

New Mexico 2010 Corn and Sorghum Performance Tests



Agricultural Experiment Station
Cooperative Extension Service
College of Agricultural, Consumer and Environmental Sciences

**New Mexico
2010
Corn and Sorghum Performance Tests**

New Mexico State University
Agricultural Science Centers
at
Artesia, Clovis, Farmington, Los Lunas and Tucumcari

Department of Extension Plant Sciences

and

Department of Plant and Environmental Sciences

Agricultural Experiment Station/Cooperative Extension Service
College of Agricultural, Consumer and Environmental Sciences
New Mexico State University

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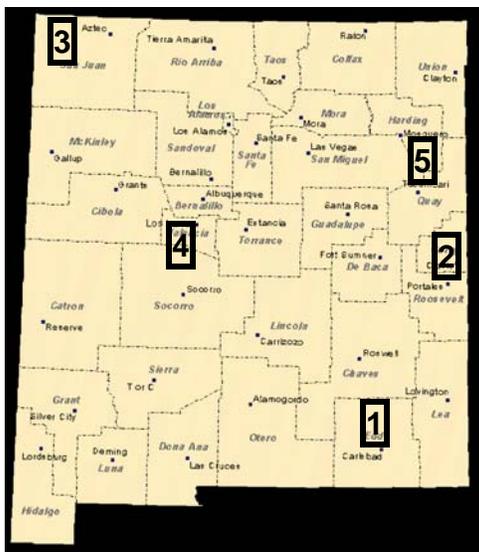
New Mexico 2010 Corn and Sorghum Performance Tests

INTRODUCTION

Performance tests for grain corn, grain sorghum, forage corn, forage sorghum and sorghum sudangrass were conducted at the Agricultural Science Centers at Artesia, Clovis, Farmington, and Los Lunas New Mexico in 2010 (Figure 1). This report contains information from all Agricultural Science Center corn and sorghum tests.

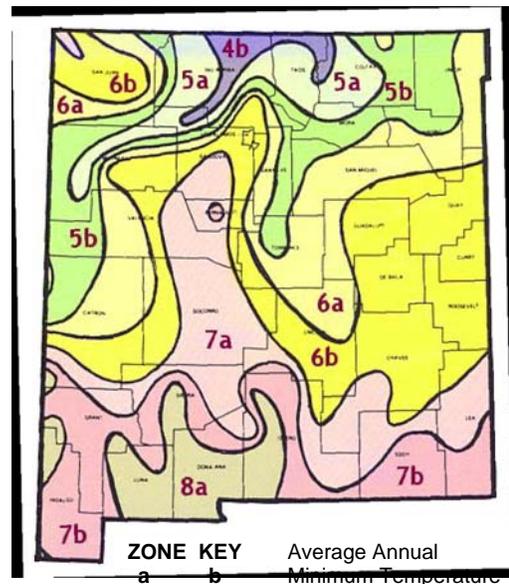
The New Mexico corn and sorghum performance testing program is part of an ongoing program to provide farmers, Extension workers and seed industry personnel with reliable, unbiased, information that will allow a valid comparison of corn and sorghum varieties/hybrids at various locations throughout the state. The state of New Mexico encompasses eight climate zones, all of which have some form of agricultural production (Figure 2). Variability in climate, soils, water and local production practices contribute to the need for crop performance tests throughout the state. Climate data for the Agricultural Science Center testing locations are shown in Table 1. Growers who use this report to make cropping decisions should rely primarily on results from tests near their location or in comparable climate zones.

Figure 1. Corn and sorghum testing locations.



1. Agricultural Science Center at Artesia
2. Agricultural Science Center at Clovis
3. Agricultural Science Center at Farmington
4. Agricultural Science Center at Los Lunas
5. Agricultural Science Center at Tucumcari

Figure 2. Climate zones in New Mexico.



- | | | |
|---|--|--------------------------|
| 4 | | -25 to 20F |
| 5 | | -20 to -15 / -15 to -10F |
| 6 | | -10 to -5 / -5 to 0F |
| 7 | | 0 to -5 / -5 to 10F |
| 8 | | 10 to 15F |

Table 1. Historical average monthly precipitation (inches) and temperatures (°F) for cooperating agricultural science centers.

	Artesia	Clovis	Farmington	Los Lunas	Tucumcari
Precipitation (inches)					
January	0.39	0.36	0.54	0.36	0.37
February	0.43	0.39	0.58	0.42	0.47
March	0.43	0.75	0.74	0.51	0.76
April	0.63	0.83	0.64	0.46	1.12
May	1.22	1.95	0.56	0.48	1.98
June	1.42	2.42	0.21	0.63	1.89
July	1.76	2.83	0.87	1.26	2.65
August	1.70	3.07	1.12	1.72	2.72
September	1.80	1.85	1.03	1.18	1.52
October	1.18	1.68	0.91	10.70	1.30
November	0.54	0.53	0.74	0.47	0.67
December	0.50	0.49	0.48	0.50	0.57
Total	12.00	17.14	8.42	9.06	16.02
Average Temperature (°F)					
January	40.5	37.9	30.5	34.6	38.3
February	45.0	41.5	36.2	40.1	42.1
March	51.9	47.8	43.6	46.9	49.0
April	60.3	56.1	51.0	54.6	57.5
May	69.4	64.8	60.3	63.3	66.2
June	77.6	73.7	70.0	72.2	75.6
July	79.8	76.4	75.6	76.7	79.0
August	78.3	74.7	73.0	74.6	77.3
September	71.4	68.5	65.8	67.3	70.6
October	60.7	58.3	53.6	55.7	59.5
November	48.9	46.3	40.9	43.6	47.5
December	40.7	38.9	31.1	35.0	39.1
Average	60.4	57.1	52.6	55.4	58.4

Source: Western Region Climate Center: <http://www.wrcc.dri.edu/summary/climsmnm.html>

TEST LOCATIONS

The New Mexico corn and sorghum performance testing program is supported by paid fees from the cooperating companies. Personnel at each location determine which tests will be conducted at their site and seed companies are invited to participate in those tests. Because seed company participation in individual tests and locations is voluntary, many of the hybrids/varieties that are grown in the state are not included in the tests, and different groups of hybrids/varieties are evaluated at the different locations.

A list of seed companies that participated in the 2010 fee-test program and relevant contact information are presented in Appendix A. Additional company names and contacts may be added to the list of prospective companies by contacting the Agricultural Science Center at Clovis, 2346 State Road 288, Clovis, NM 88101, (575) 985-2292, [http://clovisssc@nmsu.edu](mailto:clovisssc@nmsu.edu). Entry forms for the 2011 Corn and Sorghum Performance Tests will be mailed to seed companies in February 2011. Additional 2011 entry forms can be obtained from the address above.

TEST PROCEDURES

In an effort to provide readers with easily accessible information, procedural data for individual tests are presented in the 'Test Description' tables that immediately precede the summary tables of results for the tests. The 'Test Description' tables contain information on location, test design, management practices and growing conditions. Test description tables are designated with an 'A' suffix.

All of the Agricultural Science Center performance tests were replicated randomized complete block designs (RBD). Where appropriate, statistical analyses were used to calculate measures of least significant difference (LSD), coefficient of variability (CV) and F test values. All LSD's are reported at the 95% probability level. For the LSD value to be considered significant, the F test value in that same column must be less than 0.05. If the F test value is greater than 0.05 the LSD is non-significant at the 95% probability level. When the F test value is less than 0.05, it is appropriate to use the LSD value as a measure of the magnitude by which one entry must differ from another to be considered significantly different. The CV is a measure of variability relative to the mean. A CV below 10% generally indicates reliable, uniform data. CV's of 10 to 20% are indicators of normal variability for grain and forage tests.

Yields for the grain tests are presented on a bushel-per-acre or pound-per-acre basis, adjusted to a standard moisture content and bushel weight. Corn yields are calculated at a standard moisture of 15.5% and a bushel weight of 56 lb. Grain sorghum yields are calculated at a standard moisture of 14% and a bushel weight of 56 lb.

Dry and green (fresh) forage yields reported for the forage tests are in tons per acre. Moisture at harvest was calculated from a representative sample (approximately 1 lb.) from harvested plots. Samples from variety tests at the Agricultural Science Centers were dried in a forced air oven (150°F) for determination of moisture content. Moisture content determinations at Farmington were derived from air-dried samples. Sub-samples of the dried material from all locations were submitted to the University of Wisconsin, Soil and Forage Analysis Laboratory, Marshfield, WI (or other certified

forage testing laboratory) for nutrient composition analysis using near infrared reflectance spectroscopy (NIRS). For these trials, milk production estimates were calculated using the University of Wisconsin Milk2000 and Milk2006 spreadsheet programs.

RESULTS

Results for the 2010 corn and sorghum hybrid/variety tests are shown in Tables 2-14. Results are presented in tables designated with 'B' or 'C' suffixes. Within tables, hybrids and varieties are ranked according to grain yield or total dry forage yield. A glossary of terms used in the tables is presented in Appendix B.

Grain Corn

Entries for grain corn tests were accepted by the Agricultural Science Centers at Clovis, Farmington and Los Lunas.

The Clovis grain corn test contained 14 entries. Mean grain yield was 231 bu/ac and significant yield differences among varieties were observed (Table 2A-B). Test weights averaged 54 lb/bu for the test.

Two grain corn tests were conducted at Farmington. The early season grain corn test contained 8 entries. Mean grain yield was 253 bu/ac and yields were different. (Table 3A-B). Farmington's full-season grain corn test consisted of 3 entries. Mean grain yield was 259 bu/ac and yield differences among hybrids were non-significant (Table 4A-B).

The grain corn test at Los Lunas contained 3 hybrids, which produced a mean grain yield of 285 bu/ac (Table 5A-B). There were no statistical yield differences for grain corn entries at Los Lunas.

Grain Sorghum

A dryland grain sorghum test was conducted at the Clovis science center in 2010. There were no irrigated grain sorghum trials in New Mexico in 2010. It should be noted that the dryland test at Clovis was irrigated once after planting in order to aid in establishment. The researchers recognize that this is not a true 'dryland' representation, but also recognize that no data would be collected if the test did not establish due to drought after planting. A one-time irrigation after planting was deemed more logical than a complete crop disaster yielding no information. Several entries included in the dryland test were part of a larger, regional testing program conducted by Texas A&M in which the Clovis center participates. Although yield results are reported, company contact information and variety characteristics of these entries are not included in this report.

The dryland grain sorghum test contained 25 entries; mean test yield was 88 bu/A (4913 lb/A) and yields ranged from 70 to 107 bu/A (Tables 6A-B). Excellent in-season precipitation, previously fallowed ground, and adequate N fertility contributed to high yields.

Forage Corn

Forage corn tests were conducted at the Agricultural Science Centers at Artesia, Clovis, Farmington and Los Lunas. The Artesia forage corn test consisted of 16 entries. Mean dry forage yield was 7.8 ton/ac and yield and forage quality differences were observed (Table 7A-B).

There were 23 entries in the Clovis forage corn test. Mean dry forage yield was 10.4 ton/A and wet yields averaged 22.6 ton/A (Table 8A-B). In 2010, fertilizer, seed and irrigation inputs were reduced in the Clovis trial. This was done in response to the ever-increasing pressures of regional water issues, specifically declining well capacities. Researchers at Clovis feel that it is prudent to test new hybrid performance under such limiting conditions. Hybrids differed in all yield and nutrient composition parameters.

