.0
B04378	I01892/JAGUAR	20	26.3	19.1	54.5	100.5	1.9	52.5	4.0
B04367	I01892/JAGUAR	9	26.2	19.2	54.0	102.0	0.9	52.5	4.0
B04432	I01892/JAGUAR	74	26.2	20.2	54.9	106.0	1.5	54.0	5.0
B04420	I01892/JAGUAR	62	26.1	19.1	55.0	100.4	0.9	53.0	4.6
B04403	I01892/JAGUAR	45	26.1	17.7	55.0	101.1	2.1	53.0	3.4
B04406	I01892/JAGUAR	48	26.0	18.0	55.0	100.5	1.5	52.5	4.5
B04374	I01892/JAGUAR	16	25.9	20.2	54.4	101.5	2.5	52.5	2.9
B04402	I01892/JAGUAR	44	25.8	18.0	54.9	103.0	1.0	52.1	3.5
B04379	I01892/JAGUAR	21	25.7	18.8	54.5	101.6	0.9	52.5	4.5

EXPERIMENT 7103 PYT BLACK'S I01892(115-11M)/JAGUAR

PLANTING DATE 05/31/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
B04393	I01892/JAGUAR	35	25.6	20.4	55.0	103.6	2.0	53.0	3.0
B04424	I01892/JAGUAR	66	25.6	19.6	55.1	101.5	0.9	52.0	4.0
B04389	I01892/JAGUAR	31	25.6	18.8	53.5	101.0	1.5	52.0	4.5
B04375	I01892/JAGUAR	17	25.4	19.3	54.0	100.0	1.2	51.1	5.0
B04409	I01892/JAGUAR	51	25.4	20.8	55.6	102.4	1.0	54.0	3.5
B04417	I01892/JAGUAR	59	25.4	17.7	50.9	100.5	1.0	52.0	5.0
B04419	I01892/JAGUAR	61	25.4	20.0	54.0	99.4	1.0	50.9	5.0
B04436	I01892/JAGUAR	78	25.2	20.3	54.0	101.4	0.9	53.0	4.0
B04416	I01892/JAGUAR	58	24.8	19.2	53.1	100.0	0.9	52.0	4.5
B04428	I01892/JAGUAR	70	24.7	21.4	54.0	99.9	1.0	53.9	4.1
B04371	I01892/JAGUAR	98	24.6	18.9	54.9	101.0	1.5	53.0	4.0
I81066	SEL-BTS, T39	13	24.5	20.1	54.5	100.1	4.1	42.0	2.0
B04397	I01892/JAGUAR	39	24.3	18.6	53.5	101.9	0.9	54.0	4.0
B04388	I01892/JAGUAR	30	24.1	18.3	55.0	101.0	1.0	53.0	5.0
B04433	I01892/JAGUAR	75	24.0	17.3	55.4	100.4	0.9	51.9	5.1
B04359	I01892/JAGUAR	1	24.0	20.1	55.0	102.5	1.4	52.5	4.0
B04362	I01892/JAGUAR	99	23.8	17.7	53.0	101.0	2.0	53.0	3.5
B04408	I01892/JAGUAR	50	23.8	17.3	54.4	102.4	0.9	51.5	4.0
B04425	I01892/JAGUAR	67	23.4	23.1	55.9	103.1	2.1	53.6	3.0
B04368	I01892/JAGUAR	10	23.3	18.2	55.1	101.6	1.5	53.0	4.0
B04438	I01892/JAGUAR	80	23.0	19.3	54.4	102.4	0.9	52.4	3.6
B04399	I01892/JAGUAR	41	22.4	18.3	53.1	99.9	0.9	52.0	5.0
B04434	I01892/JAGUAR	76	22.2	22.3	55.5	107.1	2.0	54.5	3.0
B04381	I01892/JAGUAR	23	21.9	19.5	53.5	100.4	1.0	51.5	4.0
B04442	I01892/JAGUAR	84	21.4	21.4	53.1	102.1	1.0	52.0	4.0
AVERAGE OF PRECEDING 100 MEANS			27.1	19.6	54.3	101.3	1.5	52.7	4.0
LSD (P=.05)			3.1	1.1	0.9	1.1	0.4	1.0	0.5
LSD (P=.01)			4.0	1.4	1.2	1.4	0.6	1.2	0.7
COEFFICIENT OF VARIATION			6.9	3.3	1.0	0.6	18.2	1.1	7.8

EXPERIMENT 7104 PYT BLACKS(48-11M, 26-11M, AND 39-11M LINES)

PLANTING DATE 05/31/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
B04265	I01893/JAGUAR	12	30.8	21.3	54.5	101.0	2.1	52.5	4.0
B04492	I01894/JAGUAR	16	30.5	20.7	55.5	101.0	2.0	53.5	3.5
B04301	I01891/JAGUAR	5	30.1	22.1	54.0	102.0	1.6	52.5	4.0
B04587	B95556 *4/I93154	41	29.9	20.4	50.1	99.0	1.0	48.0	5.0
B04256	I01893/JAGUAR	18	29.8	17.8	54.2	101.0	1.6	52.5	4.0
B04341	I01891/JAGUAR	10	29.8	19.2	54.0	101.5	2.0	53.1	3.0
B04521	I01894/JAGUAR	32	29.7	21.3	56.0	102.0	2.0	52.9	3.5
B04554	B00103*/ X00822	38	29.5	19.8	53.1	100.0	0.9	51.4	5.5
B04469	I01894/JAGUAR	13	29.1	20.0	55.1	100.5	1.6	52.0	5.0
B04468	I01894/JAGUAR	17	29.0	20.4	53.8	102.5	1.5	54.0	3.5
B04324	I01891/JAGUAR	3	29.0	21.5	57.5	103.5	2.0	53.4	3.0
B95556	B90211/N90616, JAGUAR	34	28.8	19.1	54.1	100.0	0.9	50.0	6.0
B04489	I01894/JAGUAR	23	28.7	19.4	54.9	100.5	1.0	51.9	5.0
B04457	I01894/JAGUAR	14	28.5	19.5	55.4	102.0	1.5	52.0	4.0
B04544	I01894/JAGUAR	21	28.5	21.0	53.6	101.5	1.5	52.4	4.0
B04542	I01894/JAGUAR	19	28.5	18.8	55.5	101.5	2.5	52.5	3.5
B04506	I01894/JAGUAR	11	28.5	17.0	54.5	100.0	1.1	49.6	5.0
B04475	I01894/JAGUAR	26	28.4	20.1	54.0	100.0	1.5	51.6	4.0
B04456	I01894/JAGUAR	24	28.4	20.5	56.0	101.5	1.0	52.0	4.0
B04323	I01891/JAGUAR	1	28.4	21.1	54.8	101.5	1.0	53.5	4.0
B04500	I01894/JAGUAR	22	28.3	20.2	56.2	102.0	1.4	53.0	4.5
I01892	G24423/2*TACANA, 115-11M	40	27.9	20.5	54.7	102.0	1.5	53.5	4.0
B04253	I01893/JAGUAR	31	27.9	19.8	55.1	101.0	1.1	51.1	5.0
B04302	I01891/JAGUAR	2	27.8	20.4	55.5	102.0	2.0	52.5	4.0
B04461	I01894/JAGUAR	29	27.7	18.4	52.0	100.0	1.0	50.1	5.0

EXPERIMENT 7104 PYT BLACKS(48-11M, 26-11M, AND 39-11M LINES)

PLANTING DATE 05/31/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
B04318	I01891/JAGUAR	8	27.6	20.5	54.4	101.0	0.9	51.0	5.0
I01894	G24423/2*TACANA, 39-11M	37	27.5	21.0	54.0	102.5	1.0	54.0	3.5
B04357	I01891/JAGUAR	9	27.5	19.4	54.9	101.0	1.0	51.5	5.0
B04288	I01893/JAGUAR	15	27.4	18.8	54.4	101.0	1.0	51.4	4.0
B04541	I01894/JAGUAR	20	26.9	19.0	55.0	101.0	1.5	52.1	3.5
B05055	34-27/JAGUAR*2/SEL 1308//HR45/KABOON	39	26.8	17.9	53.6	100.0	1.1	49.6	5.0
B04316	I01891/JAGUAR	6	26.4	19.8	55.6	102.0	2.1	51.5	3.5
B04481	I01894/JAGUAR	27	26.4	18.2	52.4	100.0	1.0	51.5	5.0
I01893	G24423/2*TACANA, 26-11M	36	26.3	20.6	53.6	102.5	1.4	53.5	4.0
I98402	DOR390, TACANA	33	26.1	19.5	53.6	101.0	1.1	52.6	4.5
B04292	I01893/JAGUAR	25	26.1	17.2	53.5	101.0	2.4	51.5	3.5
B04488	I01894/JAGUAR	30	25.5	17.1	53.3	100.0	1.0	49.4	5.0
B04343	I01891/JAGUAR	7	25.5	19.8	54.4	101.0	1.0	51.6	5.0
I01891	G24423/2*TACANA, 48-21M	35	24.9	20.9	54.0	101.5	1.0	54.0	4.5
B04337	I01891/JAGUAR	4	24.8	21.3	57.0	105.0	2.0	54.0	3.0
B04483	I01894/JAGUAR	28	24.2	17.9	51.5	100.0	1.0	51.4	4.5
B05039	35-5/JAGUAR*2/SEL 1308//HR45/KABOON	42	23.9	19.5	52.8	100.5	0.9	49.0	5.0
AVERAGE OF PRECEDING 42 MEANS			27.8	19.7	54.3	101.2	1.4	51.9	4.3
LSD (P=.05)			2.6	1.0	0.8	0.7	0.5	0.9	0.5
LSD (P=.01)			3.3	1.3	1.0	1.0	0.6	1.1	0.7
COEFFICIENT OF VARIATION			5.7	3.1	0.9	0.4	20.5	1.0	7.2

EXPERIMENT 7105 STD GREAT NORTHERN TRIAL

PLANTING DATE 6/1/2007

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
G05239	G93414/G99750	13	24.4	44.0	44.0	88.0	1.0	48.0	4.5
G07302	G02646/I02545	32	24.0	39.5	44.0	91.1	1.5	53.6	6.0
G05220	G00536/G99750	11	23.9	46.4	43.5	94.0	2.0	49.5	4.0
G06207	I03387/G93414//G98602	23	23.7	37.5	45.9	89.5	1.5	48.9	4.0
G07305	G02462/I02541	35	23.4	39.2	44.5	94.0	1.5	53.6	5.0
G02453	G99750/P97803	16	23.2	37.7	45.9	90.5	1.0	49.9	4.5
G07306	G02462/I02541	36	23.1	37.3	45.5	94.0	1.0	52.5	4.0
G07301	G02646/I02545	31	22.8	38.2	45.0	90.5	1.0	53.0	5.0
G05462	P94207/G93414//P00207	22	21.9	33.8	45.5	93.1	2.0	49.5	4.0
G07309	G02646/G02454	39	21.9	41.8	43.5	90.0	1.0	52.6	5.5
G04207	P99139/G99750	12	21.8	45.0	44.5	91.5	1.0	48.9	5.0
G05246	P94207*/G99750	15	21.6	42.0	44.5	91.0	1.0	52.0	5.0
G05212	P94207*/G99750	18	21.4	37.0	45.0	90.5	1.0	48.5	4.5
G02460	MATTERHORN/VAX-1	9	21.3	38.2	44.0	88.0	1.5	46.5	4.0
G04510	G99750//G93414/N00904	3	21.3	37.5	44.4	89.5	1.0	49.4	4.5
G07308	G02462/I02541	38	21.2	36.7	45.0	91.5	1.0	50.0	5.0
G06205	G93414*3/I93154//P99120	30	21.0	42.1	46.0	90.6	1.0	54.0	5.0
G06209	G93414//G00536/N00760	24	21.0	29.5	47.0	90.5	2.0	51.0	5.5
G06206	G93414*3/I93154//P99120	29	20.9	42.4	46.0	92.5	1.5	53.0	5.0
G07318	G02647//P00227/I03386	48	20.8	35.5	45.0	89.5	1.0	47.4	5.0
G07304	G02462/I02541	34	20.8	37.4	45.5	91.5	1.0	50.1	6.0
G97941	G93414/G93441	14	20.8	36.2	45.1	89.5	1.0	47.2	3.5
G07303	G02462/I02541	33	20.7	38.4	44.6	91.0	1.5	50.6	4.5
G07317	G02647//P00227/I03386	47	20.6	38.4	44.1	91.0	1.0	48.5	5.5
G05202	P94207/P99120//G99750	7	20.6	40.3	44.5	93.0	1.5	51.5	5.0
G98602	G93442/X94023	5	20.6	37.5	43.5	86.5	1.5	46.9	4.5
G05242	P94207/P99120//G99750	21	20.5	40.1	45.0	93.5	1.0	52.5	5.0
G05463	P94207*/G99750	20	20.4	38.4	43.5	88.5	1.5	49.1	4.0
G93414	MATTERHORN	2	20.3	37.7	44.0	88.0	2.0	45.6	4.0
G07323	G93414//G00536/N00760	53	20.3	26.0	45.0	94.6	2.0	51.5	4.0