Three hybrids were evaluated in the Farmington forage corn test. Dry forage yield averaged 13.5 ton/ac and yields were similar among hybrids (Table 9A-B). Differences were not observed for any measures of nutrient composition or yield.

The Los Lunas forage corn test was comprised of 5 hybrids. Mean dry forage and green forage yields were 8.5 and 29.8 ton/ac, respectively. Differences existed for dry and green forage yield, harvest moisture, and NDFD-48 components (Table 10A-B).

Forage Sorghum

Entries for irrigated forage sorghum evaluations were accepted at the Agricultural Science Centers at Artesia and Clovis. There were 6 entries in the irrigated forage sorghum test at Artesia. Mean dry forage yield was 6.7 ton/ac and green forage yield averaged 28.2 ton/ac (Table 11A-B). Forage yields and quality estimates were different among the entries.

At Clovis, there were 9 entries in the irrigated forage sorghum test. Mean forage yields were 7.4 and 19.1 ton/ac for dry and green yields, respectively, and differences were observed for yield and nutritive parameters (Table 12A-B). A separate dryland forage sorghum trial including the same 9 entries was conducted at Clovis; and one cutting was obtained. Total dry forage yield was good and averaged 5.7 ton/ac for the year (Table 13A-B). Large amounts of in-season rainfall contributed to the high dryland yields.

Sorghum Sudangrass

Entries for sorghum sudangrass tests were accepted by the Agricultural Science Centers at Artesia. All plots were harvested twice. There were 9 entries in the test. Plots were harvested on August 3 and October 5, and mean dry forage yields were 4.5 and 4.1 ton/ac for first and second harvests, respectively (Table 14A-C). All yield and forage quality differences among the hybrids were significant for both harvests.

Table 2A. New Mexico 2010 Grain Corn Performance Test - Agricultural Science Center at Clovis

Investigators: R.E. Kirksey, M.A. Marsalis, A. Scott, and B. Niece

Test Description

Location:	Management Practices:	Growing Conditions:																																																																																																																					
County/Area: Curry Longitude: -103.22 Latitude: 34.60 Elevation: 4435 ft. Soil Name: Olton Soil Texture: clay loam Soil Depth: >60 in.	Previous Crop: fallow Planting Date: 28-Apr Harvest Date: 1-Nov Production Inputs <hr/> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Rate</th> <th style="text-align: center;">Date</th> </tr> </thead> <tbody> <tr> <td colspan="3">Fertilizer:</td> </tr> <tr> <td>Nitrogen</td> <td>11 lb/a</td> <td>carryover</td> </tr> <tr> <td>Nitrogen</td> <td>230 lb/a</td> <td>9-Apr</td> </tr> <tr> <td>P₂O₅</td> <td>55 lb/a</td> <td>9-Apr</td> </tr> <tr> <td>S</td> <td>39 lb/a</td> <td>9-Apr</td> </tr> <tr> <td>Zn</td> <td>1 lb/a</td> <td>9-Apr</td> </tr> <tr> <td colspan="3">Herbicides:</td> </tr> <tr> <td>Bicep Lite II Mag</td> <td>3 pt/a</td> <td>28-Apr</td> </tr> <tr> <td>Dual II Mag</td> <td>1 pt/a</td> <td>14-Jun</td> </tr> <tr> <td>Status</td> <td>5 oz/a</td> <td>14-Jun</td> </tr> <tr> <td colspan="3">Insecticides:</td> </tr> <tr> <td>Onager</td> <td>10 oz/ac</td> <td>14-Jun</td> </tr> <tr> <td>Intrepid 2F</td> <td>8 oz/ac</td> <td>1-Aug</td> </tr> <tr> <td>Oberon 4 SC</td> <td>6 oz/ac</td> <td>1-Aug</td> </tr> </tbody> </table>		Rate	Date	Fertilizer:			Nitrogen	11 lb/a	carryover	Nitrogen	230 lb/a	9-Apr	P ₂ O ₅	55 lb/a	9-Apr	S	39 lb/a	9-Apr	Zn	1 lb/a	9-Apr	Herbicides:			Bicep Lite II Mag	3 pt/a	28-Apr	Dual II Mag	1 pt/a	14-Jun	Status	5 oz/a	14-Jun	Insecticides:			Onager	10 oz/ac	14-Jun	Intrepid 2F	8 oz/ac	1-Aug	Oberon 4 SC	6 oz/ac	1-Aug	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Average Temp. °F</th> <th style="text-align: center;">Precip. in.</th> <th style="text-align: center;">Irrigation in.</th> </tr> </thead> <tbody> <tr><td>January</td><td style="text-align: center;">36.6</td><td></td><td></td></tr> <tr><td>February</td><td style="text-align: center;">34.9</td><td></td><td></td></tr> <tr><td>March</td><td style="text-align: center;">46.1</td><td></td><td></td></tr> <tr><td>April</td><td style="text-align: center;">56.3</td><td style="text-align: center;">1.56</td><td style="text-align: center;">0.60</td></tr> <tr><td>May</td><td style="text-align: center;">63.0</td><td style="text-align: center;">2.34</td><td style="text-align: center;">1.00</td></tr> <tr><td>June</td><td style="text-align: center;">77.8</td><td style="text-align: center;">2.98</td><td style="text-align: center;">4.25</td></tr> <tr><td>July</td><td style="text-align: center;">76.0</td><td style="text-align: center;">2.30</td><td style="text-align: center;">4.60</td></tr> <tr><td>August</td><td style="text-align: center;">77.0</td><td style="text-align: center;">6.83</td><td style="text-align: center;">1.40</td></tr> <tr><td>September</td><td style="text-align: center;">73.0</td><td style="text-align: center;">1.41</td><td style="text-align: center;">1.25</td></tr> <tr><td>October</td><td style="text-align: center;">59.5</td><td style="text-align: center;">0.87</td><td></td></tr> <tr><td>November</td><td></td><td></td><td></td></tr> <tr><td>December</td><td></td><td></td><td></td></tr> <tr> <td colspan="2" style="text-align: right;">Seasonal Precipitation:</td> <td colspan="2" style="text-align: center;">18.3 in.</td> </tr> <tr> <td colspan="2" style="text-align: right;">Total Irrigation:</td> <td colspan="2" style="text-align: center;">13.1 in.</td> </tr> <tr> <td colspan="2" style="text-align: right;">Date of Last Spring Frost:</td> <td colspan="2" style="text-align: center;">9-Apr</td> </tr> <tr> <td colspan="2" style="text-align: right;">Date of First Fall Frost:</td> <td colspan="2" style="text-align: center;">28-Oct</td> </tr> <tr> <td colspan="2" style="text-align: right;">Frost Free Period:</td> <td colspan="2" style="text-align: center;">202 days</td> </tr> </tbody> </table>		Average Temp. °F	Precip. in.	Irrigation in.	January	36.6			February	34.9			March	46.1			April	56.3	1.56	0.60	May	63.0	2.34	1.00	June	77.8	2.98	4.25	July	76.0	2.30	4.60	August	77.0	6.83	1.40	September	73.0	1.41	1.25	October	59.5	0.87		November				December				Seasonal Precipitation:		18.3 in.		Total Irrigation:		13.1 in.		Date of Last Spring Frost:		9-Apr		Date of First Fall Frost:		28-Oct		Frost Free Period:		202 days	
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Test Design: Replications: 4 Plot Length: 20 ft. Rows per Plot: 2 Row Spacing: 30 in. Seeding Rate: 27000 seed/a																																																																																																																							

Table 2B. New Mexico 2010 Grain Corn Performance Test - Agricultural Science Center at Clovis

Results

Brand/Company Name	Hybrid/Variety Name	Grain Yield bu/a	Moisture	Test Weight lb/bu	Plant Height in	Ear Height in	Silk Date
			at Harvest %				
Monsanto Co.	Dekalb DKC64-69	269.2	11.6	54.3	103.3	45.7	14-Jul
Dyna Gro Seeds	CX 9218	251.9	11.2	53.1	103.0	44.6	17-Jul
Monsanto Co.	Dekalb DKC66-96	251.6	11.3	53.7	104.6	39.6	16-Jul
Warner Seeds, Inc.	W 4777	239.9	11.5	53.5	106.3	43.4	14-Jul
Dyna Gro Seeds	CX 10115	235.8	11.3	53.7	100.9	39.9	14-Jul
Dyna Gro Seeds	CX 10617	224.6	12.1	54.6	107.4	41.5	17-Jul
Warner Seeds, Inc.	W 4744	224.4	10.6	51.8	101.0	46.8	18-Jul
Dyna Gro Seeds	DG 56VP69	224.4	12.1	54.5	107.2	47.5	17-Jul
Warner Seeds, Inc.	W 4774	223.2	11.7	54.7	106.2	42.0	13-Jul
Grand Valley Hybrids	X6P205	221.8	10.6	52.8	104.2	38.7	15-Jul
Grand Valley Hybrids	X7P206	220.9	11.2	54.4	105.2	41.1	14-Jul
Monsanto Co.	Dekalb DKC63-14	220.8	11.3	54.3	104.4	44.0	14-Jul
Grand Valley Hybrids	X6P202	217.8	11.3	52.8	104.1	37.0	18-Jul
Grand Valley Hybrids	23T75	212.6	11.5	52.9	107.0	42.2	17-Jul
Trial Mean		231.3	11.37	53.64	104.6	42.4	15-Jul
LSD (P > 0.05)		24.1	0.55	0.62	NS	3.0	2.2
CV		7.3	3.4	0.8	5.9	4.9	0.8
F Test		0.0008	<0.0001	<0.0001	0.9310	<0.0001	<0.0001

Table 3A. New Mexico 2010 Early Grain Corn Performance Test - Agricultural Science Center at Farmington

Investigators: O'Neill, M.K.and Owen, C.K.