EXPERIMENT 7105 STD GREAT NORTHERN TRIAL

PLANTING DATE 6/1/2007

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
G02633	P99118/MATTERHORN	28	20.3	37.3	44.0	88.0	1.0	48.0	5.0
G05463	P94207*/G99750	19	20.2	36.3	45.0	89.5	1.0	47.5	4.5
G04517	G99750//G93414/N00904	6	20.1	37.6	43.4	88.5	1.0	46.9	5.0
G02647	G99750/P97803	56	20.0	44.5	43.5	95.0	2.0	52.9	4.0
G00536	X95623/G95009	17	20.0	35.1	47.0	92.5	2.5	51.0	4.0
G07314	G02647//P00227/I03386	44	20.0	35.4	45.5	91.5	1.0	50.5	5.5
G07310	G98602/G02462	40	19.9	38.2	43.0	88.5	1.0	48.5	5.0
G07319	G02647//P00227/I03386	49	19.8	35.8	43.5	93.0	1.0	51.1	5.0
G07315	G02647//P00227/I03386	45	19.8	34.3	45.0	92.0	1.0	48.9	5.0
G07307	G02462/I02541	37	19.8	36.9	44.1	90.0	1.0	48.5	5.0
G07320	G93414//G00536/N00760	50	19.4	29.2	44.0	89.1	1.0	46.5	5.0
G07324	G93414//G00536/N00760	54	19.3	26.3	43.4	94.5	1.5	52.5	4.5
G07321	G93414//G00536/N00760	51	19.2	27.4	45.5	88.0	1.0	46.4	5.0
G06212	G93414//G00536/N00760	27	18.9	30.5	47.0	91.0	1.0	48.6	4.5
G06211	G93414//G00536/N00760	25	18.8	29.7	46.5	89.0	1.5	48.5	4.5
G97905	G93414/54028	1	18.8	36.3	44.5	89.0	1.5	46.4	4.0
G07312	G98602/G02462	42	18.7	37.5	43.5	88.5	1.0	47.0	4.5
G07311	G98602/G02462	41	18.3	37.8	43.9	89.0	1.0	49.4	5.5
G07316	G02647//P00227/I03386	46	17.9	35.0	45.5	91.5	1.0	49.5	4.5
G07322	G93414//G00536/N00760	52	17.8	27.2	43.5	89.0	1.0	47.0	5.0
G04520	G99702//G93414/N00904	4	17.7	36.0	45.4	86.5	1.0	44.8	3.5
G05240	G99702//G93414/N00904	10	17.6	36.8	45.1	88.5	1.0	46.0	4.0
G06210	G93414//G00536/N00760	26	17.2	30.6	47.5	90.0	1.0	48.5	3.5
G07313	G98602/G02462	43	17.1	38.0	44.0	87.5	1.0	47.0	4.0
G05241	G99702//G93414/N00904	8	16.7	36.6	44.5	90.0	1.0	45.0	4.5
G89003	WM1-85-43/P86297, ALPINE	55	16.6	35.3	45.5	92.5	1.0	46.9	3.5
AVERAGE OF PRECEDING 56 MEANS			20.4	36.7	44.8	90.5	1.2	49.3	4.6
LSD (P=.05)			2.3	1.6	0.7	0.8	0.3	0.9	0.4
LSD (P=.01)			3.0	2.1	0.9	1.1	0.4	1.2	0.5
COEFFICIENT OF VARIATION			7.9	3.1	1.1	0.6	15.7	1.3	5.4

EXPERIMENT 7106 STD PINTO TRIAL

PLANTING DATE 06/02/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
P06125	P02646/P02630	37	26.5	38.1	46.1	90.0	1.0	50.5	6.0
I07113	LAPAZ	47	25.0	35.3	54.0	96.0	2.0	51.2	3.5
P07405	I03360/P02647	54	24.8	46.4	43.5	91.5	1.0	50.6	5.5
P05462	P94207/G93414//P00207	26	24.7	33.3	47.6	93.0	2.0	52.0	4.0
P04203	P99119/G99750	11	24.4	41.8	46.4	91.5	1.5	49.9	6.0
I06225	PS00-013-1-B-6-B3 (USWA)	30	24.3	37.4	46.1	92.0	2.0	48.9	4.9
P05463	P94207*/G99750	4	24.0	35.9	46.1	91.5	1.0	48.5	4.6
P05444	P94207/P99120//G99750	12	23.9	33.4	45.9	90.5	2.0	50.0	4.5
P06130	P02646/P02630	33	23.9	41.2	46.4	89.0	1.0	48.9	5.9
P07404	I03360/P02647	53	23.2	44.0	45.9	91.0	1.0	53.0	5.5
P05456	P94207/P00207//P99120	23	23.1	38.1	47.0	93.0	1.0	52.0	4.9
P05405	P94207/P00207//P99120	20	23.0	36.1	46.4	91.5	1.0	51.0	5.6
P05446	P94207/P00207//P99120	15	22.9	45.6	45.0	90.0	2.0	48.9	4.5
P07406	P00227/I03385//P00207	55	22.9	33.5	48.9	93.0	1.0	53.5	5.0
P06126	P02646/P02630	31	22.8	38.9	46.6	89.5	1.0	47.5	5.0
P07403	I03360/P02647	52	22.7	43.2	45.0	93.0	1.0	53.1	4.6
P04204	P99119/G99750	10	22.5	42.4	46.4	94.0	1.5	50.5	4.5
P04205	P99119/G99750	9	22.2	40.7	44.6	90.0	2.0	49.5	5.5
P06131	P02646/P02630	27	22.2	40.9	46.0	90.0	1.0	49.5	6.0
P04207	P99139/G99750	7	22.1	44.6	44.6	91.5	1.0	51.4	5.5
P00204	KODIAK/P96705	14	22.1	44.2	46.0	89.0	2.0	49.5	4.0
P06115	P94207/P00207//G99750	46	21.8	38.7	46.5	90.5	2.0	49.5	5.5
P06139	P02630//P00227/I03386	35	21.7	38.8	43.5	92.5	1.5	48.0	4.0
I06224	PS00-013-1-B-5-B3 (USWA)	49	21.7	39.3	46.0	90.5	1.5	48.1	4.5
P06104	P94207/P00207//P99120	48	21.6	38.0	47.0	93.0	1.0	54.0	6.5
P04206	P99119/G99750	3	21.5	42.8	46.5	92.5	2.0	51.0	5.0
P06129	P02646/P02630	42	21.5	38.9	44.5	90.0	1.0	48.7	5.5
P06123	P02647/I03355	38	21.5	40.3	45.5	89.0	1.5	48.2	4.5
P06127	P02646/P02630	44	21.4	39.9	46.5	90.5	1.0	49.0	5.5
P07407	P00227/I03385//P00207	56	21.4	30.1	48.3	92.0	1.0	51.5	5.5

EXPERIMENT 7106 STD PINTO TRIAL

PLANTING DATE 06/02/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
I06226	PS01-081-4-B4 (USWA)	34	21.3	34.1	52.9	95.5	3.0	51.6	3.0
P06114	P99120/G93414//P00207	41	21.2	38.5	45.5	89.5	2.0	48.5	4.4
P07401	I02545/P02630	50	20.9	33.9	47.4	93.0	2.5	49.0	4.5
P02630	P99120/MATTERHORN	2	20.9	38.8	45.0	87.5	1.5	46.5	4.0
I06228	PS01-082-10-B-3-B2 (USWA)	40	20.9	32.1	51.5	95.0	1.5	53.5	5.0
P06124	P02646/P02630	32	20.8	41.0	44.0	88.0	1.0	47.5	5.0
P06132	P02646/P02630	29	20.8	37.9	46.0	89.0	1.0	48.4	5.0
P05432	P99120/G93414//P00207	19	20.7	38.2	45.6	90.0	2.0	48.9	4.0
P05429	P99120/G93414//P00207	25	20.6	37.6	46.1	89.0	2.5	48.0	3.5
P07402	I03360/P02647	51	20.4	43.0	45.0	93.5	1.5	53.4	5.0
P05431	P99120/G93414//P00207	16	20.3	39.6	44.9	91.5	2.0	50.5	5.1
P05428	G93414*3/I93154//P99120	5	20.3	41.7	45.6	88.5	1.5	48.0	4.4
P06128	P02646/P02630	39	20.2	38.6	45.5	89.5	1.0	48.6	5.0
P04202	P99119/G99750	1	20.2	40.4	43.1	89.0	2.0	48.5	4.5
P06137	P02627/P02647	43	20.1	38.7	43.1	89.5	1.0	52.0	5.0
P02627	P99120/MATTERHORN	13	20.0	40.0	46.1	92.0	1.0	50.0	4.6
P06112	P99120/G93414//P00207	45	20.0	38.7	46.3	88.5	2.0	48.5	4.5
P05448	P99120/G93414//P00207	18	19.9	36.1	46.1	90.0	2.0	49.5	5.1
P05403	P94207/P00207//P99120	24	19.3	33.4	44.9	88.0	1.0	49.0	5.4
I06221	PS00-001-6-B-1-B3 (USWA)	28	19.0	35.8	42.0	86.0	2.0	47.0	2.1
I99117	ASG85-5051-7, BUSTER	8	18.9	38.3	43.9	88.5	3.0	48.4	3.4
P05416	P94207/P00207//P99120	21	18.7	33.9	44.5	89.5	1.5	48.5	5.1
P05445	P94207/P00207//G99750	6	18.4	38.9	45.5	91.0	1.5	49.0	4.5
P05454	G93414*3/I93154//P99120	17	17.7	35.8	45.9	92.0	1.0	48.4	4.5
I84002	NW410//VICTOR/AURORA,GH215, OTHELLO	22	13.8	34.6	40.1	85.0	3.0	45.9	3.0
I06227	PS01-082-13-B-6-B2 (USWA)	36	7.6	41.5	56.9	98.0	2.0	48.5	2.0
AVERAGE OF PRECEDING 56 MEANS			21.3	38.6	46.1	90.8	1.6	49.7	4.7
LSD (P=.05)			3.2	1.7	0.7	0.8	0.3	1.0	0.5
LSD (P=.01)			4.2	2.2	1.0	1.1	0.4	1.3	0.7
COEFFICIENT OF VARIATION			10.7	3.1	1.1	0.7	13.9	1.4	7.9

EXPERIMENT 7107 STD PINKS AND REDS TRIAL

PLANTING DATE 06/02/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
R06412	S01944/R02205	19	27.7	28.6	52.0	93.0	2.5	49.0	4.5
R06413	S01944/R02205	15	26.2	31.7	49.5	93.9	3.0	45.9	3.0
R06417	S01944/R02205	17	25.9	30.8	52.0	94.5	3.0	46.4	3.5
R06418	S01944/R02205	16	25.6	31.2	52.0	94.0	3.5	45.5	3.5
R06415	S01944/R02205	26	25.0	26.9	45.0	93.5	3.0	46.5	4.0
R06416	S01944/R02205	28	24.4	28.3	51.5	95.0	3.5	45.1	3.0
S04505	X99352//X99354/G93414	9	23.0	38.8	45.0	93.0	1.5	50.5	5.0
I06241	PS00-072-1-B-8-B3 (USWA)	2	22.2	35.6	43.5	89.0	3.0	51.4	3.1
S07501	S00809/I03386//R02205	29	22.2	33.6	54.0	97.0	2.0	50.6	3.5
R06422	R02205//I03386/R98026	14	21.9	28.5	44.0	88.5	1.0	46.4	5.0
S04504	X99352//X99354/G93414	5	21.9	38.7	45.0	93.5	1.5	51.1	4.5
R06420	S01944/R02205	25	21.8	25.1	44.5	89.5	2.0	47.6	5.0
R98026	R94037/R94161, MERLOT	8	21.7	37.6	46.5	93.5	2.0	51.0	4.0
S00809	R94142/X94076, SEDONA	13	21.2	33.6	45.5	91.5	2.0	49.5	4.0
S06401	S00802/R97003	23	20.9	32.0	45.0	93.5	2.0	51.4	4.5
I95322	BROOKS-18(RM), BROOKS	11	20.8	33.7	47.0	93.5	2.5	50.6	4.0
I06240	PS00-072-1-B-2-B3 (USWA)	4	20.6	32.1	42.5	87.0	2.0	50.0	3.5
I06243	PS00-092-3-B5 (USWA)	1	20.6	32.9	43.5	86.6	2.0	45.7	3.5
S06407	I03916/S00802	24	20.3	37.2	42.5	88.5	1.5	48.0	4.5
R06423	R02205//I03386/R98026	21	19.9	25.4	44.5	88.5	1.0	46.0	4.5
R02002	R94026/X96024//R95429/X96034	7	19.7	29.3	48.5	88.0	1.0	48.1	4.0
S02753	X99352/X99351	3	19.6	32.9	42.0	88.5	1.0	52.1	4.5
R06424	R02205//I03386/R98026	18	18.8	26.6	42.5	89.0	1.0	47.4	5.0
R97003	R93006/R93003	30	18.2	38.0	42.5	93.0	2.0	49.5	3.5
S04508	X99354//X99354/G93414	10	18.0	37.4	44.0	91.0	1.0	49.1	5.5
R02189	R93346/3/R93006//R94030/JB 9438-217 - RUST REST	12	17.8	36.3	46.5	92.0	1.0	51.0	4.1
S02068	USWA-61//89:411K/R93346	6	16.4	28.4	45.5	92.4	1.0	49.8	4.5
S06409	I03917/S00802	22	14.8	34.7	45.5	88.0	1.0	52.0	4.5
S06410	I03913//S00809/I03386	27	14.3	37.1	46.0	92.0	1.0	48.5	4.5
S06404	S00802//I03385/S00809	20	12.5	31.5	43.0	89.5	1.5	52.0	4.5
AVERAGE OF PRECEDING 30 MEANS			20.8	32.5	46.0	91.4	1.9	48.9	4.2
LSD (P=.05)			2.8	1.6	0.6	0.8	0.3	1.1	0.4
LSD (P=.01)			3.7	2.0	0.8	1.0	0.4	1.4	0.6
COEFFICIENT OF VARIATION			9.6	3.4	0.9	0.6	11.4	1.5	7.5