Test Description

Location:	Management Practices:	Growing Conditions:																																																																																																																	
County/Area: San Juan Longitude: -108.3061 Latitude: 36.6812 Elevation: 5,640 ft. Soil Name: Wall Soil Texture: sandy loam Soil Depth: > 75 in.	Previous Crop: sunflowers Planting Date: 12-May Harvest Date: 1-Dec <hr/> Production Inputs <hr/> <table border="1"> <thead> <tr> <th></th> <th style="text-align: center;">Rate</th> <th style="text-align: center;">Date</th> </tr> </thead> <tbody> <tr> <td colspan="3">Fertilizer:</td> </tr> <tr> <td>Nitrogen</td> <td>10 lb/a</td> <td>23-Mar</td> </tr> <tr> <td>Nitrogen</td> <td>23 lb/a</td> <td>8-Jun</td> </tr> <tr> <td>Nitrogen</td> <td>20 lb/a</td> <td>16-Jun</td> </tr> <tr> <td>Nitrogen</td> <td>23 lb/a</td> <td>22-Jun</td> </tr> <tr> <td>Nitrogen</td> <td>30 lb/a</td> <td>30-Jun</td> </tr> <tr> <td>Nitrogen</td> <td>20 lb/a</td> <td>8-Jul</td> </tr> <tr> <td>Nitrogen</td> <td>18 lb/a</td> <td>14-Jul</td> </tr> <tr> <td>Nitrogen</td> <td>25 lb/a</td> <td>20-Jul</td> </tr> <tr> <td>Nitrogen</td> <td>28 lb/a</td> <td>27-Jul</td> </tr> <tr> <td>Nitrogen</td> <td>43 lb/a</td> <td>6-Aug</td> </tr> <tr> <td>Total Nitrogen</td> <td>240 lb/a</td> <td></td> </tr> <tr> <td>P₂O₅</td> <td>52 lb/a</td> <td>23-Mar</td> </tr> <tr> <td>K₂O</td> <td>60 lb/a</td> <td>23-Mar</td> </tr> </tbody> </table> Herbicides: <table border="1"> <tbody> <tr> <td>Guardsman Max</td> <td>1.2 qt/a</td> <td>27-May</td> </tr> <tr> <td>Clarity</td> <td>2 oz/a</td> <td>27-May</td> </tr> <tr> <td>Status</td> <td>5 oz/a</td> <td>9-Jun</td> </tr> <tr> <td>Prowl H2O</td> <td>1 qt/a</td> <td>9-Jun</td> </tr> </tbody> </table>		Rate	Date	Fertilizer:			Nitrogen	10 lb/a	23-Mar	Nitrogen	23 lb/a	8-Jun	Nitrogen	20 lb/a	16-Jun	Nitrogen	23 lb/a	22-Jun	Nitrogen	30 lb/a	30-Jun	Nitrogen	20 lb/a	8-Jul	Nitrogen	18 lb/a	14-Jul	Nitrogen	25 lb/a	20-Jul	Nitrogen	28 lb/a	27-Jul	Nitrogen	43 lb/a	6-Aug	Total Nitrogen	240 lb/a		P ₂ O ₅	52 lb/a	23-Mar	K ₂ O	60 lb/a	23-Mar	Guardsman Max	1.2 qt/a	27-May	Clarity	2 oz/a	27-May	Status	5 oz/a	9-Jun	Prowl H2O	1 qt/a	9-Jun	<table border="1"> <thead> <tr> <th></th> <th style="text-align: center;">Average Temp. °F</th> <th style="text-align: center;">Precip. in.</th> <th style="text-align: center;">Irrigation in.</th> </tr> </thead> <tbody> <tr><td>January</td><td></td><td></td><td></td></tr> <tr><td>February</td><td></td><td></td><td></td></tr> <tr><td>March</td><td></td><td></td><td></td></tr> <tr><td>April</td><td>51.0</td><td>0.26</td><td></td></tr> <tr><td>May</td><td>57.2</td><td>0.10</td><td>3.4</td></tr> <tr><td>June</td><td>71.5</td><td>0.10</td><td>8.5</td></tr> <tr><td>July</td><td>76.0</td><td>0.65</td><td>9.3</td></tr> <tr><td>August</td><td>71.9</td><td>2.50</td><td>5.9</td></tr> <tr><td>September</td><td>67.3</td><td>0.84</td><td>3.5</td></tr> <tr><td>October</td><td>56.0</td><td>1.32</td><td></td></tr> <tr><td>November</td><td></td><td></td><td></td></tr> <tr><td>December</td><td></td><td></td><td></td></tr> </tbody> </table> <table border="1"> <tbody> <tr> <td>Seasonal Precipitation</td> <td>5.77 in.</td> </tr> <tr> <td>Total Irrigation</td> <td>30.6 in.</td> </tr> </tbody> </table> Date of Last Spring Frost: 12-May Date of First Fall Frost: 26-Oct Frost Free Period: 167 days		Average Temp. °F	Precip. in.	Irrigation in.	January				February				March				April	51.0	0.26		May	57.2	0.10	3.4	June	71.5	0.10	8.5	July	76.0	0.65	9.3	August	71.9	2.50	5.9	September	67.3	0.84	3.5	October	56.0	1.32		November				December				Seasonal Precipitation	5.77 in.	Total Irrigation	30.6 in.
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Table 3B. New Mexico 2010 Early Season Grain Corn Performance Test - Agricultural Science Center at Farmington

Results

Brand/Company Name	Hybrid/Variety Name	Grain Yield bu/a	Moisture	Test Weight lb/bu	Plant Height in	Ear Height in	Silk Date	Days to Silk	Plant Population	Maturity
			at Harvest %							
Pioneer Hi-Bred Int.	PO751HR	281.2	13.2	57.6	118.5	52.5	3-Aug	83	32,100	107
Pioneer Hi-Bred Int.	36V75	267.3	13.3	56.6	115.5	48.8	1-Aug	81	32,723	102
Triumph Seed Co.	1023S	263.6	13.8	57.8	121.5	56.3	2-Aug	83	33,035	109
Pioneer Hi-Bred Int.	PO541HR	248.9	13.6	59.2	123.0	52.5	4-Aug	84	33,554	105
Triumph Seed Co.	3212X	244.5	13.7	58.8	114.8	53.3	30-Jul	79	30,230	103
Monsanto Co.	DKC50-66	243.9	12.5	59.4	112.5	49.5	25-Jul	74	35,424	100
Monsanto Co.	DKC52-59 (VT3)	239.0	12.1	57.7	111.0	51.8	31-Jul	80	32,827	102
Monsanto Co.	DKC50-35 (VT3)	236.1	12.9	59.2	108.0	42.8	25-Jul	75	33,762	100
	Trial Mean	253.0	13.1	58.3	115.6	50.9	30-Jul	80	32,957	104
	LSD	26.3	0.6	0.7	4.6	4.9	-	2	2210	-
	LSD P >	0.05	0.05	0.05	0.05	0.05	-	0.05	0.05	-
	CV	7.1	3.0	0.9	2.7	6.5	-	1.4	4.6	-
	F Test	0.0194	<0.0001	<0.0001	<0.0001	0.0008	-	<0.0001	0.0073	-

Table 4A. New Mexico 2010 Full Corn Performance Test - Agricultural Science Center at Farmington

Investigators: O'Neill, M.K. and Owen, C.K.

Test Description

Location:	Management Practices:	Growing Conditions:																																																																																																	
County/Area: San Juan Longitude: -108.3061 Latitude: 36.6812 Elevation: 5,640 ft. Soil Name: Wall Soil Texture: sandy loam Soil Depth: > 75 in.	Previous Crop: sunflowers Planting Date: 12-May Harvest Date: 1-Dec Production Inputs <hr/> <table border="1"> <thead> <tr> <th></th> <th>Rate</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td colspan="3">Fertilizer:</td> </tr> <tr> <td>Nitrogen</td> <td>10 lb/a</td> <td>23-Mar</td> </tr> <tr> <td>Nitrogen</td> <td>23 lb/a</td> <td>8-Jun</td> </tr> <tr> <td>Nitrogen</td> <td>20 lb/a</td> <td>16-Jun</td> </tr> <tr> <td>Nitrogen</td> <td>23 lb/a</td> <td>22-Jun</td> </tr> <tr> <td>Nitrogen</td> <td>30 lb/a</td> <td>30-Jun</td> </tr> <tr> <td>Nitrogen</td> <td>20 lb/a</td> <td>8-Jul</td> </tr> <tr> <td>Nitrogen</td> <td>18 lb/a</td> <td>14-Jul</td> </tr> <tr> <td>Nitrogen</td> <td>25 lb/a</td> <td>20-Jul</td> </tr> <tr> <td>Nitrogen</td> <td>28 lb/a</td> <td>27-Jul</td> </tr> <tr> <td>Nitrogen</td> <td>43 lb/a</td> <td>6-Aug</td> </tr> <tr> <td>Total Nitrogen</td> <td>240 lb/a</td> <td></td> </tr> <tr> <td>P₂O₅</td> <td>52 lb/a</td> <td>23-Mar</td> </tr> <tr> <td>K₂O</td> <td>60 lb/a</td> <td>23-Mar</td> </tr> </tbody> </table> Herbicides: Guardsman Max 1.2 qt/a 27-May Clarity 2 oz/a 27-May Status 5 oz/a 9-Jun Prowl H ₂ O 1 qt/a 9-Jun		Rate	Date	Fertilizer:			Nitrogen	10 lb/a	23-Mar	Nitrogen	23 lb/a	8-Jun	Nitrogen	20 lb/a	16-Jun	Nitrogen	23 lb/a	22-Jun	Nitrogen	30 lb/a	30-Jun	Nitrogen	20 lb/a	8-Jul	Nitrogen	18 lb/a	14-Jul	Nitrogen	25 lb/a	20-Jul	Nitrogen	28 lb/a	27-Jul	Nitrogen	43 lb/a	6-Aug	Total Nitrogen	240 lb/a		P ₂ O ₅	52 lb/a	23-Mar	K ₂ O	60 lb/a	23-Mar	<table border="1"> <thead> <tr> <th></th> <th>Average Temp. °F</th> <th>Precip. in.</th> <th>Irrigation in.</th> </tr> </thead> <tbody> <tr> <td>January</td> <td></td> <td></td> <td></td> </tr> <tr> <td>February</td> <td></td> <td></td> <td></td> </tr> <tr> <td>March</td> <td></td> <td></td> <td></td> </tr> <tr> <td>April</td> <td>51.0</td> <td>0.26</td> <td></td> </tr> <tr> <td>May</td> <td>57.2</td> <td>0.10</td> <td>3.4</td> </tr> <tr> <td>June</td> <td>71.5</td> <td>0.10</td> <td>8.5</td> </tr> <tr> <td>July</td> <td>76.0</td> <td>0.65</td> <td>9.3</td> </tr> <tr> <td>August</td> <td>71.9</td> <td>2.50</td> <td>5.9</td> </tr> <tr> <td>September</td> <td>67.3</td> <td>0.84</td> <td>3.5</td> </tr> <tr> <td>October</td> <td>56.0</td> <td>1.32</td> <td></td> </tr> <tr> <td>November</td> <td></td> <td></td> <td></td> </tr> <tr> <td>December</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> Seasonal Precipitation 5.77 in. Total Irrigation 30.6 in. Date of Last Spring Frost: 12-May Date of First Fall Frost: 26-Oct Frost Free Period: 167 days		Average Temp. °F	Precip. in.	Irrigation in.	January				February				March				April	51.0	0.26		May	57.2	0.10	3.4	June	71.5	0.10	8.5	July	76.0	0.65	9.3	August	71.9	2.50	5.9	September	67.3	0.84	3.5	October	56.0	1.32		November				December			
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Table 4B. New Mexico 2010 Full Season Grain Corn Performance Test - Agricultural Science Center at Farmington

Results

Brand/Company Name	Hybrid/Variety Name	Moisture		Test Weight	Plant Height	Ear Height	Silk Date	Days to Silk	Plant Population	Relative Maturity
		Grain Yield	at Harvest							
		bu/a	%	lb/bu	in	in				
Monsanto Co.	DKC54-16 (VT3)	269.9	13.3	59.4	109.5	48.0	28-Jul	77	33,655	104
Monsanto Co.	DKC59-88 (VT3)	259.4	13.6	58.8	111.0	45.8	1-Aug	82	30,954	109
Monsanto Co.	DKC55-24 (VT3)	247.1	12.7	59.3	105.8	48.8	2-Aug	83	33,239	105
	Trial Mean	258.8	13.2	59.2	108.8	47.5	31-Jul	80	32,616	106
	LSD	NS	0.7	NS	2.6	NS	-	1	NS	-
	LSD P >	0.05	0.05	0.05	0.05	0.05	-	0.05	0.05	-
	CV	9.1	2.9	0.9	1.4	5.5	-	0.5	7.0	-
	F Test	0.4444	0.0300	0.3775	0.0066	0.3075	-	<0.0001	0.2767	-