EXPERIMENT 7108 STD TEBO TRIAL

PLANTING DATE 06/02/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
G05922	HIME TEBO*4/MATTERHORN	2	23.4	28.3	45.6	91.9	2.0	47.6	4.5
G05902	HIME TEBO*4/MATTERHORN	15	22.0	27.8	46.5	89.0	2.0	45.5	4.0
G04912	HIME TEBO*3/MATTERHORN	7	21.4	27.5	42.9	88.0	2.0	47.1	4.0
G05920	HIME TEBO*4/MATTERHORN	16	21.4	27.0	45.9	89.5	2.5	47.0	3.0
I03388	HIME TEBO	11	20.5	26.6	47.0	90.5	3.0	46.8	3.5
G05909	HIME TEBO*4/MATTERHORN	3	20.3	28.0	43.0	90.5	2.5	47.3	4.0
G05913	HIME TEBO*4/MATTERHORN	8	19.6	28.0	46.5	92.0	2.5	46.9	4.5
G05915	HIME TEBO*4/MATTERHORN	6	18.7	26.3	42.0	88.1	2.0	46.2	4.0
G05903	HIME TEBO*4/MATTERHORN	12	18.5	27.9	46.0	89.5	2.0	46.5	4.0
G05916	HIME TEBO*4/MATTERHORN	13	17.9	25.8	43.0	88.5	2.0	45.3	4.5
G04911	HIME TEBO*3/MATTERHORN	4	17.9	26.4	43.5	87.4	2.0	44.9	3.5
G05907	HIME TEBO*4/MATTERHORN	5	17.8	27.6	43.5	90.5	2.5	46.5	3.5
G04914	HIME TEBO*3/MATTERHORN	10	17.5	26.8	43.5	86.9	2.0	46.0	4.0
G04909	HIME TEBO*3/MATTERHORN	1	16.9	27.0	43.4	91.6	3.0	47.6	4.0
G04910	HIME TEBO*3/MATTERHORN	14	16.7	26.6	44.0	89.1	2.0	46.1	3.5
G05905	HIME TEBO*4/MATTERHORN	9	14.8	26.0	43.4	88.0	2.0	45.5	4.0
AVERAGE OF PRECEDING 16 MEANS			19.1	27.1	44.4	89.4	2.3	46.4	3.9
LSD (P=.05)			3.1	1.2	0.5	0.8	0.3	0.8	0.4
LSD (P=.01)			4.0	1.6	0.7	1.1	0.4	1.0	0.5
COEFFICIENT OF VARIATION			11.5	3.2	0.8	0.6	9.1	1.2	6.8

EXPERIMENT 7109 PYT MRPN/CDBN GN, PINTO, PINK AND REDS

PLANTING DATE 06/02/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LOGGING	HEIGHT	DES. SCORE
I07139	CO 33546	25	28.7	40.7	50.0	96.0	3.0	50.2	4.0
P06131	P02646/P02630	14	26.1	42.1	45.5	94.5	1.0	50.7	6.0
P04204	P99119/G99750	16	25.8	44.8	48.5	95.5	2.0	49.5	5.0
I06251	CO23704	24	25.1	36.4	47.5	96.5	3.0	48.5	4.0
I05834	ND020351, STAMPEDE	29	23.7	37.1	49.0	94.5	1.0	51.2	6.0
I07121	PT 7-8 (USWA)	6	23.3	32.2	50.5	95.0	1.0	51.2	6.0
I07118	PK 7-4 (USWA)	3	23.2	34.4	43.0	90.0	2.0	49.1	4.5
P04205	P99119/G99750	17	22.9	41.2	46.0	93.5	2.0	47.8	5.5
I07120	PT 7-1 (USWA)	5	22.2	37.8	45.5	93.5	2.0	49.1	5.0
I06265	6115, KIMBERLY	11	22.1	35.3	45.0	92.0	3.0	47.9	3.5
P05459	P94207/P00207//P99120	18	22.1	36.2	47.5	94.0	1.0	51.1	6.5
I98313	CO 51715(PINTO), MONTROSE	22	22.0	35.2	44.5	90.5	3.5	42.8	2.5
P05463	P94207*/G99750	19	22.0	36.8	45.0	92.0	1.0	49.2	5.5
I07122	ISB 620-1	7	21.8	36.7	46.0	95.0	2.0	53.3	4.0
I05221	ISB 1145 (CDBN)	10	21.8	36.8	44.0	92.0	3.5	47.6	3.0
I07141	CO 29258	27	21.7	39.0	50.0	97.5	2.0	53.1	4.0
I05833	ND010307 (MPRN)	30	21.5	41.0	44.0	96.0	2.0	48.8	3.5
I06249	ND020069, LARIAT	28	21.5	38.1	50.0	97.0	2.0	52.0	4.5
P06132	P02646/P02630	15	21.2	39.7	45.5	93.5	1.0	46.5	5.5
I07147	NE-2-06-22	36	21.1	40.9	44.5	93.0	2.0	49.5	5.0
I07144	NE-1-06-19	33	20.9	37.2	49.0	97.0	3.0	49.0	4.0
I07119	PK 7-5 (USWA)	4	20.6	34.2	46.5	93.0	2.0	48.1	4.0
I06259	611, SAWTOOTH	2	20.3	45.3	41.5	96.5	3.5	48.0	2.0
I07123	ISB 777	8	19.5	37.8	45.5	88.0	4.0	43.6	2.5
G93414	MATTERHORN	21	19.4	37.4	44.5	90.5	2.0	47.5	5.0
I07145	NE-2-06-1	34	19.4	38.8	44.0	90.5	2.0	48.5	5.0
I07138	CO 33309	23	18.7	29.8	46.5	94.0	2.0	51.3	5.5
I07140	CO 24372	26	17.4	34.6	45.0	96.0	1.5	52.4	5.0
I07142	NE-1-06-12	31	17.1	36.1	45.0	92.5	1.5	47.0	4.5
I06262	614, SHOSHONE	12	16.9	35.8	43.0	90.0	3.0	46.0	3.5
I07143	NE-1-06-13	32	16.7	36.7	44.5	91.5	2.0	49.1	5.0
I99117	ASG85-5051-7, BUSTER	20	16.1	35.1	44.0	93.0	2.5	48.0	3.5
I84002	NW410//VICTOR/AURORA,GH215, OTHELLO	13	15.6	33.0	41.0	88.0	3.0	44.9	3.0
I07146	NE-2-06-8	35	15.6	43.5	43.0	92.0	2.0	46.3	4.0
I07124	616, HUNGERFORD	1	15.2	43.3	43.5	92.5	3.0	47.0	3.5
I05220	ISB 1131 (CDBN)	9	11.1	35.7	41.0	87.5	2.0	45.4	3.0
	AVERAGE OF PRECEDING 36 MEANS		20.6	37.7	45.5	93.2	2.2	48.6	4.3
	LSD (P=.05)		2.7	2.5	1.1	0.9	0.3	1.6	0.5
	LSD (P=.01)		3.5	3.3	1.4	1.2	0.4	2.1	0.7
	COEFFICIENT OF VARIATION		8.1	4.1	1.4	0.6	9.1	2.1	7.5

EXPERIMENT 7110 STD VINE CRAN TRIAL

PLANTING DATE 06/02/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
C03158	C97407 2*\NEGRO SAN LUIS-68	3	25.4	39.0	45.0	96.5	4.5	41.5	3.0
C03156	C97407 2*\NEGRO SAN LUIS-66	9	23.2	39.2	45.0	97.0	4.0	42.0	3.0
C03151	C97407 2*\NEGRO SAN LUIS-61	5	21.4	41.2	42.5	92.0	3.0	44.0	4.0
C06808	I01800/C03129	14	21.1	45.9	42.5	94.0	3.0	48.9	5.0
C03147	C97407 2*\NEGRO SAN LUIS-57	11	20.0	31.0	44.5	97.0	4.0	42.5	3.0
C05625	X01019/C97407//C99833	15	19.9	42.3	44.5	93.5	3.0	46.0	4.0
C06807	I01800/C03129	13	19.7	44.5	43.0	96.5	2.0	50.0	4.5
C03161	C97407 2*\NEGRO SAN LUIS-71	4	19.1	45.2	45.5	95.0	3.0	46.0	4.0
C99833	CARDINAL/K94803, CAPRI	1	18.9	49.0	39.5	92.5	2.0	48.0	4.9
C05605	X01014/I98337//C99804	2	18.5	33.5	48.0	95.0	3.0	46.9	3.5
C05618	X01019/C97407//C99804	16	17.6	45.5	43.0	94.0	3.0	45.5	4.0
I04317	ASGROW 0759 VINE, CHIANTI	8	16.4	48.5	43.0	95.0	2.0	47.6	4.5
C03119	C97407 2*\NEGRO SAN LUIS-24	7	16.0	47.5	43.5	95.0	2.0	46.7	4.5
C05626	X01019/C97407//C99833	6	15.3	45.2	42.5	93.5	3.0	46.9	4.0
C03150	C97407 2*\NEGRO SAN LUIS-60	12	14.8	40.3	40.0	96.0	2.0	45.6	3.0
C66001	MICRAN	10	14.5	44.7	43.5	96.0	3.5	42.0	3.5
AVERAGE OF PRECEDING 16 MEANS			18.9	42.6	43.5	94.9	2.9	45.6	3.9
LSD (P=.05)			3.1	1.7	0.7	0.7	0.2	0.8	0.3
LSD (P=.01)			4.0	2.2	0.9	0.9	0.3	1.0	0.4
COEFFICIENT OF VARIATION			11.5	2.8	1.1	0.5	5.0	1.2	5.3

EXPERIMENT 7211 STD BUSH CRAN TRIAL

PLANTING DATE 06/08/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
C07403	X03510/C99833	29	34.1	52.6	39.2	97.0	2.0	47.5	4.5
I06209	USCR-CBB-20	6	27.5	45.7	35.9	94.6	2.0	45.0	4.5
C99833	CARDINAL/K94803,CAPRI	2	27.0	52.4	37.5	94.0	2.0	45.5	3.5
C06814	C99833/C03151	16	26.3	51.6	39.9	94.2	1.5	43.0	4.5
C00302	92-197-02-14/CARDINAL	8	26.2	51.3	38.7	93.4	2.0	45.5	4.0
C07410	X03516/C99804	36	25.8	50.2	38.1	94.0	1.5	47.5	5.5
C07409	X03513/C99833	35	25.5	52.8	37.8	95.4	2.0	47.0	5.5
C03142	C97407 2*NEGRO SAN LUIS-52	13	25.2	50.4	38.0	91.5	1.5	44.5	3.5
C05631	X01021/C81008//C00301	3	24.7	51.7	39.0	93.6	1.5	47.0	5.5
C05647	X01022/C81008//C99833	7	24.5	50.1	38.4	95.4	1.5	46.5	5.5
C07411	X03516/C99804	37	24.4	47.7	39.0	94.0	1.0	47.0	6.0
C06811	C99833/C03151	19	24.4	44.0	38.4	94.4	2.5	44.0	4.5
I06208	USCR-CBB-19	1	24.4	46.9	36.4	95.6	2.0	44.0	3.5
C05617	X01019/C97407//C99804	14	24.2	50.8	40.1	93.1	1.5	45.5	5.5
C06812	C99833/C03151	21	23.3	51.8	38.5	93.4	1.5	44.5	4.5
C07408	X03513/C99833	34	23.2	52.4	39.9	94.4	2.1	48.0	4.0
C05632	X01021/C81008//C00301	11	23.2	48.1	39.2	93.5	1.5	46.5	5.0
C07401	C99804/C03164	27	23.1	47.3	39.5	92.0	2.0	43.0	4.5
C07413	X03511/I01800	39	22.9	50.4	39.1	92.0	2.0	47.5	4.0
C06820	C99833//X01020//C97407	17	22.9	44.7	39.5	95.4	2.0	48.5	5.5
C07412	C99833/C03154	38	22.5	45.7	39.7	93.5	2.0	45.5	4.0
C06815	C99804/X03512	26	22.4	52.3	37.9	93.7	2.0	43.0	5.0
C07407	X03513/C99833	33	21.9	52.5	38.5	93.4	2.0	47.0	4.5
C06819	C99833//X01020//C97407	20	21.8	45.9	40.5	94.6	2.0	46.5	5.0
C07414	X03511/I01800	40	21.7	48.5	39.0	94.0	2.0	47.5	4.5