Table 5A. New Mexico 2010 Grain Corn Performance Test - Agricultural Science Center at Los Lunas

Investigators: C. Havlik, M. Place, and M.A. Marsalis

Test Description

<p>Location:</p> <p>County/Area: Valencia Longitude: -106.45 Latitude: 34.46 Elevation: 4840 ft. Soil Name: Belen Clay Loam Soil Texture: loam Soil Depth: 60 in</p> <p>Test Design:</p> <p>Replications: 4 Plot Length: 10 ft. Rows per Plot: 2 Row Spacing: 30 in. Seeding Rate: 38000 seed/a</p>	<p>Management Practices:</p> <p>Previous Crop: Alfalfa Planting Date: 9-Jun Harvest Date(s): 18-Oct</p> <p>Production Inputs</p> <table border="1"> <thead> <tr> <th></th> <th>Rate</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>Fertilizer:</td> <td></td> <td></td> </tr> <tr> <td>33-0-0-11</td> <td>570 lb/a</td> <td>8-Jul</td> </tr> <tr> <td>Total:</td> <td></td> <td></td> </tr> <tr> <td>N</td> <td>P</td> <td>K</td> <td>S</td> </tr> <tr> <td>188</td> <td>0</td> <td>0</td> <td>62</td> </tr> </tbody> </table> <p>Herbicides:</p> <p>G Max Lite 2.75 pt/a 8-Jun Round Up 2 qt/a 6-Jul</p>		Rate	Date	Fertilizer:			33-0-0-11	570 lb/a	8-Jul	Total:			N	P	K	S	188	0	0	62	<p>Growing Conditions:</p> <table border="1"> <thead> <tr> <th></th> <th>Average Temp. °F</th> <th>Precip. in.</th> <th>Flood Irrigation in.</th> </tr> </thead> <tbody> <tr><td>January</td><td>37.5</td><td>0.00</td><td></td></tr> <tr><td>February</td><td>42.4</td><td>0.00</td><td></td></tr> <tr><td>March</td><td>48.8</td><td>0.30</td><td></td></tr> <tr><td>April</td><td>55.0</td><td>0.14</td><td></td></tr> <tr><td>May</td><td>68.2</td><td>0.96</td><td></td></tr> <tr><td>June</td><td>72.9</td><td>0.98</td><td>9.0</td></tr> <tr><td>July</td><td>79.5</td><td>1.92</td><td>6.0</td></tr> <tr><td>August</td><td>75.3</td><td>0.98</td><td>6.0</td></tr> <tr><td>September</td><td>67.5</td><td>2.20</td><td>3.0</td></tr> <tr><td>October</td><td>55.1</td><td>1.31</td><td></td></tr> <tr><td>November °C</td><td>44.2</td><td>0.14</td><td></td></tr> <tr><td>December °C</td><td>38.0</td><td>0.15</td><td></td></tr> </tbody> </table> <p>Growing Season Precipitation 8.4 in. Total Irrigation 24.0 in.</p> <p>Date of Last Spring Frost: 3-May Date of First Fall Frost: 26-Oct Frost Free Period: 176 days</p>		Average Temp. °F	Precip. in.	Flood Irrigation in.	January	37.5	0.00		February	42.4	0.00		March	48.8	0.30		April	55.0	0.14		May	68.2	0.96		June	72.9	0.98	9.0	July	79.5	1.92	6.0	August	75.3	0.98	6.0	September	67.5	2.20	3.0	October	55.1	1.31		November °C	44.2	0.14		December °C	38.0	0.15	
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Table 5B. New Mexico 2010 Grain Corn Performance Test - Agricultural Science Center at Los Lunas

Results

Brand/Company Name	Hybrid/Variety Name	Grain Yield	Moisture		Test Weight	Plant Height	Ear Height	Silk Date
			at Harvest	%				
		bu/a	%	lb/bu	in	in		
Monsanto Co.	DKC 63-14	274.5	24.6	54.1	117.8	54.8	5-Aug	
Monsanto Co.	DKC 64-69	277.7	21.8	55.5	112.8	52.5	2-Aug	
Monsanto Co.	DKC 66-96	303.5	24.7	53.0	116.0	49.0	3-Aug	
	Trial Mean	285.3	23.70	54.20	115.5	52.1	3-Aug	
	LSD	NS	NS	1.20	3.4	3.3	-	
	LSD P >	0.05	0.05	0.05	0.05	0.05	-	
	CV	11.1	7.8	1.3	1.7	3.6	-	
	F Test	0.4201	0.1211	0.0061	0.0317	0.0143	-	

Table 6A. New Mexico 2010 Dryland Grain Sorghum Performance Test - Agricultural Science Center at Clovis

Investigators: M.A. Marsalis, A. Scott, and B. Niece

Test Description

<p>Location: County/Area: Curry Longitude: -103.22 Latitude: 34.60 Elevation: 4435 ft. Soil Name: Olton Soil Texture: clay loam Soil Depth: >60 in.</p> <p>Test Design: Replications: 3 Plot Length: 20 ft. Rows per Plot: 2 Row Spacing: 30 in. Seeding Rate: 29,000 seed/a</p> <p>Notes: Good growing conditions Large amounts of rainfall</p>	<p>Management Practices: Previous Crop: Fallow Planting Date: 11-Jun Harvest Date: 3-Nov</p> <p>Production Inputs</p> <table border="1"> <thead> <tr> <th></th> <th>Rate</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td colspan="3">Fertilizer:</td> </tr> <tr> <td>Nitrogen</td> <td>85 lb/a</td> <td>10-Jun</td> </tr> <tr> <td>P₂O₅</td> <td>40 lb/a</td> <td>10-Jun</td> </tr> <tr> <td>S</td> <td>13 lb/a</td> <td>10-Jun</td> </tr> <tr> <td>Zn</td> <td>1 lb/a</td> <td>10-Jun</td> </tr> <tr> <td colspan="3">Herbicides:</td> </tr> <tr> <td>Bicep Lite II Mag</td> <td>3 pts/a</td> <td>11-Jun</td> </tr> <tr> <td>Yukon</td> <td>5 oz/a</td> <td>1-Jul</td> </tr> <tr> <td>Dual II Magnum</td> <td>1 pts/a</td> <td>1-Jul</td> </tr> <tr> <td colspan="3">Insecticides:</td> </tr> <tr> <td>Fanfare</td> <td>6.4 oz/a</td> <td>4-Aug</td> </tr> <tr> <td>Lorsban</td> <td>1 pts/a</td> <td>4-Aug</td> </tr> </tbody> </table>		Rate	Date	Fertilizer:			Nitrogen	85 lb/a	10-Jun	P ₂ O ₅	40 lb/a	10-Jun	S	13 lb/a	10-Jun	Zn	1 lb/a	10-Jun	Herbicides:			Bicep Lite II Mag	3 pts/a	11-Jun	Yukon	5 oz/a	1-Jul	Dual II Magnum	1 pts/a	1-Jul	Insecticides:			Fanfare	6.4 oz/a	4-Aug	Lorsban	1 pts/a	4-Aug	<p>Growing Conditions:</p> <table border="1"> <thead> <tr> <th></th> <th>Average Temp. °F</th> <th>Precip. in.</th> <th>Irrigation in.</th> </tr> </thead> <tbody> <tr><td>January</td><td></td><td></td><td></td></tr> <tr><td>February</td><td></td><td></td><td></td></tr> <tr><td>March</td><td></td><td></td><td></td></tr> <tr><td>April</td><td></td><td></td><td></td></tr> <tr><td>May</td><td>63.0</td><td>2.34</td><td></td></tr> <tr><td>June</td><td>77.8</td><td>2.98</td><td>0.60*</td></tr> <tr><td>July</td><td>76.0</td><td>2.30</td><td></td></tr> <tr><td>August</td><td>77.0</td><td>6.83</td><td></td></tr> <tr><td>September</td><td>73.0</td><td>1.41</td><td></td></tr> <tr><td>October</td><td>59.5</td><td>0.87</td><td></td></tr> <tr><td>November†</td><td>52.3</td><td>0.00</td><td></td></tr> <tr><td>December</td><td></td><td></td><td></td></tr> <tr><td colspan="4">* Emergence and soil crust mellowing irrigations.</td></tr> <tr><td colspan="4">† Nov. 1-3</td></tr> <tr><td colspan="2">Seasonal Precipitation:</td><td colspan="2">16.7 in.</td></tr> <tr><td colspan="2">Total Irrigation:</td><td colspan="2">0.60 in.</td></tr> <tr><td colspan="2">Date of Last Spring Frost:</td><td colspan="2">9-Apr</td></tr> <tr><td colspan="2">Date of First Fall Frost:</td><td colspan="2">28-Oct</td></tr> <tr><td colspan="2">Frost Free Period:</td><td colspan="2">202 days</td></tr> </tbody> </table>		Average Temp. °F	Precip. in.	Irrigation in.	January				February				March				April				May	63.0	2.34		June	77.8	2.98	0.60*	July	76.0	2.30		August	77.0	6.83		September	73.0	1.41		October	59.5	0.87		November†	52.3	0.00		December				* Emergence and soil crust mellowing irrigations.				† Nov. 1-3				Seasonal Precipitation:		16.7 in.		Total Irrigation:		0.60 in.		Date of Last Spring Frost:		9-Apr		Date of First Fall Frost:		28-Oct		Frost Free Period:		202 days	
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Table 6B. New Mexico 2010 Dryland Grain Sorghum Performance Test - Agricultural Science Center at Clovis

Results

Brand/Company Name	Hybrid/Variety Name	Maturity Class	Head Date	Plant Height in.*	Head Exertion in.	Moisture %	Yield lb/a	Yield bu/a	Test Weight lb/bu
ATx2752 x RTx430	Tx. Agri. Exp. Stat.	ML	17-Aug	27.4	2.4	12.6	5981	106.8	47.4
B-H 3822	B-H Genetics	M	15-Aug	27.7	2.5	14.4	5512	98.4	48.4
ATx399 x RTx430	Tx. Agri. Exp. Stat.	ML	16-Aug	25.7	2.8	11.5	5465	97.6	45.6
85G01	Pioneer Hi-Bred Int., Inc	M	14-Aug	24.5	0.0	15.5	5450	97.3	50.9
B-H 5350	B-H Genetics	M	16-Aug	27.6	1.8	11.3	5321	95.0	42.2
6B10	Channel Bio LLC	M	13-Aug	23.4	0.0	13.0	5320	95.0	52.0
TR438	Triumph Seed Co. Inc.	ME	12-Aug	24.7	1.3	13.4	5287	94.4	51.5
86G32	Pioneer Hi-Bred Int., Inc	ME	12-Aug	25.7	0.4	13.3	5287	94.4	50.9
85G46	Pioneer Hi-Bred Int., Inc	M	14-Aug	25.9	0.0	15.6	5258	93.9	53.0
DeKalb DKS37-07	Monsanto Company	ME	13-Aug	25.1	0.0	13.3	5232	93.4	48.6
TR463	Triumph Seed Co. Inc.	M	16-Aug	29.4	4.9	13.9	5202	92.9	49.3
ATx378 x RTx430	Tx. Agri. Exp. Stat.	ML	16-Aug	25.9	2.4	12.3	5091	90.9	46.8
TR452	Triumph Seed Co. Inc.	M	12-Aug	23.8	2.5	14.0	4913	87.7	50.6
DeKalb DKS44-20	Monsanto Company	M	14-Aug	26.9	0.5	13.0	4890	87.3	52.6
5B90	Channel Bio LLC	ME	13-Aug	23.8	0.8	14.4	4806	85.8	51.1
7B11	Channel Bio LLC	M	15-Aug	27.3	4.1	15.0	4721	84.3	51.0
Asgrow Pulsar	Monsanto Company	ME	14-Aug	23.5	1.3	11.7	4590	82.0	48.1
B-H 5227	B-H Genetics	M	13-Aug	22.3	2.5	14.6	4537	81.0	52.0
B-H 5224	B-H Genetics	ME	14-Aug	28.0	2.1	13.5	4489	80.2	50.9
87P06	Pioneer Hi-Bred Int., Inc	E	12-Aug	23.0	0.4	13.3	4442	79.3	51.8
DeKalb DKS28-05	Monsanto Company	E	11-Aug	24.9	3.1	12.8	4378	78.2	50.8
B-H 3808	B-H Genetics	ME	13-Aug	25.1	3.8	13.2	4327	77.3	49.7
DeKalb DKS29-28	Monsanto Company	E	11-Aug	23.0	1.3	12.9	4249	75.9	50.0
TR458	Triumph Seed Co. Inc.	M	13-Aug	23.9	5.2	16.3	4145	74.0	49.1
ATx631 x RTx436	Tx. Agri. Exp. Stat.	ML	18-Aug	28.0	6.2	14.7	3935	70.3	46.7
	Trial Mean		14-Aug	25.4	2.1	13.6	4913	87.7	49.6
	LSD			2.2	3.5	1.1	538	9.6	1.7
	LSD P >		0.05	0.05	0.05	0.05	0.05	0.05	0.05
	CV		0.6	8.5	44.3	5.1	6.7	6.7	2.1
	F Test		<0.0001	0.0056	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

* Plant height is measured from the ground to the top of the leaf canopy.

Table 7A. New Mexico 2010 Forage Corn Performance Test - Agricultural Science Center at Artesia

Investigators: F.E. Contreras-Govea and R. Flynn

Test Description

Location:	Management Practices:	Growing Conditions:																																																																																																	
County/Area: Eddy Longitude: -104.38 Latitude: 32.75 Elevation: 3348 ft Soil Name: Reagan Soil Texture: loam Soil Depth: >80 in.	Previous Crop: Cotton Planting Date: 3-May Harvest Date: 23-Aug Production Inputs: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Rate</th> <th style="text-align: center;">Date</th> </tr> </thead> <tbody> <tr> <td colspan="3">Fertilizer:</td> </tr> <tr> <td style="padding-left: 20px;">Nitrogen</td> <td style="text-align: center;">7 lb/a</td> <td style="text-align: center;">27-May</td> </tr> <tr> <td></td> <td style="text-align: center;">40 lb/a</td> <td style="text-align: center;">4-Jun</td> </tr> <tr> <td></td> <td style="text-align: center;">47 lb/a</td> <td style="text-align: center;">10-Jun</td> </tr> <tr> <td></td> <td style="text-align: center;">94 lb/a</td> <td style="text-align: center;">Total</td> </tr> <tr> <td style="padding-left: 20px;">P₂O₅</td> <td style="text-align: center;">74 lb/a</td> <td style="text-align: center;">27-May</td> </tr> <tr> <td colspan="3">Herbicides:</td> </tr> <tr> <td colspan="3">Insecticides:</td> </tr> <tr> <td style="padding-left: 20px;">Intrepid</td> <td style="text-align: center;">6 oz/ac</td> <td style="text-align: center;">21-Jun</td> </tr> <tr> <td style="padding-left: 20px;">Oberon</td> <td style="text-align: center;">5 oz/ac</td> <td style="text-align: center;">21-Jun</td> </tr> </tbody> </table>		Rate	Date	Fertilizer:			Nitrogen	7 lb/a	27-May		40 lb/a	4-Jun		47 lb/a	10-Jun		94 lb/a	Total	P ₂ O ₅	74 lb/a	27-May	Herbicides:			Insecticides:			Intrepid	6 oz/ac	21-Jun	Oberon	5 oz/ac	21-Jun	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Average Temp F</th> <th style="text-align: center;">Precip. in.</th> <th style="text-align: center;">Irrigation in.</th> </tr> </thead> <tbody> <tr><td>January</td><td style="text-align: center;">38.2</td><td style="text-align: center;">0.68</td><td></td></tr> <tr><td>February</td><td style="text-align: center;">41.7</td><td style="text-align: center;">1.36</td><td></td></tr> <tr><td>March</td><td style="text-align: center;">49.3</td><td style="text-align: center;">0.20</td><td></td></tr> <tr><td>April</td><td style="text-align: center;">60.4</td><td style="text-align: center;">0.28</td><td style="text-align: center;">4.3</td></tr> <tr><td>May</td><td style="text-align: center;">67.9</td><td style="text-align: center;">1.26</td><td style="text-align: center;">3.5</td></tr> <tr><td>June</td><td style="text-align: center;">81.1</td><td style="text-align: center;">1.05</td><td style="text-align: center;">8.3</td></tr> <tr><td>July</td><td style="text-align: center;">77.7</td><td style="text-align: center;">3.64</td><td style="text-align: center;">5.0</td></tr> <tr><td>August</td><td style="text-align: center;">79.7</td><td style="text-align: center;">1.31</td><td style="text-align: center;">5.6</td></tr> <tr><td>September</td><td style="text-align: center;">74.8</td><td style="text-align: center;">1.85</td><td></td></tr> <tr><td>October</td><td></td><td></td><td></td></tr> <tr><td colspan="2" style="text-align: right;">Seasonal Precipitation:</td><td style="text-align: center;">7.5 in.</td><td></td></tr> <tr><td colspan="2" style="text-align: right;">Total Irrigation:</td><td style="text-align: center;">26.7 in.</td><td></td></tr> <tr><td colspan="2" style="text-align: right;">Date of Last Spring Frost:</td><td style="text-align: center;">10-Apr</td><td></td></tr> <tr><td colspan="2" style="text-align: right;">Date of First Fall Frost:</td><td style="text-align: center;">28-Oct</td><td></td></tr> <tr><td colspan="2" style="text-align: right;">Frost Free Period:</td><td style="text-align: center;">201 days</td><td></td></tr> </tbody> </table>		Average Temp F	Precip. in.	Irrigation in.	January	38.2	0.68		February	41.7	1.36		March	49.3	0.20		April	60.4	0.28	4.3	May	67.9	1.26	3.5	June	81.1	1.05	8.3	July	77.7	3.64	5.0	August	79.7	1.31	5.6	September	74.8	1.85		October				Seasonal Precipitation:		7.5 in.		Total Irrigation:		26.7 in.		Date of Last Spring Frost:		10-Apr		Date of First Fall Frost:		28-Oct		Frost Free Period:		201 days	
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Test Design: Replications: 4 Plot Length: 25 ft. Rows per Plot: 2 Row Spacing: 40 in. Seeding Rate: 35000 seeds/a Plant Density: 21218 plants/a Field Notes: Maturity at harvest: From 1/3 to 1/2 Starch Milk Line																																																																																																			

Table 7B. New Mexico 2010 Forage Corn Performance Test - Agricultural Science Center at Artesia

Results

Brand/Company Name	Hybrid/Variety Name	Dry Forage	Green Forage	Moisture	CP	NDF	NDFD 48hr	Starch	NE _i	Milk/Ton	Milk/Acre
				at Harvest							
		t/a	t/a	%	%	%	%	%	Mcal/lb	lb/t	lb/a
Golden Acres Genetics	X6515VT3	9.2	28.2	67.4	8.2	48.8	61.1	30.2	0.67	3074	28280
Mycogen Seeds	TMF 2H918	9.0	27.7	67.6	8.6	50.5	62.5	28.2	0.66	3079	27645
Dyna-Gro Seeds	58V69	8.7	24.9	65.0	9.1	47.2	62.3	28.5	0.68	3129	27272
Golden Acres Genetics	28Z47	8.7	28.2	69.0	8.5	49.8	61.9	29.1	0.66	3049	26687
BH-Genetics	8895 VTTP	8.4	24.0	65.1	8.4	41.0	63.0	37.1	0.71	3367	28174
BH-Genetics	9018 VTTP	7.9	21.7	63.8	8.7	46.1	61.7	31.1	0.68	3169	24900
Golden Acres Genetics	28V71	7.7	21.0	63.5	8.5	44.1	61.3	36.3	0.70	3281	25181
Dyna-Gro Seeds	CXO9218	7.7	21.9	65.0	8.6	44.4	62.8	34.2	0.70	3273	25052
Dyna-Gro Seeds	56VP69	7.6	20.3	62.3	8.7	44.8	61.0	34.4	0.70	3264	24898
Dyna-Gro Seeds	CX10015	7.6	22.7	66.4	9.1	45.4	63.4	30.0	0.69	3236	24605
Mycogen Seeds	F2F700	7.5	22.7	66.9	9.2	46.3	64.8	30.8	0.69	3246	24421
Mycogen Seeds	TMF 2N804	7.5	23.7	68.6	8.8	52.2	62.1	24.9	0.64	2925	21827
Mycogen Seeds	F2F622	7.5	20.0	62.9	8.9	46.8	67.1	31.1	0.70	3292	24558
BH-Genetics	8719 RR/HXT	7.4	21.8	66.1	8.5	50.1	60.9	28.1	0.66	3009	22148
Dyna-Gro Seeds	58V24	7.0	21.2	66.4	8.6	48.7	61.3	28.5	0.65	3016	20706
BH-Genetics	X9150 G	6.1	17.8	65.8	9.1	45.7	60.7	31.0	0.68	3131	19047
	Trial Mean	7.8	22.9	65.7	8.7	46.9	62.4	30.9	0.68	3160	24688
	LSD	1.1	3.6	2.4	0.5	2.6	2.7	3.4	0.02	145	3559
	LSD P >	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	CV	7.0	16.1	3.6	4.5	6.9	3.8	12.5	3.4	4.8	13.9
	F Test	<0.0001	<0.0001	<0.0001	0.001	<0.0001	0.0019	<0.0001	<0.0001	<0.0001	<0.0001

Table 8A. New Mexico 2010 Forage Corn Performance Test - Agricultural Science Center at Clovis