EXPERIMENT 7211 STD BUSH CRAN TRIAL

PLANTING DATE 06/08/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
C99806	CARDINAL/C93212	10	21.6	48.7	38.4	94.7	2.0	46.5	4.5
C05603	X01014/C81008//C99804	12	21.5	44.7	41.0	92.5	2.1	46.0	5.0
I07125	BD 1002	25	21.4	48.1	38.0	92.5	2.0	46.0	5.0
C07404	X03517/I01800	30	21.3	51.8	38.9	92.0	1.5	45.0	3.5
I07127	BD 1004	42	21.2	54.2	37.9	92.0	3.0	45.0	3.5
C05653	X01020/C81008//C99804	4	20.9	51.2	38.0	93.4	1.5	45.0	4.5
C06818	C99833//X01020//C97407	22	20.7	47.9	39.0	93.9	2.0	44.5	4.5
C07406	X03513/C99833	32	20.5	52.2	37.5	92.4	1.5	45.0	3.5
C06816	C99804/X03512	24	20.1	51.0	39.4	98.5	2.0	47.5	3.5
C06817	X01015/C97407//C99833	23	20.0	45.5	39.5	93.1	2.0	46.0	4.0
I07126	BD 1003	41	19.9	51.9	37.4	91.4	3.0	38.5	2.5
C05660	C97407/I98512//C97407	9	19.5	46.1	39.2	94.0	1.5	46.0	5.0
C03155	C97407 2*\NEGRO SAN LUIS-65	5	19.3	46.4	40.9	94.0	1.5	42.5	3.0
C03157	C97407 2*\NEGRO SAN LUIS-67	15	19.1	50.7	37.1	92.0	1.5	45.5	3.5
C07402	X03510/C99833	28	18.4	51.0	39.5	92.5	1.5	45.5	4.0
C06803	X01020/C81008//C99833	18	17.7	50.5	38.0	92.5	1.0	42.0	3.5
C07405	X03513/C99833	31	15.7	51.2	38.0	91.9	1.5	43.0	3.0
AVERAGE OF PRECEDING 42 MEANS			22.7	49.5	38.7	93.7	1.8	45.4	4.3
LSD (P=.05)			4.7	2.3	0.8	1.1	0.4	1.3	0.6
LSD (P=.01)			6.1	3.0	1.0	1.4	0.5	1.7	0.8
COEFFICIENT OF VARIATION			14.6	3.3	1.5	0.8	14.8	2.0	10.0

EXPERIMENT 7212 STD KIDNEY TRIAL

DATE 06/07/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
K05602	I99105/X02152	19	25.2	42.7	41.0	97.6	2.0	48.0	4.0
I06266	773-V98 (CDBN)	26	23.9	43.6	39.0	96.5	1.5	48.5	6.0
I06214	USWK-CBB-17	29	23.3	45.5	37.0	97.0	1.5	47.1	5.5
K03601	CN49242/3*MONT//REDKLOUD, CHINOOK SELECT	18	22.2	55.0	40.0	99.5	2.0	48.8	4.0
K03242	REDHAWK 2*NEGRO SAN LUIS-142	16	22.2	46.6	40.5	98.5	2.1	48.5	3.5
K03235	REDHAWK 2*NEGRO SAN LUIS-135	11	21.9	45.3	40.0	99.0	2.0	49.1	3.5
I07134	RH4-1308C-9-B3	30	20.5	52.9	40.5	95.5	3.0	47.0	3.0
K94601	CN49242/3*MONT//REDKLOUD, CHINOOK2000	10	20.5	54.0	39.5	99.5	2.1	49.5	3.5
K05004	I99105//K00922/G93414	5	20.3	55.0	40.0	99.0	1.9	49.6	3.5
K74002	MDRK/CN(3)-HBR(NEB#1), MONTCALM	15	19.5	51.1	38.5	100.7	2.0	49.4	3.0
K03240	REDHAWK 2*NEGRO SAN LUIS-140	8	19.4	47.9	39.5	98.0	1.9	47.5	3.0
I06267	1062-V98 (CDBN)	27	19.1	52.3	37.5	96.5	2.1	47.5	4.0
K03288	REDHAWK 2*NEGRO SAN LUIS-188	12	19.0	51.9	40.0	99.0	2.0	48.6	4.0
I90013	(LRK)UCD, CELRK	25	18.8	56.4	37.0	92.0	1.5	46.5	3.5
I05101	USDK-CBB-15	4	18.4	48.0	40.5	97.0	1.9	47.0	4.0
K05923	K99968/I98188	21	18.4	50.2	41.5	97.5	2.0	49.0	5.0
K05605	I99103/K01635	22	18.3	52.0	40.5	99.5	2.0	47.6	3.5
K05607	I99103/K01635	2	18.3	47.6	41.0	96.0	1.0	47.0	4.0
K05614	K90101/K74002//K74002	13	18.2	53.6	38.5	97.5	2.0	50.4	5.0
I07128	D000264	28	18.0	48.5	40.0	94.5	2.1	47.1	3.5
K05608	I99103/K77002	20	17.7	52.8	40.5	99.0	1.6	49.6	3.0
K90101	CHAR/2*MONT, RED HAWK	14	17.6	47.5	40.0	98.5	1.4	47.9	3.5
K01234	MUTANT OUT OF REDHAWK, REDCOAT	24	17.0	49.3	39.0	97.5	1.6	47.8	4.5
K05604	K00604/X02151	1	16.8	48.9	40.0	99.5	2.5	47.6	3.5
K05905	K01405//K00922/G93414	7	16.4	48.7	40.0	97.0	2.0	49.6	5.5
K05920	K99962/K90101	17	16.4	52.3	38.5	97.0	1.5	48.4	5.0
K05606	I99103/K01635	3	15.8	49.9	41.0	97.0	2.0	48.5	4.5
K05908	K01405//K00922/G93414	9	15.5	49.8	40.5	98.5	2.0	49.0	4.5
K90902	BEA/50B1807//LASSEN, BELUGA	23	15.1	48.0	41.0	97.5	1.9	47.6	4.0
K05615	I99103/K02991	6	13.3	48.2	40.5	97.5	2.0	47.3	3.5
	AVERAGE OF PRECEDING 30 MEANS		18.9	49.9	39.8	97.6	1.9	48.2	4.0
	LSD (P=.05)		4.4	3.1	0.6	0.1	0.3	1.0	0.5
	LSD (P=.01)		5.8	4.0	0.8	0.1	0.3	1.3	0.7
	COEFFICIENT OF VARIATION		16.6	4.4	1.1	0.1	9.5	1.4	9.6

EXPERIMENT 7213 PYT KIDNEY TRIAL

PLANTING DATE 06/07/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
K06619	I00639/K02601	39	32.9	52.9	40.5	98.0	2.1	47.5	4.0
K07713	K02601/K01635	13	32.5	51.5	41.5	100.0	2.0	48.5	5.0
I06213	USWK-CBB-16	55	32.3	43.6	41.0	102.0	2.1	52.0	4.0
K07921	K03244/I05103	21	32.1	54.4	40.0	98.5	2.4	49.0	4.0
K07711	K03244/I05103	11	31.8	53.4	40.5	101.5	2.0	50.5	4.0
K06001	I99105/X02151	32	29.8	55.3	40.0	101.0	2.4	49.0	4.0
K03601	CN49242/3*MONT//REDKLOUD, CHINOOK SELECT	61	29.3	54.6	40.0	101.0	2.6	51.5	3.5
K07712	K02601/K01635	12	29.2	50.3	41.0	98.0	2.1	49.0	5.0
K06610	K90101/K02601	33	29.1	49.5	39.0	101.0	2.0	49.5	4.5
I06214	USWK-CBB-17	64	28.7	46.9	38.0	96.5	1.5	46.0	5.0
K06012	K90101/K02601	35	28.4	50.4	39.0	98.0	1.9	47.5	4.0
K07306	K90101/K02601	6	28.4	52.7	39.5	100.5	2.4	49.0	3.5
K07926	I05102/K03244	26	28.2	51.1	40.5	98.5	2.0	52.0	4.0
K06002	MDRK/CN(3)-HBR(NEB#1), MONTCALM SELECT	52	28.1	52.5	42.0	102.0	1.9	48.0	3.5
K07310	I05102/K03244	10	27.9	37.2	41.0	102.0	3.6	47.0	3.0
K07309	K74002/K02601	9	27.6	46.0	42.5	102.0	2.4	48.5	3.5
K07927	X04303/X04201	27	27.6	50.5	39.5	103.0	3.0	48.5	2.5
K07305	K90101/K02601	5	27.1	47.7	38.5	96.5	2.0	46.5	4.0
K06011	K90101/K02601	34	27.1	47.8	39.5	97.5	1.5	49.0	5.0
I07137	RH4-1308C-3-B2	58	27.0	51.6	38.5	100.0	2.1	48.0	4.0
K74002	MDRK/CN(3)-HBR(NEB#1), MONTCALM	62	26.6	53.6	39.5	102.0	2.0	51.5	4.0
K07716	K02601/K01635	16	26.6	45.8	41.0	96.5	1.5	49.0	6.0
K06622	K01635/K02601	40	26.5	49.8	40.5	97.0	1.5	53.5	5.0
K06014	K90101/K02601	36	26.0	47.7	40.0	99.0	2.1	47.0	4.0
K07918	K99974/X02153	18	25.7	51.4	41.0	101.5	2.0	50.5	3.5
K90101	CHAR/2*MONT, RED HAWK	59	25.6	49.4	39.5	98.0	1.9	46.5	4.0
K90902	BEA/50B1807//LASSEN, BELUGA	60	25.4	49.3	41.0	97.5	1.9	50.0	5.0
K07931	X04304/X04203	31	25.2	61.3	39.0	95.5	2.1	49.5	3.5
K07922	K03244/I05103	22	25.1	51.8	42.0	96.5	1.5	49.0	3.5
K06623	K01635/K02601	41	25.0	47.2	40.5	97.5	2.0	48.0	4.0
K07925	K03244/I05103	25	24.9	50.8	41.0	97.5	2.0	48.5	4.5
I07135	RH4-1308C-3-B3	56	24.9	48.4	38.5	98.0	2.0	46.5	3.5
K06627	K01635/K02601	43	24.7	47.8	37.0	91.0	1.0	45.5	3.5
K07308	K74002/K02601	8	24.7	48.3	40.5	100.5	2.5	51.0	3.5
K07923	K03244/I05103	23	24.6	51.4	41.0	97.5	1.9	49.5	3.5

EXPERIMENT 7213 PYT KIDNEY TRIAL

PLANTING DATE 06/07/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
K07920	K03244/I05103	20	24.6	50.1	40.5	97.0	2.0	50.5	4.5
I05101	USDK-CBB-15	63	24.4	44.8	40.5	98.0	2.0	48.0	4.5
K06929	K99974/X02153	45	24.2	46.6	40.0	100.5	1.5	51.5	4.5
K07924	K03244/I05103	24	24.0	49.9	41.5	97.5	2.0	49.5	4.5
K07715	K02601/K01635	15	24.0	44.4	40.5	96.5	1.4	47.5	5.5
K06940	K02601/K02991	50	23.9	44.2	37.0	91.5	1.5	60.0	4.0
K07714	K02601/K01635	14	23.7	49.0	40.5	96.5	1.9	47.0	4.0
K07304	I02535//K90101/K74001	4	23.6	48.5	39.0	98.0	2.1	51.0	4.0
K07917	K99974/X02153	17	23.3	46.7	41.0	99.0	2.5	52.5	3.5
K07930	X04303/X04201	30	23.3	65.1	41.5	102.5	3.5	47.0	3.0
I06274	ND02-373-02-02	54	23.3	47.7	43.0	103.0	2.0	54.0	4.0
K06618	I00639/K02601	38	23.0	55.9	40.0	101.0	2.0	47.0	3.0
K06626	K01635/K02601	42	22.7	51.3	37.0	90.5	1.0	45.5	3.5
K07928	X04303/X04201	28	22.7	46.5	39.0	100.0	3.8	45.0	3.0
K06939	K02601/K02991	49	22.6	42.6	37.0	92.5	1.4	45.5	4.5
K07919	K03244/I05103	19	22.4	52.0	40.5	98.0	1.5	49.5	5.0
K07303	I02535//K90101/K74001	3	22.2	47.0	39.5	99.5	2.0	50.5	4.5
I07136	PS01-370C-3-B3	57	21.9	41.8	41.0	98.5	2.0	43.5	2.0
K07929	X04303/X04201	29	21.7	70.7	40.5	105.0	3.4	50.5	3.0
I06273	ND02-373-02-01	53	21.3	43.8	40.0	100.5	1.6	49.0	3.5
K06930	K99974/X02153	46	21.1	41.9	37.0	92.0	1.1	47.0	4.0
K06935	K90902*4/I93154	48	21.0	50.1	38.5	99.5	1.5	53.5	4.0
K06931	K99974/X02153	47	21.0	44.2	39.0	95.5	2.0	62.5	3.5
K07307	K74002/K02601	7	20.9	47.1	41.0	102.5	2.0	50.0	3.0
K07302	I02535//K90101/K74001	2	20.6	40.1	39.5	98.5	2.0	46.5	4.0
K06928	K99974/X02153	44	19.3	46.7	42.5	98.5	1.6	51.5	3.5
K06616	K01635/K02601	37	18.4	45.5	36.5	91.0	1.0	47.0	3.5
K06942	I99103/K02991	51	17.8	48.8	37.0	93.5	1.1	48.0	4.0
K07301	I02535//K90101/K74001	1	17.5	48.0	39.5	99.5	2.1	49.0	3.5
AVERAGE OF PRECEDING 64 MEANS			25.1	49.3	39.9	98.4	2.0	49.2	3.9
LSD (P=.05)			6.7	4.8	1.1	1.8	0.5	4.9	0.8
LSD (P=.01)			8.7	6.3	1.4	2.3	0.7	6.3	1.0
COEFFICIENT OF VARIATION			16.3	6.0	1.6	1.1	15.7	6.0	12.3

EXPERIMENT 7214 NATIONAL WHITE MOLD YIELD TRIAL

PLANTING DATE 06/07/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	WHITE MOLD(%)	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
B07104	8543, TACANA*2/PI 318695(W)	47	42.6	32.9	21.1	46.1	99.8	1.3	52.3	5.0
B05055	34-27/JAGUAR*2/SEL 1308//HR45/KABOON	4	42.3	14.9	21.2	46.4	102.7	1.0	52.2	5.2
B03622	B98306/X00821	32	42.0	19.2	23.9	44.4	102.0	1.3	51.6	5.3
B04316	I01891/JAGUAR	5	40.8	45.5	21.7	47.6	102.9	2.7	49.0	4.0
I01892	G24423/2*TACANA, 115-11M	19	39.6	63.4	22.1	47.0	102.3	2.0	51.2	4.0
B05040	35-5/JAGUAR*2/SEL 1308//HR45/KABOON	31	39.2	13.7	23.4	48.0	101.6	1.1	50.3	4.9
N05357	5-14/PHANTOM*2/SEL1308//HR45/KABOON	35	39.1	55.3	22.0	45.5	98.6	2.3	47.1	5.0
R98026	R94037/R94161, MERLOT	17	38.4	59.7	37.0	43.5	97.6	2.1	49.5	3.7
P06131	P02646/P02630	43	37.7	33.7	36.3	44.0	94.7	1.7	49.1	6.0
N05319	29-1/JAGUAR*2/SEL1308//HR45/KABOON	26	37.6	55.5	21.3	44.6	99.3	2.0	47.9	4.9
P04207	P99139/G99750	44	36.5	27.3	41.6	43.9	94.3	2.0	48.5	5.5
N05310	N03611/B01749	29	36.4	46.6	19.6	45.5	100.7	1.6	51.8	5.1
B04404	I01892/JAGUAR	22	36.3	65.0	21.2	48.0	97.2	2.3	50.2	4.6
I07130	PS02-037-7-B2	8	36.0	24.4	37.0	44.0	98.8	1.6	52.2	5.8
I07129	PS02-036A-10-B3	7	35.9	51.6	38.4	44.5	95.3	2.7	48.5	4.7
B07102	8661, TACANA*/PI 313850 (L)	45	35.6	77.4	20.8	46.6	99.0	2.6	49.3	3.7
B04431	I01892/JAGUAR	39	35.6	57.4	22.0	47.6	100.3	2.0	51.2	4.2
N05324	N00838/N00809//N00792	27	35.5	29.4	20.6	46.5	97.6	1.4	50.8	5.7
B05039	35-5/JAGUAR*2/SEL 1308//HR45/KABOON	34	35.1	19.1	23.2	46.6	101.3	1.0	49.1	5.0
G07326	06T-8028	51	34.8	73.5	31.4	43.5	94.1	2.1	48.3	4.8
P04205	P99119/G99750	14	34.5	40.2	39.5	43.4	93.9	2.3	46.5	5.7
G93414	MATTERHORN	64	34.3	65.8	31.4	43.4	94.0	1.7	47.0	4.6
G07332	06T-8049	57	34.0	79.7	32.8	43.9	93.4	1.6	45.5	4.4
B07105	8563, TACANA*2/PI 318695(W)	48	33.8	67.0	19.7	46.0	97.4	1.1	49.8	3.2
C99833	CARDINAL/K94803, CAPRI	24	33.8	24.7	60.4	36.5	94.3	2.0	47.1	5.3
N04158	N00820 / I00758	37	33.6	39.1	19.8	45.6	96.5	0.9	52.1	6.8
S00809	R94142/X94076, SEDONA	15	33.4	70.6	35.0	44.5	94.0	3.0	46.0	4.2
P06132	P02646/P02630	42	33.4	32.4	34.2	44.0	94.1	1.7	46.5	5.1
B07103	8615, TACANA*/PI 313850 (L)	46	33.3	65.3	19.0	45.2	99.1	1.3	49.5	3.5
P04204	P99119/G99750	13	33.1	48.9	38.7	46.5	95.3	2.0	47.8	4.7
K03240	REDHAWK 2*//NEGRO SAN LUIS-140	23	32.9	36.8	53.4	39.0	100.0	2.3	46.1	2.4
N04120	N00838 // N99219 / X00821	28	32.9	14.5	20.7	47.0	101.6	1.3	53.2	5.3
G06211	G93414//G00536/N00760	41	32.6	38.0	29.2	45.1	95.3	1.7	48.4	5.7
N97774	BUNSI/HURON, SEAHAWK	25	32.6	40.7	22.0	42.1	96.6	2.4	44.5	4.4
B05024	I01892 / B98304 //B00101	33	32.3	29.1	21.6	45.5	97.1	1.3	50.1	5.4

EXPERIMENT 7214 NATIONAL WHITE MOLD YIELD TRIAL

PLANTING DATE 06/07/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	WHITE MOLD(%)	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
G07327	06T-8059	52	32.1	78.7	33.6	43.6	93.6	2.0	46.9	3.6
G07333	06T-8048	58	32.0	80.3	32.4	44.0	93.3	2.1	46.0	3.4
G07334	06T-8054	59	31.6	69.2	32.9	44.1	92.7	1.6	46.2	4.2
B05001	8690, TACANA*/PI 313850 (L)	49	31.2	59.6	20.9	46.0	98.6	1.4	49.0	4.0
P06136	P02627/P02647	40	31.1	54.5	34.7	43.0	93.8	1.6	48.2	4.3
N04152	N99250 / I00758	30	30.7	48.1	19.5	44.1	97.4	1.7	49.9	6.1
N04109	B98306 / X01002	36	30.5	43.8	19.5	44.5	101.0	0.9	52.7	5.4
G07328	06T-8061	53	30.4	69.9	32.7	43.1	93.2	1.4	46.9	4.2
B04554	B00103*/ X00822	18	30.3	37.8	19.8	46.9	97.0	1.4	44.1	5.3
G07338	06T-8043	63	29.4	70.7	33.1	44.0	93.3	2.1	45.5	3.9
G07337	06T-8045	62	29.3	74.6	32.3	44.3	92.6	2.0	45.2	3.7
I05054	CORNELL 605	11	29.3	32.5	37.3	43.9	105.4	2.3	47.7	1.3
B95556	B90211/N90616, JAGUAR	21	29.2	55.0	18.8	46.1	95.6	1.3	49.5	4.7
I06278	CORNELL 605	10	29.2	25.2	52.2	44.5	99.1	2.0	45.3	2.6
B00101	PHANTOM/BLACKJACK, CONDOR	20	28.8	76.6	19.7	45.6	95.4	2.0	48.3	4.2
G07335	06T-8047	60	28.7	76.9	32.1	43.4	93.3	2.0	45.5	3.3
I06281	DPC-1	38	28.2	84.4	21.1	45.2	94.7	1.9	48.4	3.4
I81010	JAPON3/MAGDALENE, BUNSI	2	27.9	55.0	20.1	43.6	98.0	2.6	43.5	3.1
G07331	06T-8055	56	26.9	82.3	31.9	43.9	93.7	1.7	46.1	3.7
G07325	06T-8023	50	26.2	73.8	30.9	43.6	93.1	1.6	45.8	4.1
I89011	RB(GN), BERYL	3	25.9	90.4	31.8	41.9	94.1	4.9	28.4	1.1
G05915	HIME TEBO*4/MATTERHORN	16	25.8	87.8	27.5	41.8	92.0	2.6	42.1	3.3
G07329	06T-8058	54	25.3	84.7	30.5	43.9	93.0	1.6	45.9	3.0
I06276	VA-19	6	25.2	29.3	50.3	41.0	101.6	2.0	49.0	2.7
G07336	06T-8046	61	24.1	88.2	30.8	43.9	92.6	2.4	43.9	3.2
I96417	G122 MAGNUSON(CRAN)	1	23.2	20.5	42.4	38.5	99.2	1.4	47.0	1.9
G07330	06T-8057	55	22.9	89.1	30.0	42.9	92.6	1.7	45.9	3.3
I07131	WM67	12	18.9	70.2	33.4	44.0	98.4	4.4	40.3	1.1
I05053	CORNELL 604	9	17.8	10.6	33.6	45.6	110.0	4.6	38.9	1.0
	AVERAGE OF PRECEDING 64 MEANS		32.2	52.8	29.5	44.4	97.0	1.9	47.5	4.2
	LSD (P=.05)		6.6	25.0	2.5	1.0	2.6	0.8	3.7	1.1
	LSD (P=.01)		8.6	32.5	3.2	1.3	3.4	1.0	4.8	1.4
	COEFFICIENT OF VARIATION		12.5	29.0	5.2	1.4	1.6	24.4	4.7	16.3

EXPERIMENT 7215 GENETIC WHITE MOLD, POP AP647(I02545/P02647)

PLANTING DATE 06/07/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	WHITE MOLD(%)	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
P07751	AN 37/P02647	47	41.5	27.8	38.4	41.5	98.0	2.5	49.0	5.5
P07757	AN 37/P02647	53	40.7	22.2	34.4	43.5	97.0	1.0	50.0	5.5
P07782	AN 37/P02647	77	39.9	22.2	38.2	43.5	100.0	2.0	50.0	4.0
P07733	AN 37/P02647	33	39.3	44.4	34.5	42.5	97.5	1.5	46.0	4.0
P07797	AN 37/P02647	92	39.1	44.4	33.2	46.0	99.0	2.0	48.5	5.0
P07767	AN 37/P02647	63	38.8	50.0	40.7	43.0	96.0	2.0	49.5	4.0
P07789	AN 37/P02647	84	38.7	27.8	36.8	44.0	101.0	1.0	50.0	4.5
P07788	AN 37/P02647	83	38.3	27.8	42.7	42.0	100.5	2.0	51.5	4.0
P07745	AN 37/P02647	41	38.0	33.3	37.2	43.5	97.0	1.5	49.0	5.0
P07704	AN 37/P02647	6	37.9	33.3	40.9	43.5	96.0	2.0	50.5	4.5
P07792	AN 37/P02647	87	37.9	27.8	33.1	44.5	98.0	2.0	48.5	5.0
P07756	AN 37/P02647	52	37.6	44.5	34.7	45.0	100.5	2.5	54.0	4.5
P02647	G99750/P97803	2	37.5	33.4	40.7	43.5	96.5	1.5	50.5	5.0
P07742	AN 37/P02647	38	37.3	38.9	40.3	42.5	96.0	2.0	50.5	4.0
P07748	AN 37/P02647	44	37.2	50.0	42.3	44.0	100.0	2.0	48.5	3.0
P07747	AN 37/P02647	43	36.9	50.0	36.9	42.5	96.0	1.5	48.0	3.5
P07770	AN 37/P02647	66	36.8	22.2	37.4	43.0	100.0	1.5	50.5	5.5
P07785	AN 37/P02647	80	36.7	16.7	42.1	43.0	103.5	2.0	51.0	4.5
P07734	AN 37/P02647	34	36.7	27.8	34.0	46.5	101.0	2.0	49.0	4.0
P07769	AN 37/P02647	65	36.6	88.9	31.4	44.0	93.0	1.5	47.0	2.5
P07735	AN 37/P02647	35	36.4	33.3	39.1	43.5	100.0	1.5	51.5	4.0
P07708	AN 37/P02647	10	36.2	50.0	37.1	42.5	93.0	2.0	47.0	3.5
P07762	AN 37/P02647	58	36.1	11.1	36.9	43.0	102.0	1.5	52.0	4.0
P07714	AN 37/P02647	16	36.1	66.7	33.9	41.0	93.0	1.5	48.0	3.0
P07794	AN 37/P02647	89	35.7	33.3	40.4	44.0	103.0	2.0	51.0	4.0