Investigators: M.A. Marsalis, R.E. Kirksey, B. Niece, and A. Scott

Test Description

Location:	Management Practices:	Growing Conditions:																																																																																																					
County/Area: Curry Longitude: -103.22 Latitude: 34.60 Elevation: 4435 ft. Soil Name: Olton Soil Texture: clay loam Soil Depth: >60 in.	Previous Crop: fallow Planting Date: 28-Apr Harvest Date: 8-Sep Production Inputs <hr/> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Rate</th> <th style="text-align: center;">Date</th> </tr> </thead> <tbody> <tr> <td colspan="3">Fertilizer:</td> </tr> <tr> <td>Nitrogen</td> <td>18 lb/a</td> <td>carryover</td> </tr> <tr> <td>Nitrogen</td> <td>230 lb/a</td> <td>9-Apr</td> </tr> <tr> <td>P₂O₅</td> <td>55 lb/a</td> <td>9-Apr</td> </tr> <tr> <td>S</td> <td>39 lb/a</td> <td>9-Apr</td> </tr> <tr> <td>Zn</td> <td>1 lb/a</td> <td>9-Apr</td> </tr> </tbody> </table> Herbicides: <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Bicep Lite II Mag</td> <td>3 pt/a</td> <td>28-Apr</td> </tr> <tr> <td>Dual II Mag</td> <td>1 pt/a</td> <td>14-Jun</td> </tr> <tr> <td>Status</td> <td>5 oz/a</td> <td>14-Jun</td> </tr> </tbody> </table> Insecticides: <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Onager</td> <td>10 oz/a</td> <td>14-Jun</td> </tr> <tr> <td>Intrepid 2F</td> <td>8 oz/a</td> <td>1-Aug</td> </tr> <tr> <td>Oberon 4SC</td> <td>6 oz/a</td> <td>1-Aug</td> </tr> </tbody> </table>		Rate	Date	Fertilizer:			Nitrogen	18 lb/a	carryover	Nitrogen	230 lb/a	9-Apr	P ₂ O ₅	55 lb/a	9-Apr	S	39 lb/a	9-Apr	Zn	1 lb/a	9-Apr	Bicep Lite II Mag	3 pt/a	28-Apr	Dual II Mag	1 pt/a	14-Jun	Status	5 oz/a	14-Jun	Onager	10 oz/a	14-Jun	Intrepid 2F	8 oz/a	1-Aug	Oberon 4SC	6 oz/a	1-Aug	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Average Temp. °F</th> <th style="text-align: center;">Precip. in.</th> <th style="text-align: center;">Irrigation in.</th> </tr> </thead> <tbody> <tr><td>January</td><td></td><td></td><td></td></tr> <tr><td>February</td><td></td><td></td><td></td></tr> <tr><td>March</td><td></td><td></td><td></td></tr> <tr><td>April</td><td style="text-align: center;">56.3</td><td style="text-align: center;">1.56</td><td style="text-align: center;">0.60</td></tr> <tr><td>May</td><td style="text-align: center;">63.0</td><td style="text-align: center;">2.34</td><td style="text-align: center;">1.00</td></tr> <tr><td>June</td><td style="text-align: center;">77.8</td><td style="text-align: center;">2.98</td><td style="text-align: center;">4.25</td></tr> <tr><td>July</td><td style="text-align: center;">76.0</td><td style="text-align: center;">2.30</td><td style="text-align: center;">4.60</td></tr> <tr><td>August</td><td style="text-align: center;">77.0</td><td style="text-align: center;">6.83</td><td style="text-align: center;">1.40</td></tr> <tr><td>September†</td><td style="text-align: center;">73.8</td><td style="text-align: center;">0.01</td><td></td></tr> <tr><td>October</td><td></td><td></td><td></td></tr> <tr><td>November</td><td></td><td></td><td></td></tr> <tr><td>December</td><td></td><td></td><td></td></tr> </tbody> </table> <hr/> † Sept. 1-8 <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="text-align: right;">Seasonal Precipitation</td> <td style="text-align: center;">16.0 in.</td> </tr> <tr> <td style="text-align: right;">Total Irrigation</td> <td style="text-align: center;">11.9 in.</td> </tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="text-align: right;">Date of Last Spring Frost:</td> <td style="text-align: center;">9-Apr</td> </tr> <tr> <td style="text-align: right;">Date of First Fall Frost:</td> <td style="text-align: center;">28-Oct</td> </tr> <tr> <td style="text-align: right;">Frost Free Period:</td> <td style="text-align: center;">202 days</td> </tr> </tbody> </table>		Average Temp. °F	Precip. in.	Irrigation in.	January				February				March				April	56.3	1.56	0.60	May	63.0	2.34	1.00	June	77.8	2.98	4.25	July	76.0	2.30	4.60	August	77.0	6.83	1.40	September†	73.8	0.01		October				November				December				Seasonal Precipitation	16.0 in.	Total Irrigation	11.9 in.	Date of Last Spring Frost:	9-Apr	Date of First Fall Frost:	28-Oct	Frost Free Period:	202 days
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Table 8B. New Mexico 2010 Forage Corn Performance Test - Agricultural Science Center at Clovis

Results

Brand/Company Name	Hybrid/Variety Name	Moisture			CP	NDF	NDFD		Ash	TDN	NE _l	Milk/Ton	Milk/Acre
		Dry Forage	Green Forage	at Harvest			48hr	Starch					
		t/a	t/a	%	%	%	%	%	%	Mcal/lb	lb/t	lb/a	
Triumph Seed Co., Inc.	1825V	12.0	25.7	53.2	8.4	43.6	64.2	31.0	3.6	67.8	0.70	3334	40183
Triumph Seed Co., Inc.	8539R	11.6	27.9	58.4	7.6	48.4	61.4	27.4	4.0	65.0	0.67	3108	36043
Golden Acres Genetics	28V71	11.2	24.1	53.3	8.2	44.7	62.8	30.8	3.5	67.1	0.69	3271	36780
Warner Seeds, Inc.	W 4727 VT3	11.2	26.3	57.3	7.9	48.8	63.1	26.8	4.0	66.1	0.68	3199	35963
Golden Acres Genetics	28Z47	11.2	26.5	57.8	6.9	48.1	61.8	26.7	4.3	65.4	0.67	3141	35186
B-H Genetics	X9151G	11.1	24.0	53.7	7.6	43.0	63.5	34.6	3.5	67.3	0.69	3289	36439
Mycogen Seeds	TMF2N804	11.0	25.8	57.3	8.0	47.5	63.0	26.7	4.0	66.1	0.68	3201	35136
Dyna Gro Seeds	CX 9218	10.9	22.5	51.5	8.2	42.3	63.3	33.1	3.5	67.9	0.70	3331	36222
Golden Acres Genetics	X6515VT3	10.7	25.7	58.1	7.8	48.3	62.0	26.7	4.0	65.5	0.67	3152	33764
Dyna Gro Seeds	DG 56VP69	10.6	21.6	50.6	8.4	42.4	63.5	32.6	2.9	68.7	0.71	3391	36001
B-H Genetics	BH8895VTTP	10.6	22.2	52.1	7.9	40.1	63.6	37.0	3.3	68.2	0.71	3360	35607
Grand Valley Hybrids	X7D215	10.5	22.7	53.5	8.1	44.8	65.2	29.7	2.8	69.1	0.71	3433	36186
Dyna Gro Seeds	CX 10115	10.4	21.9	52.4	8.4	42.0	64.7	31.7	3.5	68.7	0.71	3401	35440
Grand Valley Hybrids	23T75	10.4	23.0	54.9	8.2	41.9	65.7	32.5	3.4	69.1	0.72	3437	35627
Triumph Seed Co., Inc.	2288H	10.4	24.3	57.5	7.9	47.9	64.6	27.5	2.9	67.9	0.70	3341	34667
Golden Acres Genetics	X6022GTCB	10.1	20.3	50.5	7.6	42.9	63.3	32.0	3.8	67.5	0.70	3306	33279
Mycogen Seeds	F2F622	10.0	18.9	47.1	8.3	44.6	68.0	31.9	3.2	69.6	0.72	3495	34864
Mycogen Seeds	2T784	9.9	21.6	54.4	8.1	42.1	63.1	33.9	3.1	68.1	0.70	3342	32991
Dyna Gro Seeds	CX 10617	9.5	19.5	50.9	8.3	41.0	62.2	34.2	3.5	65.2	0.70	3288	31358
B-H Genetics	BH8719RR/HXT	9.5	19.7	51.9	7.8	44.6	64.6	29.4	3.1	68.3	0.71	3372	31947
B-H Genetics	X9150G	9.4	18.9	50.4	8.8	39.9	66.0	35.8	2.7	69.9	0.72	3499	32824
Grand Valley Hybrids	X7G157	8.9	19.3	53.8	8.6	44.6	63.6	29.6	4.0	67.0	0.69	3269	29070
Grand Valley Hybrids	X6Y156	8.0	17.6	54.7	8.4	40.3	65.6	34.6	3.1	69.2	0.71	3447	27449
	Trial Mean	10.4	22.6	53.7	8.1	44.1	63.9	31.1	3.5	67.6	0.70	3322	34479
	LSD	0.9	2.0	2.8	0.9	2.6	2.4	3.5	0.8	2.5	0.02	148	3446
	LSD P >	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	CV	5.9	6.4	3.6	7.8	4.2	2.6	7.9	16.8	2.6	2.1	3.1	7.1
	F Test	<0.0001	<0.0001	<0.0001	0.0489	<0.0001	<0.0001	<0.0001	0.0023	0.0006	<0.0001	<0.0001	<0.0001

Table 9A. New Mexico 2010 Forage Corn Performance Test - Agricultural Science Center at Farmington

Investigators: O'Neill, M.K. and Owen, C.K.

Test Description

Location:	Management Practices:	Growing Conditions:																																																																																																																									
County/Area: San Juan Longitude: -108.3061 Latitude: 36.6812 Elevation: 5,640 ft. Soil Name: Wall Soil Texture: sandy loam Soil Depth: > 75 in.	Previous Crop: sunflowers Planting Date: 12-May Harvest Date: 20-Sep Production Inputs <hr/> <table border="1"> <thead> <tr> <th></th> <th>Rate</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td colspan="3">Fertilizer:</td> </tr> <tr> <td>Nitrogen</td> <td>10 lb/a</td> <td>23-Mar</td> </tr> <tr> <td>Nitrogen</td> <td>23 lb/a</td> <td>8-Jun</td> </tr> <tr> <td>Nitrogen</td> <td>20 lb/a</td> <td>16-Jun</td> </tr> <tr> <td>Nitrogen</td> <td>23 lb/a</td> <td>22-Jun</td> </tr> <tr> <td>Nitrogen</td> <td>30 lb/a</td> <td>30-Jun</td> </tr> <tr> <td>Nitrogen</td> <td>20 lb/a</td> <td>8-Jul</td> </tr> <tr> <td>Nitrogen</td> <td>18 lb/a</td> <td>14-Jul</td> </tr> <tr> <td>Nitrogen</td> <td>25 lb/a</td> <td>20-Jul</td> </tr> <tr> <td>Nitrogen</td> <td>28 lb/a</td> <td>27-Jul</td> </tr> <tr> <td>Nitrogen</td> <td>43 lb/a</td> <td>6-Aug</td> </tr> <tr> <td>Total Nitrogen</td> <td>240 lb/a</td> <td></td> </tr> <tr> <td>P₂O₅</td> <td>52 lb/a</td> <td>23-Mar</td> </tr> <tr> <td>K₂O</td> <td>60 lb/a</td> <td>23-Mar</td> </tr> </tbody> </table> Herbicides: Guardsman Max 1.2 qt/a 27-May Clarity 2 oz/a 27-May Status 5 oz/a 9-Jun Prowl H2O 1 qt/a 9-Jun		Rate	Date	Fertilizer:			Nitrogen	10 lb/a	23-Mar	Nitrogen	23 lb/a	8-Jun	Nitrogen	20 lb/a	16-Jun	Nitrogen	23 lb/a	22-Jun	Nitrogen	30 lb/a	30-Jun	Nitrogen	20 lb/a	8-Jul	Nitrogen	18 lb/a	14-Jul	Nitrogen	25 lb/a	20-Jul	Nitrogen	28 lb/a	27-Jul	Nitrogen	43 lb/a	6-Aug	Total Nitrogen	240 lb/a		P ₂ O ₅	52 lb/a	23-Mar	K ₂ O	60 lb/a	23-Mar	<table border="1"> <thead> <tr> <th></th> <th>Average Temp. °F</th> <th>Precip. in.</th> <th>Irrigation in.</th> </tr> </thead> <tbody> <tr><td>January</td><td></td><td></td><td></td></tr> <tr><td>February</td><td></td><td></td><td></td></tr> <tr><td>March</td><td></td><td></td><td></td></tr> <tr><td>April</td><td>51.0</td><td>0.26</td><td></td></tr> <tr><td>May</td><td>57.2</td><td>0.10</td><td>3.4</td></tr> <tr><td>June</td><td>71.5</td><td>0.10</td><td>8.5</td></tr> <tr><td>July</td><td>76.0</td><td>0.65</td><td>9.3</td></tr> <tr><td>August</td><td>71.9</td><td>2.50</td><td>5.9</td></tr> <tr><td>September†</td><td>67.3</td><td>0.31</td><td>2.5</td></tr> <tr><td>October</td><td></td><td></td><td></td></tr> <tr><td>November</td><td></td><td></td><td></td></tr> <tr><td>December</td><td></td><td></td><td></td></tr> <tr><td colspan="4">† Sept. 1-20</td></tr> <tr><td colspan="2">Seasonal Precipitation</td><td>3.92 in.</td><td></td></tr> <tr><td colspan="2">Total Irrigation</td><td>29.6 in.</td><td></td></tr> <tr><td colspan="4">Date of Last Spring Frost: 12-May</td></tr> <tr><td colspan="4">Date of First Fall Frost: 26-Oct</td></tr> <tr><td colspan="4">Frost Free Period: 167 days</td></tr> </tbody> </table>		Average Temp. °F	Precip. in.	Irrigation in.	January				February				March				April	51.0	0.26		May	57.2	0.10	3.4	June	71.5	0.10	8.5	July	76.0	0.65	9.3	August	71.9	2.50	5.9	September†	67.3	0.31	2.5	October				November				December				† Sept. 1-20				Seasonal Precipitation		3.92 in.		Total Irrigation		29.6 in.		Date of Last Spring Frost: 12-May				Date of First Fall Frost: 26-Oct				Frost Free Period: 167 days			
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Table 9B. New Mexico 2010 Forage Corn Performance Test - Agricultural Science Center at Farmington

Results

Brand/Company Name	Hybrid/Variety Name	Moisture			Plant Height	Ear Height	CP	NDFD			Ash	TDN	NEI	Milk/Ton	Milk/Acre
		Dry Forage	Green Forage	at Harvest				NDF	48hr	Starch					
		t/a	t/a	%	in	in	%	%	%	%	%	Mcal/lb	lb/t	lb/a	
Monsanto Co.	DKC59-35 (VT3)	13.7	31.6	56.3	115.5	50.3	7.9	37.1	62.4	35.7	4.1	67.6	0.648	2,971	40,841
Monsanto Co.	DKC54-16 (VT3)	13.7	28.1	51.1	110.3	48.8	7.2	33.8	61.7	40.9	3.8	67.3	0.647	2,961	40,503
Monsanto Co.	DKC52-59 (VT3)	12.9	27.8	53.4	104.3	46.5	7.3	34.3	59.8	40.5	3.7	66.6	0.641	2,911	37,714
	Trial Mean	13.5	29.1	53.6	110.0	48.5	7.5	35.1	61.3	39.0	3.9	67.2	0.645	2,948	39,686
	LSD	NS	NS	NS	7.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	LSD P >	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	CV	12.1	13.1	5.3	4.1	8.8	5.5	7.4	3.2	9.1	14.4	1.4	1.6	2.4	12.3
	F Test	0.7508	0.3545	0.1061	0.0357	0.4996	0.0887	0.2316	0.2418	0.1468	0.7703	0.3455	0.6321	0.4769	0.6307

Table 10A. New Mexico 2010 Forage Corn Performance Test - Agricultural Science Center at Los Lunas

Investigators: C. Havlik, M. Place, and M.A. Marsalis

Test Description

<p>Location: County/Area: Valencia Longitude: -106.45 Latitude: 34.46 Elevation: 4840 ft. Soil Name: Belen Clay Loam Soil Texture: loam Soil Depth: 60 in</p> <p>Test Design: Replications: 4 Plot Length: 10 ft. Rows per Plot: 2 Row Spacing: 30 in. Seeding Rate: 38000 seed/a</p>	<p>Management Practices: Previous Crop: Alfalfa Planting Date: 9-Jun Harvest Date(s): 27-Sep</p> <p>Production Inputs</p> <table border="1"> <thead> <tr> <th></th> <th>Rate</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td colspan="3">Fertilizer:</td> </tr> <tr> <td>33-0-0-11</td> <td>570 lb/a</td> <td>8-Jul</td> </tr> <tr> <td>Total:</td> <td>N P K S</td> <td></td> </tr> <tr> <td></td> <td>188 0 0 62</td> <td></td> </tr> </tbody> </table> <p>Herbicides:</p> <table> <tr> <td>G Max Lite</td> <td>2.75 pt/a</td> <td>8-Jun</td> </tr> <tr> <td>Roundup</td> <td>2.0 qt/a</td> <td>6-Jul</td> </tr> </table>		Rate	Date	Fertilizer:			33-0-0-11	570 lb/a	8-Jul	Total:	N P K S			188 0 0 62		G Max Lite	2.75 pt/a	8-Jun	Roundup	2.0 qt/a	6-Jul	<p>Growing Conditions:</p> <table border="1"> <thead> <tr> <th></th> <th>Average Temp. °F</th> <th>Precip. in.</th> <th>Flood Irrigation in.</th> </tr> </thead> <tbody> <tr><td>January</td><td>37.5</td><td>0.00</td><td></td></tr> <tr><td>February</td><td>42.4</td><td>0.00</td><td></td></tr> <tr><td>March</td><td>48.8</td><td>0.30</td><td></td></tr> <tr><td>April</td><td>55.0</td><td>0.14</td><td></td></tr> <tr><td>May</td><td>68.2</td><td>0.96</td><td></td></tr> <tr><td>June</td><td>72.9</td><td>0.98</td><td>9.0</td></tr> <tr><td>July</td><td>79.5</td><td>1.92</td><td>6.0</td></tr> <tr><td>August</td><td>75.3</td><td>0.98</td><td>6.0</td></tr> <tr><td>September</td><td>67.5</td><td>2.20</td><td>3.0</td></tr> <tr><td>October</td><td>55.1</td><td>1.31</td><td></td></tr> <tr><td>November</td><td>44.2</td><td>0.14</td><td></td></tr> <tr><td>December</td><td>38.0</td><td>0.15</td><td></td></tr> </tbody> </table> <p>Growing Season Precipitation: 7.0 in. Total Irrigation: 24.0 in.</p> <p>Date of Last Spring Frost: 3-May Date of First Fall Frost: 26-Oct Frost Free Period: 176 days</p>		Average Temp. °F	Precip. in.	Flood Irrigation in.	January	37.5	0.00		February	42.4	0.00		March	48.8	0.30		April	55.0	0.14		May	68.2	0.96		June	72.9	0.98	9.0	July	79.5	1.92	6.0	August	75.3	0.98	6.0	September	67.5	2.20	3.0	October	55.1	1.31		November	44.2	0.14		December	38.0	0.15	
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Table 10B. New Mexico 2010 Forage Corn Performance Test - Agricultural Science Center at Los Lunas

Results

Brand/Company Name	Hybrid/Variety Name	Moisture			CP	NDF	NDFD 48hr	Starch	Ash	TDN	NEI	Milk/Ton	Milk/Acre
		Dry Forage	Green Forage	at Harvest									
		t/a	t/a	%	%	%	%	%	%	%	Mcal/lb	lb/t	lb/a
Mycogen Seeds	TMF 2W 727	9.6	32.1	69.9	8.6	54.7	63.0	19.8	5.9	65.2	0.61	2744	26579.3
Mycogen Seeds	TMF 2H 918	8.8	32.0	72.5	7.9	56.9	61.1	20.8	5.3	63.8	0.60	2658	23446.8
Mycogen Seeds	TMF 1N 804	8.8	33.4	72.7	8.1	58.4	63.4	17.6	6.4	63.5	0.59	2595	22643.8
Mycogen Seeds	F2F 622	8.5	26.3	67.8	7.5	54.6	69.0	22.8	5.2	69.0	0.64	2970	25056.3
Mycogen Seeds	F2F 700	6.9	25.2	72.4	7.7	58.2	63.9	18.7	5.7	64.6	0.60	2678	18656.8
	Trial Mean	8.5	29.8	71.0	8.0	56.6	64.1	19.9	5.7	65.2	0.61	2729	23277
	LSD	1.4	3.9	3.6	NS	NS	3.5	NS	NS	NS	NS	NS	NS
	LSD P >	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	CV	10.7	8.4	3.3	12.5	9.9	3.5	23.2	10.1	4.3	5.5	8.2	15.2
	F Test	0.0158	0.0013	0.0458	0.5497	0.7859	0.0044	0.5781	0.0540	0.0945	0.3466	0.2234	0.0713

Table 11B. New Mexico 2010 Forage Sorghum Performance Test - Agricultural Science Center at Artesia

Results

Brand/Company Name	Hybrid/Variety Name	Dry Forage t/a	Green Forage t/a	Moisture		CP %	NDF %	NDFD 48hr %	Starch %	NE _i Mcal/lb	Milk/ ton lb/t	Milk/ acre lb/a
				at Harvest %								
BH-Genetics	BH 380 F	9.5	32.9	71.3	6.9	58.4	66.1	14.2	0.60	2696	25577	
Eastern Colorado Seeds, LLC	HP95 BMR	7.2	26.5	73.0	8.3	60.2	68.1	10.4	0.59	2642	19102	
BH-Genetics	BH 304 FB	6.3	26.6	76.3	8.5	58.6	70.3	9.5	0.60	2734	17386	
BH-Genetics	BH 312 FBD	6.1	30.8	80.2	9.6	62.2	66.7	9.1	0.56	2427	14867	
Eastern Colorado Seeds, LLC	HP120 BMR	5.6	29.0	80.8	9.4	62.6	66.4	8.3	0.56	2411	13591	
Eastern Colorado Seeds, LLC	HP1010 BMR	5.5	23.4	76.7	8.5	59.4	70.1	9.0	0.60	2705	14930	
	Trial Mean	6.7	28.2	76.3	8.5	60.2	67.9	10.1	0.59	2602	17575	
	LSD	2.3	8.7	2.3	0.8	2.3	1.7	1.7	0.02	124	6699	
	LSD>	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
	CV (%)	22.9	20.4	2.0	6.0	2.6	1.7	11.0	2.1	3.2	25.3	
	F test	0.0205	0.2740	<0.0001	<0.0001	0.005	0.0001	<0.0001	0.0001	<0.0001	0.0181	

Table 12A. New Mexico 2010 Irrigated Forage Sorghum Performance Test - Agricultural Science Center at Clovis