EXPERIMENT 7215 GENETIC WHITE MOLD, POP AP647(I02545/P02647)

PLANTING DATE 06/07/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	WHITE MOLD(%)	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
P07763	AN 37/P02647	59	35.6	27.8	42.5	42.5	94.5	2.0	49.5	4.5
P07728	AN 37/P02647	30	35.5	55.6	34.5	41.5	98.0	2.0	47.0	3.0
P07787	AN 37/P02647	82	35.5	22.2	39.0	42.5	99.5	2.0	49.0	4.5
I02545	AN 37	1	35.3	38.9	36.2	43.0	95.5	1.0	46.0	3.5
P07793	AN 37/P02647	88	35.2	27.8	36.9	42.0	94.5	1.0	46.5	4.0
P07724	AN 37/P02647	26	35.2	66.7	35.9	42.5	94.0	2.5	49.0	3.5
P07786	AN 37/P02647	81	35.1	55.6	35.2	42.5	94.0	1.5	46.5	3.5
P07715	AN 37/P02647	17	35.1	33.3	38.8	43.0	101.5	2.0	50.0	3.5
P07712	AN 37/P02647	14	35.1	27.8	38.2	42.5	102.0	2.5	44.5	3.0
P07800	AN 37/P02647	95	34.9	33.3	36.7	43.5	101.5	2.0	47.5	4.5
P07798	AN 37/P02647	93	34.7	16.7	36.6	47.0	104.0	2.0	52.0	4.0
P07773	AN 37/P02647	69	34.5	22.2	40.3	42.0	98.5	2.0	50.0	3.5
P07755	AN 37/P02647	51	34.2	50.0	32.5	46.0	103.5	1.5	53.0	3.0
P07711	AN 37/P02647	13	34.1	38.9	38.4	43.5	96.0	2.0	50.0	4.5
P07774	AN 37/P02647	70	34.1	11.1	34.1	47.0	105.5	2.0	53.5	3.5
P07744	AN 37/P02647	40	34.1	33.3	36.8	44.5	102.0	2.0	49.0	4.0
P07799	AN 37/P02647	94	33.9	44.5	35.5	44.0	104.0	3.0	48.5	3.0
P07779	AN 37/P02647	75	33.9	38.9	33.9	44.5	99.5	2.0	49.0	4.0
P07772	AN 37/P02647	68	33.9	55.6	37.7	42.0	95.5	1.5	49.0	4.0
P07707	AN 37/P02647	9	33.8	33.3	38.3	43.5	98.0	1.5	49.0	4.0
P07754	AN 37/P02647	50	33.8	77.8	30.8	42.0	93.0	1.5	45.0	2.5
P07778	AN 37/P02647	74	33.7	16.7	34.8	43.0	96.5	1.0	49.0	5.5
P07706	AN 37/P02647	8	33.6	11.1	35.7	47.0	104.0	2.5	53.0	3.5
P07771	AN 37/P02647	67	33.6	38.9	35.7	46.5	100.5	2.0	52.0	4.5
P07796	AN 37/P02647	91	33.5	44.5	34.3	41.5	94.5	1.0	47.0	4.0

EXPERIMENT 7215 GENETIC WHITE MOLD, POP AP647(I02545/P02647)

PLANTING DATE 06/07/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	WHITE MOLD(%)	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
P07750	AN 37/P02647	46	33.4	22.2	37.9	45.5	104.0	3.0	46.5	2.5
P07727	AN 37/P02647	29	33.3	55.6	33.9	42.5	97.5	1.5	48.0	3.0
P07720	AN 37/P02647	22	33.3	27.8	36.5	43.0	98.0	1.0	47.5	4.5
P07705	AN 37/P02647	7	33.3	33.3	32.4	42.0	95.0	1.5	46.0	4.0
P07709	AN 37/P02647	11	33.0	22.2	33.2	47.0	99.5	1.5	47.0	4.0
P07765	AN 37/P02647	61	33.0	38.9	33.1	43.0	98.0	2.0	48.5	4.0
P07801	AN 37/P02647	96	32.9	44.5	34.7	44.0	100.0	2.0	49.0	3.5
P07746	AN 37/P02647	42	32.8	44.5	38.5	41.5	97.0	1.0	50.0	4.0
P07716	AN 37/P02647	18	32.8	27.8	36.5	45.0	99.5	2.0	47.0	4.5
P07777	AN 37/P02647	73	32.7	33.3	39.2	44.0	99.0	1.5	53.0	4.5
P07776	AN 37/P02647	72	32.7	22.2	37.8	43.5	101.5	2.0	50.5	3.0
P07764	AN 37/P02647	60	32.7	77.8	31.0	42.5	95.5	3.0	45.5	3.0
P07725	AN 37/P02647	27	32.7	50.0	34.6	42.0	102.5	2.0	48.0	3.5
P07761	AN 37/P02647	57	32.2	50.0	35.0	42.0	94.5	1.5	44.5	3.5
P07726	AN 37/P02647	28	32.0	22.2	38.6	45.5	101.0	2.5	47.5	4.0
P07795	AN 37/P02647	90	32.0	55.6	34.8	43.0	103.5	3.5	43.5	2.0
P07722	AN 37/P02647	24	32.0	50.0	32.4	45.5	100.0	2.0	50.0	3.0
P07719	AN 37/P02647	21	31.9	38.9	26.3	42.0	98.0	2.5	45.0	3.5
P07759	AN 37/P02647	55	31.7	27.8	36.1	46.0	99.0	1.0	50.5	4.0
P07768	AN 37/P02647	64	31.6	72.3	31.5	42.5	92.5	1.0	47.0	2.5
P07702	AN 37/P02647	4	31.5	38.9	34.0	42.0	96.5	2.0	46.5	4.0
P07703	AN 37/P02647	5	31.4	44.5	35.7	43.0	94.0	1.0	47.5	4.5
P07723	AN 37/P02647	25	31.3	55.6	33.1	42.5	93.5	1.5	43.5	3.5
P07775	AN 37/P02647	71	31.2	44.5	38.7	44.0	94.0	2.0	47.0	3.5
P07753	AN 37/P02647	49	31.1	66.7	36.5	41.5	96.0	2.5	45.0	3.0

EXPERIMENT 7215 GENETIC WHITE MOLD, POP AP647(I02545/P02647)

PLANTING DATE 06/07/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	WHITE MOLD(%)	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
P07738	AN 37/P02647	37	31.1	77.8	33.7	41.5	93.5	3.0	41.5	2.5
P07701	AN 37/P02647	3	31.0	44.4	31.2	44.0	95.0	2.5	45.0	3.5
P07710	AN 37/P02647	12	30.9	61.1	27.1	42.0	93.0	1.0	46.0	3.0
P07752	AN 37/P02647	48	30.6	50.0	39.5	42.0	95.0	2.0	47.0	2.5
P07737	AN 37/P02647	36	30.6	38.9	34.1	43.5	94.5	2.0	49.0	3.5
P07791	AN 37/P02647	86	30.5	33.3	34.3	43.0	98.5	1.5	50.5	4.5
P07721	AN 37/P02647	23	30.2	33.4	32.5	47.0	102.0	2.0	53.5	4.0
P07749	AN 37/P02647	45	30.0	44.5	34.0	41.0	96.0	2.0	43.5	3.0
P07766	AN 37/P02647	62	30.0	38.9	31.8	42.0	94.5	2.0	48.0	4.0
P07743	AN 37/P02647	39	29.6	33.3	30.2	41.5	94.5	1.0	48.0	4.0
P07730	AN 37/P02647	31	29.4	38.9	35.6	47.0	97.5	2.5	47.0	3.5
P07760	AN 37/P02647	56	29.0	38.9	34.2	41.5	102.0	1.5	54.0	3.5
P07783	AN 37/P02647	78	28.8	16.7	37.6	46.5	104.0	2.5	50.0	3.5
P07790	AN 37/P02647	85	28.6	72.3	31.6	42.0	94.5	1.0	45.0	2.5
P07717	AN 37/P02647	19	28.5	38.9	33.5	42.0	95.0	2.0	47.5	4.5
P07758	AN 37/P02647	54	28.3	22.2	35.3	44.5	104.5	2.5	48.5	3.0
P07731	AN 37/P02647	32	28.0	38.9	32.8	42.0	93.5	1.5	44.5	3.5
P07784	AN 37/P02647	79	26.8	44.5	28.9	42.0	92.5	1.0	43.5	2.5
P07718	AN 37/P02647	20	26.4	55.6	36.2	45.0	104.0	2.0	54.0	3.0
P07781	AN 37/P02647	76	25.9	94.4	31.3	42.5	93.5	1.5	46.0	2.5
P07713	AN 37/P02647	15	25.6	44.4	28.4	43.5	101.0	2.5	48.0	3.0
AVERAGE OF PRECEDING 96 MEANS			33.6	40.4	35.5	43.4	98.1	1.8	48.4	3.7
LSD (P=.05)			7.7	33.5	4.8	1.9	4.5	1.0	3.6	1.6
LSD (P=.01)			10.1	43.5	6.2	2.5	5.9	1.3	4.7	2.1
COEFFICIENT OF VARIATION			11.5	41.5	6.7	2.2	2.3	26.7	3.7	21.7

EXPERIMENT 7216 GENETIC WHITE MOLD, POP AP630 (I02545/P02630)

PLANTING DATE 06/07/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	WHITE MOLD(%)	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
P07863	AN 37/P02630	57	46.0	11.1	42.3	43.0	103.0	2.0	52.0	4.5
P07806	AN 37/P02630	7	45.2	50.0	36.8	41.5	96.5	2.5	47.5	4.5
P07839	AN 37/P02630	35	43.1	33.3	35.0	42.5	98.5	1.5	48.5	4.0
P07894	AN 37/P02630	84	42.9	27.8	38.2	42.5	100.0	1.5	51.0	4.5
P07867	AN 37/P02630	60	42.3	44.5	33.1	44.0	98.0	1.5	49.5	4.0
P07904	AN 37/P02630	91	42.2	55.6	40.1	41.0	97.5	2.0	49.0	4.0
P07829	AN 37/P02630	26	42.1	72.3	33.8	41.0	92.5	2.0	46.0	3.0
P07826	AN 37/P02630	24	42.0	33.3	34.0	43.5	99.5	1.5	48.5	4.0
P07903	AN 37/P02630	90	41.9	27.8	37.4	42.5	100.5	2.5	48.5	4.0
P07842	AN 37/P02630	37	41.2	22.2	34.8	43.0	99.0	2.5	46.5	3.5
P07885	AN 37/P02630	77	41.2	77.8	33.4	45.5	97.0	3.0	46.5	3.5
P07845	AN 37/P02630	40	41.1	61.2	33.4	42.0	94.0	2.0	45.5	4.0
P07888	AN 37/P02630	80	40.9	50.0	40.3	42.0	95.0	2.0	48.5	4.0
P07830	AN 37/P02630	27	40.8	38.9	38.1	42.0	98.0	2.0	47.5	4.5
P07884	AN 37/P02630	76	40.5	50.0	39.8	43.0	101.5	3.0	46.5	2.5
P07815	AN 37/P02630	16	40.5	44.5	35.8	45.0	98.5	1.5	48.5	5.0
P07881	AN 37/P02630	73	40.4	44.5	38.2	42.5	96.5	2.0	50.5	4.5
P07855	AN 37/P02630	49	40.3	61.2	29.4	43.5	102.5	2.0	49.5	3.0
P07848	AN 37/P02630	43	40.3	33.4	40.0	42.0	102.5	2.5	51.0	3.0
P07833	AN 37/P02630	30	40.1	44.5	34.9	41.5	97.5	1.5	47.0	4.5
P07869	AN 37/P02630	62	40.0	61.1	36.6	42.5	98.0	2.0	45.5	3.5
P07856	AN 37/P02630	50	40.0	33.3	37.6	42.5	98.5	1.5	47.0	4.5
P07819	AN 37/P02630	19	39.9	55.6	43.5	43.0	97.0	2.0	49.0	4.0
P07844	AN 37/P02630	39	39.7	33.3	36.5	42.0	98.5	2.0	47.5	4.5
P07843	AN 37/P02630	38	39.6	83.4	37.6	42.5	95.5	3.0	42.5	3.0

EXPERIMENT 7216 GENETIC WHITE MOLD, POP AP630 (I02545/P02630)

PLANTING DATE 06/07/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	WHITE MOLD(%)	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
P07803	AN 37/P02630	4	39.6	22.2	41.9	43.0	102.0	2.0	50.0	4.5
P07882	AN 37/P02630	74	39.5	66.7	35.0	42.0	98.0	2.0	48.0	3.0
P07905	AN 37/P02630	92	39.4	66.7	35.3	41.0	94.0	2.0	46.0	4.0
P07876	AN 37/P02630	68	39.3	38.9	36.3	42.5	100.0	2.0	49.0	3.5
P07880	AN 37/P02630	72	39.3	55.6	36.6	45.0	95.0	1.5	48.0	4.0
P07853	AN 37/P02630	47	39.3	33.3	42.5	42.5	97.0	2.0	49.5	4.5
P07857	AN 37/P02630	51	38.8	77.8	37.3	44.0	94.0	3.0	44.0	3.5
P07902	AN 37/P02630	89	38.6	38.9	35.1	43.0	96.0	2.0	48.0	3.5
P07872	AN 37/P02630	65	38.6	77.8	38.2	41.5	94.5	1.5	45.0	3.0
P07838	AN 37/P02630	34	38.5	44.5	39.8	44.0	96.5	2.0	50.0	4.0
P07847	AN 37/P02630	42	38.5	27.8	39.9	43.5	101.5	2.0	48.0	4.5
P07832	AN 37/P02630	29	38.3	50.0	35.3	44.0	98.0	1.5	46.5	4.0
P07886	AN 37/P02630	78	38.2	44.5	32.8	41.5	95.5	1.5	47.0	4.0
P07899	AN 37/P02630	87	38.2	38.9	32.1	42.5	94.0	2.0	47.0	4.5
P07851	AN 37/P02630	46	38.2	83.4	31.9	44.5	98.0	2.0	47.5	3.0
P07860	AN 37/P02630	54	38.1	66.7	33.2	44.5	97.0	2.0	48.0	3.5
P07841	AN 37/P02630	36	38.1	38.9	34.5	44.0	103.0	2.5	49.0	3.5
P07858	AN 37/P02630	52	38.0	50.0	38.2	42.0	97.0	2.0	47.0	3.5
P07854	AN 37/P02630	48	38.0	77.8	34.0	42.0	92.5	2.0	44.5	3.0
P07820	AN 37/P02630	20	38.0	33.3	39.4	43.0	96.0	2.5	48.0	3.5
P07827	AN 37/P02630	25	38.0	50.0	34.6	44.5	93.5	2.0	47.5	4.5
P07890	AN 37/P02630	81	37.9	27.8	37.1	47.5	107.0	2.0	50.0	3.0
I02545	AN 37	1	37.8	55.6	35.3	42.5	97.0	1.5	46.0	3.5
P07878	AN 37/P02630	70	37.5	77.8	37.0	42.0	98.0	2.5	49.0	3.0
P07836	AN 37/P02630	33	37.4	66.7	35.1	44.0	93.0	2.0	46.5	3.5

EXPERIMENT 7216 GENETIC WHITE MOLD, POP AP630 (I02545/P02630)

PLANTING DATE 06/07/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	WHITE MOLD(%)	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
P07910	AN 37/P02630	96	37.3	33.3	44.9	44.0	104.5	2.0	52.5	3.5
P07868	AN 37/P02630	61	37.2	66.7	35.1	42.0	98.5	2.0	45.5	3.0
P07812	AN 37/P02630	13	37.2	72.3	38.5	42.0	96.0	2.5	42.5	3.0
P07897	AN 37/P02630	86	37.0	50.0	34.2	42.0	99.0	2.0	48.0	4.0
P07862	AN 37/P02630	56	36.8	72.3	34.0	42.0	94.5	2.5	46.0	3.0
P07907	AN 37/P02630	94	36.6	77.8	31.7	42.0	93.0	2.0	45.0	3.0
P07825	AN 37/P02630	23	36.6	66.7	36.1	42.5	95.0	1.5	49.0	3.0
P07811	AN 37/P02630	12	36.5	66.7	34.7	42.0	94.0	1.5	49.0	4.0
P07900	AN 37/P02630	88	36.5	72.3	35.2	43.5	100.0	2.5	47.0	3.5
P07892	AN 37/P02630	83	36.4	66.7	35.2	41.5	92.0	2.0	49.0	3.0
P07822	AN 37/P02630	21	36.3	38.9	37.2	41.5	98.0	1.5	48.0	3.5
P07802	AN 37/P02630	3	36.0	22.2	34.2	47.5	101.0	2.0	50.0	3.5
P07879	AN 37/P02630	71	35.8	72.3	34.4	45.0	98.0	3.0	47.5	3.5
P07807	AN 37/P02630	8	35.8	88.9	32.7	44.0	99.5	2.5	46.0	2.5
P07887	AN 37/P02630	79	35.6	61.1	36.5	41.0	94.5	1.5	47.0	4.0
P07883	AN 37/P02630	75	35.4	38.9	39.6	42.5	95.0	1.5	46.5	4.5
P07831	AN 37/P02630	28	35.4	44.5	33.1	42.0	95.5	1.5	45.5	3.5
P07818	AN 37/P02630	18	35.2	50.0	32.9	41.5	95.0	1.0	48.0	3.5
P07875	AN 37/P02630	67	34.7	44.5	33.4	42.0	93.5	1.5	46.5	4.0
P07805	AN 37/P02630	6	34.7	77.8	33.0	42.0	100.5	3.0	47.0	3.0
P07804	AN 37/P02630	5	34.6	66.7	31.4	41.5	95.5	1.5	44.5	3.0
P07895	AN 37/P02630	85	34.6	77.8	37.7	43.5	93.5	2.0	47.5	3.5
P07891	AN 37/P02630	82	34.5	27.8	39.7	42.5	101.0	1.5	50.5	4.5
P07874	AN 37/P02630	66	34.3	44.4	36.6	42.0	100.0	2.5	46.0	3.0
P07810	AN 37/P02630	11	34.3	61.2	34.1	42.5	99.0	2.0	46.5	3.0

EXPERIMENT 7216 GENETIC WHITE MOLD, POP AP630 (I02545/P02630)

PLANTING DATE 06/07/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	WHITE MOLD(%)	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
P07906	AN 37/P02630	93	34.2	50.0	39.9	45.0	110.0	3.0	46.5	2.5
P07870	AN 37/P02630	63	34.1	83.4	32.7	41.5	95.0	2.0	46.0	3.0
P07850	AN 37/P02630	45	34.0	55.6	36.7	43.0	97.5	2.0	48.0	3.5
P07823	AN 37/P02630	22	34.0	38.9	33.2	43.0	96.0	1.5	48.5	5.0
P07834	AN 37/P02630	31	33.9	77.8	35.2	45.5	96.0	1.5	48.0	3.0
P07865	AN 37/P02630	58	33.8	66.7	33.3	42.5	94.0	3.0	44.0	3.5
P07835	AN 37/P02630	32	33.6	50.0	37.4	42.5	97.5	2.0	44.5	3.0
P07814	AN 37/P02630	15	33.6	55.6	36.0	42.0	95.5	1.5	49.5	3.5
P07849	AN 37/P02630	44	33.2	50.0	35.3	45.0	99.5	2.5	46.5	3.0
P07908	AN 37/P02630	95	33.1	55.6	32.0	43.0	96.5	2.0	46.0	3.0
P07813	AN 37/P02630	14	33.0	33.3	41.0	45.5	102.0	2.0	51.0	3.5
P07846	AN 37/P02630	41	32.9	77.8	35.7	41.5	95.5	2.0	48.0	3.0
P02630	P99120/MATTERHORN	2	32.9	83.4	33.3	42.5	92.5	3.0	44.5	3.0
P07861	AN 37/P02630	55	32.8	61.1	31.8	43.0	93.0	2.0	47.0	4.0
P07816	AN 37/P02630	17	32.5	22.2	34.8	44.5	103.0	2.0	49.5	4.5
P07859	AN 37/P02630	53	31.8	33.3	36.6	47.5	106.5	3.0	52.0	2.5
P07871	AN 37/P02630	64	31.8	16.7	37.8	47.0	110.0	2.5	47.5	2.0
P07877	AN 37/P02630	69	31.8	66.7	31.4	41.0	94.5	1.5	45.5	2.5
P07866	AN 37/P02630	59	31.6	61.2	31.0	41.0	94.0	1.5	44.0	3.0
P07808	AN 37/P02630	9	29.5	72.3	36.3	43.5	96.5	2.5	45.5	2.5
P07809	AN 37/P02630	10	28.6	72.3	33.1	43.5	100.5	2.5	47.0	3.0
AVERAGE OF PRECEDING 96 MEANS			37.3	53.2	35.9	43.0	97.7	2.0	47.5	3.6
LSD (P=.05)			7.7	35.1	3.7	1.7	4.0	1.0	2.8	1.4
LSD (P=.01)			10.1	45.6	4.8	2.2	5.2	1.2	3.7	1.9
COEFFICIENT OF VARIATION			10.4	33.0	5.2	2.0	2.1	23.3	3.0	20.2

EXPERIMENT 7221 GENETIC WHITE MOLD, LINES FROM BOTH POPS AP630 & AP647

PLANTING DATE 06/08/07

ENTRY	NAMES	NO.	YIELD CWT /ACRE	WHITE MOLD(%)	100 SEED WT.	DAYS TO FLOWER	DAYS TO MATURITY	LODGING	HEIGHT	DES. SCORE
P07740	AN 37/P02647	4	43.8	50.0	42.4	42.0	95.5	2.0	48.0	4.5
P07893	AN 37/P02630	16	39.2	33.3	38.4	42.0	98.0	2.5	49.5	4.0
P07840	AN 37/P02630	11	38.4	27.8	35.5	43.5	102.0	2.5	48.5	3.5
P07901	AN 37/P02630	19	38.2	27.8	37.8	47.0	103.5	2.0	49.0	3.5
P07864	AN 37/P02630	13	38.1	27.8	38.2	48.0	110.0	3.0	46.5	2.0
P07896	AN 37/P02630	17	38.1	16.7	43.3	42.5	101.5	1.5	50.5	5.0
P07909	AN 37/P02630	20	35.7	22.2	32.3	41.5	97.0	1.5	48.0	4.5
P07889	AN 37/P02630	15	35.5	61.2	39.3	41.5	97.0	1.0	50.0	3.0
P07821	AN 37/P02630	7	35.0	50.0	36.5	42.0	96.0	1.0	47.5	4.5
P07873	AN 37/P02630	14	34.9	83.4	38.9	41.5	96.0	2.5	48.0	3.0
P07837	AN 37/P02630	10	34.8	83.4	34.7	43.0	93.0	3.0	43.0	3.0
P07852	AN 37/P02630	12	34.6	16.7	44.1	42.0	104.5	2.0	49.5	4.5
I02545	AN 37	23	34.2	55.6	34.5	40.5	95.5	2.0	47.5	3.5
P02647	G99750/P97803	22	33.8	33.3	41.1	41.5	96.5	2.0	48.5	5.0
P07824	AN 37/P02630	8	33.2	66.7	40.1	42.5	96.0	2.0	49.0	3.5
P02630	P99120/MATTERHORN	21	32.2	50.0	36.0	42.5	93.5	2.0	43.5	3.0
P07741	AN 37/P02647	5	32.0	44.5	38.0	41.5	96.0	1.5	49.5	3.5
P07780	AN 37/P02647	3	30.9	61.2	37.2	41.0	93.0	2.0	46.0	3.0
P04204	P99119/G99750	24	30.7	55.6	35.0	43.0	97.5	1.5	49.0	3.0
P07739	AN 37/P02647	2	30.5	44.5	36.3	40.5	97.0	1.0	48.0	4.0
P07736	AN 37/P02647	1	29.5	61.2	31.5	41.5	95.0	2.0	49.0	3.0
P07898	AN 37/P02630	18	28.8	55.6	32.6	41.0	94.0	1.5	45.0	3.0
P07828	AN 37/P02630	9	28.7	50.0	30.8	43.5	95.0	2.0	45.5	3.5
P07817	AN 37/P02630	6	26.2	72.3	27.2	41.0	93.0	1.0	44.0	3.0
AVERAGE OF PRECEDING 24 MEANS			34.0	47.9	36.7	42.4	97.3	1.9	47.6	3.6
LSD (P=.05)			8.4	30.6	3.5	1.7	3.1	1.0	1.8	1.3
LSD (P=.01)			11.0	39.8	4.5	2.2	4.0	1.3	2.3	1.6
COEFFICIENT OF VARIATION			12.4	31.9	4.7	2.0	1.6	26.5	1.9	17.5

EXPERIMENTS 7817A & 7818A-ORGANIC & CONVENTIONAL TRIALS SMALL SEED - KBS.			PLANTING DATE 05/30/07					
ENTRY	NAMES	NO.	ORGANIC	CONVENT	DIFFERENCE	ORGANIC	CONVENT	DIFFERENCE
			YIELD CWT /ACRE	YIELD CWT /ACRE	YIELD CWT /ACRE	100 SEED WT.	100 SEED WT.	100 SEED WT.
N05311	N03611/B01749	8	22.0	22.2	-0.2	19.9	18.7	1.2
N97774	BUNSI/HURON, SEAHAWK	7	21.7	22.6	-0.9	22.7	22.0	0.7
B04431	I01892/JAGUAR	15	21.2	23.7	-2.5	23.2	23.0	0.2
B04554	B00103 // B00103 / X00822	16	20.6	22.6	-2.0	22.4	21.8	0.6
I92002	C-20*6/CN49-242 NAVY GENTEC, VISTA	6	20.5	22.6	-2.1	19.4	20.9	-1.5
I07112	R99 - NON -NODULATING NAVY	2	20.2	16.4	3.8	18.4	16.2	2.2
N05324	N00838/N00809//N00792	4	19.2	25.3	-6.1	21.5	20.2	1.3
I81066	SEL-BTS, T39	14	18.8	19.2	-0.4	19.8	21.4	-1.6
I01892	G24423/2*TACANA, 115-11M	13	17.4	18.1	-0.7	20.5	21.0	-0.5
B05055	34-27/JAGUAR*2/SEL 1308//HR45/KABOON	11	17.1	21.8	-4.7	20.1	21.7	-1.6
N61001	MIC62, MICHELITE	5	16.9	21.2	-4.3	19.7	20.6	-0.9
I81010	JAPON3/MAGDALENE, BUNSI	3	16.7	16.3	0.4	20.0	19.3	0.7
B00101	PHANTOM/BLACKJACK, CONDOR	10	16.3	17.9	-1.6	20.8	22.2	-1.4
B95556	B90211/N90616, JAGUAR	9	16.3	16.7	-0.4	19.0	20.1	-1.1
B05039	35-5/JAGUAR*2/SEL 1308//HR45/KABOON	12	16.1	24.8	-8.7	22.5	23.3	-0.8
I07111	R69 INEFFECTIVE NODULATION NAVY	1	5.3	14.1	-8.8	15.5	14.6	0.9
AVERAGE OF PRECEDING 16 MEANS			17.9	20.4	-2.5	20.3	20.4	-0.1
LSD (P=.05)			4.7	5.2		1.7	0.8	
LSD (P=.01)			6.1	6.8		2.2	1.0	
COEFFICIENT OF VARIATION			18.6	18.0		6.0	2.7	

EXPERIMENTS 7919A & 7920A-ORGANIC & CONVENTIONAL TRIALS SMALL SEED - GRATIOT CO.						PLANTING DATE 06/12/07					
ENTRY	NAMES	NO.	ORGANIC	CONVENT	DIFFERENCE	ORGANIC	CONVENT	ORGANIC	CONVENT	ORGANIC	CONVENT
			YIELD CWT /ACRE	YIELD CWT /ACRE	YIELD	100 SEED WT.	100 SEED WT.	DAYS TO FLOWER	DAYS TO FLOWER	HEIGHT CM.	HEIGHT CM.
B05039	35-5/JAGUAR*2/SEL 1308//HR45/KABOON	12	19.5	17.5	+2.0	22.8	23.1	45.0	45.3	34.8	35.2
I01892	G24423/2*TACANA,115-11M	13	19.2	17.4	1.8	19.9	22.7	46.5	47.5	38.9	42.0
N05311	N03611/B01749	8	19.0	17.3	1.7	18.0	19.9	47.5	47.3	36.4	38.2
B00101	PHANTOM/BLACKJACK, CONDOR	10	18.9	17.2	1.7	20.6	19.9	47.0	48.3	37.9	39.0
I92002	C-20*6/CN49-242 NAVY GENTEC, VISTA	6	18.8	14.1	4.7	19.4	20.5	45.0	44.8	36.9	33.4
B95556	B90211/N90616, JAGUAR	9	18.3	12.2	6.1	18.9	20.0	46.8	48.8	36.8	31.5
B04554	B00103 // B00103 / X00822	16	17.7	18.5	-0.8	20.4	22.6	47.3	47.0	33.8	40.8
B05055	34-27/JAGUAR*2/SEL 1308//HR45/KABOON	11	17.5	17.3	0.2	20.6	20.1	46.3	45.8	32.6	32.3
N05324	N00838/N00809//N00792	4	16.8	15.6	1.2	19.3	19.6	44.8	45.0	36.4	35.5
B04431	I01892/JAGUAR	15	16.8	17.0	-0.2	21.8	23.3	47.0	48.5	36.9	41.3
I81066	SEL-BTS, T39	14	16.3	16.9	-0.6	20.5	20.2	45.5	46.5	38.1	38.0
I81010	JAPON3/MAGDALENE, BUNSI	3	14.9	13.5	1.4	19.0	17.0	41.8	40.5	32.1	31.7
N97774	BUNSI/HURON, SEAHAWK	7	14.6	14.7	-0.1	20.8	20.5	40.8	41.0	35.3	30.7
N61001	MIC62, MICHELITE	5	12.8	14.3	-1.5	19.6	21.1	46.0	46.5	35.7	41.5
I07112	R99 - NON -NODULATING NAVY	2	10.6	14.2	-3.6	15.1	17.4	42.5	43.8	35.4	34.5
I07111	R69 INEFFECTIVE NODULATION NAVY	1	4.8	10.3	-5.5	13.1	17.8	43.8	43.8	31.1	37.0
AVERAGE OF PRECEDING 16 MEANS			16.0	15.5	+0.5	19.4	20.3	45.2	45.6	35.6	36.4
LSD (P=.05)			4.0	3.5		1.1	1.6	2.5	2.6	9.1	5.4
LSD (P=.01)			5.2	4.6		1.5	2.0	3.2	3.3	11.8	7.0
COEFFICIENT OF VARIATION			17.5	16.0		4.1	5.4	3.9	4.0	18.1	10.5

EXPERIMENTS 7817B 7818B-ORGANIC & COVENTIONAL TRIAL MED & LG SEED KBS.			PLANTING DATE 05/30/07					
ENTRY	NAMES	NO.	ORGANIC	CONVENT	DIFFERENCE	ORGANIC	CONVENT	DIFFERENCE
			YIELD CWT /ACRE	YIELD CWT /ACRE	YIELD CWT /ACRE	100 SEED WT.	100 SEED WT.	100 SEED WT.
P06131	P02646/P02630	4	17.0	9.4	7.6	35.8	35.3	0.5
I99117	ASG85-5051-7, BUSTER	2	16.8	23.4	-6.6	26.8	39.4	-12.6
G93414	MATTERHORN	5	16.0	9.2	6.8	37.1	35.3	1.8
R98026	R94037/R94161, MERLOT	7	15.9	19.1	-3.2	35.3	39.4	-4.1
I05101	USDK-CBB-15	10	15.5	12.8	2.7	49.4	48.9	0.5
I84002	NW410//VICTOR/AURORA,USDA-WA, OTHELLO	1	15.1	9.9	5.2	33.8	36.9	-3.1
S00809	R94142/X94076, SEDONA	6	14.4	16.2	-1.8	33.1	39.1	-6.0
K90101	CHAR/2*MONT, RED HAWK	12	14.3	12.7	1.6	48.3	46.0	2.3
K03601	CN49242/3*MONT//REDKLOUD, CHINOOK SELECT	15	14.1	13.1	1.0	50.4	45.6	4.8
P04205	P99119/G99750	3	13.6	12.7	0.9	35.9	37.6	-1.7
K90902	BEA/50B1807//LASSEN, BELUGA	16	13.1	15.5	-2.4	49.7	46.4	3.3
C99833	CARDINAL/K94803, CAPRI	8	12.9	10.4	2.5	52.4	48.4	4.0
K74002	MDRK/CN(3)-HBR(NEB#1), MONTCALM	11	12.2	13.0	-0.8	50.9	48.3	2.6
I90013	(LRK)UCD, CELRK	13	11.5	11.2	0.3	48.6	44.2	4.4
K03240	REDHAWK 2*\NEGRO SAN LUIS-140	9	11.4	13.3	-1.9	48.4	44.5	3.9
K05604	K00604/X02151	14	10.6	12.8	-2.2	49.5	44.1	5.4
AVERAGE OF PRECEDING 16 MEANS			14.0	13.4	0.6	42.8	39.2	3.6
LSD (P=.05)			4.9	4.4		6.0	3.0	
LSD (P=.01)			6.4	5.8		7.8	3.9	
COEFFICIENT OF VARIATION			24.8	23.4		10.0	5.5	

EXPERIMENTS 7919B 7920B-ORGANIC & COVENTIONAL TRIAL MED & LG SEED GRATIOT CO.		PLANTING DATE 06/12/07									
ENTRY	NAMES	NO.	ORGANIC	CONVENT	DIFFERENCE	ORGANIC	CONVENT	ORGANIC	CONVENT	ORGANIC	CONVENT
			YIELD CWT /ACRE	YIELD CWT /ACRE	YIELD	100 SEED WT.	100 SEED WT.	DAYS TO FLOWER	DAYS TO FLOWER	HEIGHT CM	HEIGHT CM
S00809	R94142/X94076, SEDONA	6	21.7	20.2	+1.5	37.3	33.7	43.8	43.2	44.9	42.3
R98026	R94037/R94161, MERLOT	7	20.6	22.2	-2.4	37.3	36.6	45.4	44.2	48.1	45.0
P06131	P02646/P02630	4	20.4	24.5	-4.1	37.4	37.2	43.2	42.1	42.5	41.0
I99117	ASG85-5051-7, BUSTER	2	19.4	22.3	-2.9	35.1	32.4	41.7	40.8	40.7	39.5
I84002	NW410//VICTOR/AURORA,GH215, OTHELLO	1	18.7	23.5	-4.8	33.7	36.5	38.2	39.1	39.4	40.3
P04205	P99119/G99750	3	17.4	20.7	-3.4	36.5	38.3	43.5	41.4	39.4	39.3
I05101	USDK-CBB-15	10	16.3	14.8	1.5	44.3	43.0	42.0	40.9	36.2	36.5
G93414	MATTERHORN	5	15.7	21.6	-5.9	30.9	31.8	42.2	43.0	36.0	36.5
K03601	CN49242/3*MONT//REDKLOUD, CHINOOK SELEC	15	14.8	12.7	2.1	43.9	44.1	40.0	40.0	45.2	40.3
C99833	CARDINAL/K94803, CAPRI	8	12.0	19.2	-7.2	43.5	47.3	36.8	36.7	36.4	39.0
K05604	K00604/X02151	14	11.5	13.7	-2.2	40.3	42.5	41.1	39.9	42.7	46.3
K74002	MDRK/CN(3)-HBR(NEB#1), MONTCALM	11	10.8	12.1	-1.3	43.4	43.2	40.5	40.6	42.7	44.8
K90902	BEA/50B1807//LASSEN, BELUGA	16	10.5	8.1	2.4	42.6	45.4	41.7	41.5	41.7	39.3
K90101	CHAR/2*MONT, RED HAWK	12	10.0	11.3	1.3	37.9	39.8	39.1	40.1	39.7	45.3
K03240	REDHAWK 2*NEGRO SAN LUIS-140	9	9.6	8.9	0.7	38.3	38.5	38.7	39.1	42.6	43.8
I90013	(LRK)UCD, CELRK	13	7.1	6.9	0.2	37.4	36.3	35.5	36.5	36.7	38.0
AVERAGE OF PRECEDING 16 MEANS			14.8	16.4	-1.6	38.7	39.2	40.8	40.6	40.9	41.0
LSD (P=.05)			4.3	4.7		2.7	3.0	1.8	1.5	6.7	4.8
LSD (P=.01)			5.5	6.1		3.5	3.9	2.3	1.9	8.8	6.2
COEFFICIENT OF VARIATION			20.3	20.3		4.9	5.5	3.1	2.6	11.7	8.2