Investigators: M.A. Marsalis, R.E. Kirksey, B. Niece, and A. Scott

Test Description

Location:	Management Practices:	Growing Conditions:																																																																																																		
County/Area: Curry Longitude: -103.22 Latitude: 34.60 Elevation: 4435 ft. Soil Name: Olton Soil Texture: clay loam Soil Depth: >60 in.	Previous Crop: fallow Planting Date: 27-May Harvest Date: 15-Sep Production Inputs <hr/> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Rate</th> <th style="text-align: center;">Date</th> </tr> </thead> <tbody> <tr> <td colspan="3">Fertilizer:</td> </tr> <tr> <td>Nitrogen</td> <td>10 lb/a</td> <td>carryover</td> </tr> <tr> <td>Nitrogen</td> <td>180 lb/a</td> <td>1-May</td> </tr> <tr> <td>P₂O₅</td> <td>40 lb/a</td> <td>1-May</td> </tr> <tr> <td>Zn</td> <td>1 lb/a</td> <td>1-May</td> </tr> </tbody> </table> Herbicides: <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Atrazine</td> <td>2 pt/a</td> <td>28-May</td> </tr> <tr> <td>Yukon</td> <td>5 oz/a</td> <td>22-Jun</td> </tr> <tr> <td>Dual II Mag</td> <td>1 pt/a</td> <td>22-Jun</td> </tr> </tbody> </table> Insecticides: <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Intrepid</td> <td>8 oz/a</td> <td>4-Aug</td> </tr> <tr> <td>Lorsban</td> <td>1 pt/a</td> <td>4-Aug</td> </tr> <tr> <td>Oberon</td> <td>8 oz/a</td> <td>4-Aug</td> </tr> </tbody> </table>		Rate	Date	Fertilizer:			Nitrogen	10 lb/a	carryover	Nitrogen	180 lb/a	1-May	P ₂ O ₅	40 lb/a	1-May	Zn	1 lb/a	1-May	Atrazine	2 pt/a	28-May	Yukon	5 oz/a	22-Jun	Dual II Mag	1 pt/a	22-Jun	Intrepid	8 oz/a	4-Aug	Lorsban	1 pt/a	4-Aug	Oberon	8 oz/a	4-Aug	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Average Temp. °F</th> <th style="text-align: center;">Precip. in.</th> <th style="text-align: center;">Irrigation in.</th> </tr> </thead> <tbody> <tr><td>January</td><td></td><td></td><td></td></tr> <tr><td>February</td><td></td><td></td><td></td></tr> <tr><td>March</td><td></td><td></td><td></td></tr> <tr><td>April</td><td></td><td></td><td></td></tr> <tr><td>May</td><td style="text-align: center;">63.0</td><td style="text-align: center;">2.34</td><td style="text-align: center;">0.65</td></tr> <tr><td>June</td><td style="text-align: center;">77.8</td><td style="text-align: center;">2.98</td><td style="text-align: center;">2.60</td></tr> <tr><td>July</td><td style="text-align: center;">76.0</td><td style="text-align: center;">2.30</td><td style="text-align: center;">3.25</td></tr> <tr><td>August</td><td style="text-align: center;">77.0</td><td style="text-align: center;">6.83</td><td style="text-align: center;">0.75</td></tr> <tr><td>September</td><td style="text-align: center;">74.0</td><td style="text-align: center;">0.00</td><td style="text-align: center;">1.00</td></tr> <tr><td>October†</td><td></td><td></td><td></td></tr> <tr><td>November</td><td></td><td></td><td></td></tr> <tr><td>December</td><td></td><td></td><td></td></tr> </tbody> </table> <hr/> † Sept. 1-15 <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="text-align: right;">Seasonal Precipitation</td> <td style="text-align: right;">14.5 in.</td> </tr> <tr> <td style="text-align: right;">Total Irrigation</td> <td style="text-align: right;">8.3 in.</td> </tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="text-align: right;">Date of Last Spring Frost:</td> <td style="text-align: right;">9-Apr</td> </tr> <tr> <td style="text-align: right;">Date of First Fall Frost:</td> <td style="text-align: right;">28-Oct</td> </tr> <tr> <td style="text-align: right;">Frost Free Period:</td> <td style="text-align: right;">202 days</td> </tr> </tbody> </table>		Average Temp. °F	Precip. in.	Irrigation in.	January				February				March				April				May	63.0	2.34	0.65	June	77.8	2.98	2.60	July	76.0	2.30	3.25	August	77.0	6.83	0.75	September	74.0	0.00	1.00	October†				November				December				Seasonal Precipitation	14.5 in.	Total Irrigation	8.3 in.	Date of Last Spring Frost:	9-Apr	Date of First Fall Frost:	28-Oct	Frost Free Period:	202 days
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Table 12B. New Mexico 2010 Irrigated Forage Sorghum Performance Test - Agricultural Science Center at Clovis

Results

Brand/Company Name	Hybrid/Variety Name	Sorghum [†] Type	Moisture			CP	NDF	NDFD 48hr	Ash	TDN	NE ₁	Milk/Ton	Milk/Acre
			Dry Forage	Green Forage	at Harvest								
Forage First	FS-5	Conv	8.9	23.4	62.4	7.4	48.5	67.5	5.7	66.5	0.69	3266	28919
Pioneer Hi-Bred Int.	849F	Conv	8.6	20.3	57.8	7.9	49.7	64.4	5.4	65.7	0.67	3184	27299
Eastern Colorado Seeds	HP95BMR	BMR	8.3	17.9	53.6	7.4	50.4	70.4	6.6	67.7	0.70	3376	28160
Warner Seeds, Inc.	2 way F104	Conv	8.2	19.1	57.3	7.9	46.5	65.8	6.2	66.0	0.68	3220	26315
Eastern Colorado Seeds	HP1010BMR	BMR	7.0	20.0	64.8	7.7	52.9	73.2	7.3	68.3	0.71	3438	24201
Pioneer Hi-Bred Int.	841F	Conv	6.9	17.1	59.3	7.9	51.1	66.8	6.9	65.3	0.67	3171	22017
B-H Genetics	BH 312FBD	BMR	6.5	18.9	65.5	8.2	51.1	69.5	7.5	66.5	0.68	3282	21298
B-H Genetics	BH 304FB	BMR	6.1	17.6	65.5	7.6	52.8	71.9	7.7	67.6	0.70	3375	20543
Eastern Colorado Seeds	HP120BMR DW	BMR	5.9	17.4	65.9	8.2	50.9	69.5	7.4	66.7	0.69	3294	19492
Trial Mean			7.4	19.1	61.3	7.8	50.4	68.8	6.8	66.7	0.69	3290	24249
LSD			1.5	3.1	3.8	0.4	NS	1.9	1.3	NS	NS	143	5412
LSD P >			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
CV			11.5	9.5	3.5	3.2	5.2	1.6	11.1	1.6	1.9	2.5	12.9
F Test			0.0023	0.0126	<0.0001	0.0074	0.1620	<0.0001	0.0133	0.0552	0.0786	0.0124	0.0103

[†] Sorghum Type: Conv = Conventional, BMR = Brown Midrib

Table 13A. New Mexico 2010 Dryland Forage Sorghum Performance Test - Agricultural Science Center at Clovis

Investigators: M.A. Marsalis, R.E. Kirksey, B. Niece, and A. Scott

Test Description

Location:	Management Practices:	Growing Conditions:																																																																																																					
County/Area: Curry Longitude: -103.22 Latitude: 34.60 Elevation: 4435 ft. Soil Name: Olton Soil Texture: clay loam Soil Depth: >60 in.	Previous Crop: fallow Planting Date: 2-Jun Harvest Date: 30-Sep Production Inputs <hr/> <table border="1"> <thead> <tr> <th></th> <th style="text-align: center;">Rate</th> <th style="text-align: center;">Date</th> </tr> </thead> <tbody> <tr> <td colspan="3">Fertilizer:</td> </tr> <tr> <td>Nitrogen</td> <td>24 lb/a</td> <td>carryover</td> </tr> <tr> <td>Nitrogen</td> <td>85 lb/a</td> <td>1-Jun</td> </tr> <tr> <td>P₂O₅</td> <td>40 lb/a</td> <td>1-Jun</td> </tr> <tr> <td>S</td> <td>13 lb/a</td> <td>1-Jun</td> </tr> <tr> <td>Zn</td> <td>1 lb/a</td> <td>1-Jun</td> </tr> </tbody> </table> Herbicides: <table border="1"> <tbody> <tr> <td>Atrazine</td> <td>2 pt/a</td> <td>3-Jun</td> </tr> <tr> <td>Yukon</td> <td>5 oz/a</td> <td>22-Jun</td> </tr> <tr> <td>Dual II Mag</td> <td>1 pt/a</td> <td>22-Jun</td> </tr> <tr> <td>Clarity</td> <td>6 oz/a</td> <td>1-Jul</td> </tr> </tbody> </table> Insecticides: <table border="1"> <tbody> <tr> <td>Lorsban</td> <td>1 pt/a</td> <td>4-Aug</td> </tr> <tr> <td>Fanfare</td> <td>6.4 oz/a</td> <td>4-Aug</td> </tr> </tbody> </table>		Rate	Date	Fertilizer:			Nitrogen	24 lb/a	carryover	Nitrogen	85 lb/a	1-Jun	P ₂ O ₅	40 lb/a	1-Jun	S	13 lb/a	1-Jun	Zn	1 lb/a	1-Jun	Atrazine	2 pt/a	3-Jun	Yukon	5 oz/a	22-Jun	Dual II Mag	1 pt/a	22-Jun	Clarity	6 oz/a	1-Jul	Lorsban	1 pt/a	4-Aug	Fanfare	6.4 oz/a	4-Aug	<table border="1"> <thead> <tr> <th></th> <th style="text-align: center;">Average Temp. °F</th> <th style="text-align: center;">Precip. in.</th> <th style="text-align: center;">Irrigation in.</th> </tr> </thead> <tbody> <tr><td>January</td><td></td><td></td><td></td></tr> <tr><td>February</td><td></td><td></td><td></td></tr> <tr><td>March</td><td></td><td></td><td></td></tr> <tr><td>April</td><td></td><td></td><td></td></tr> <tr><td>May</td><td>63.0</td><td>2.34</td><td></td></tr> <tr><td>June</td><td>77.8</td><td>2.98</td><td></td></tr> <tr><td>July</td><td>76.0</td><td>2.30</td><td></td></tr> <tr><td>August</td><td>77.0</td><td>6.83</td><td></td></tr> <tr><td>September</td><td>73.0</td><td>1.41</td><td></td></tr> <tr><td>October†</td><td></td><td></td><td></td></tr> <tr><td>November</td><td></td><td></td><td></td></tr> <tr><td>December</td><td></td><td></td><td></td></tr> </tbody> </table> <table border="1"> <tbody> <tr> <td>Seasonal Precipitation</td> <td>15.9 in.</td> </tr> <tr> <td>Total Irrigation</td> <td>0.0 in.</td> </tr> </tbody> </table> <table border="1"> <tbody> <tr> <td>Date of Last Spring Frost:</td> <td>9-Apr</td> </tr> <tr> <td>Date of First Fall Frost:</td> <td>28-Oct</td> </tr> <tr> <td>Frost Free Period:</td> <td>202 days</td> </tr> </tbody> </table>		Average Temp. °F	Precip. in.	Irrigation in.	January				February				March				April				May	63.0	2.34		June	77.8	2.98		July	76.0	2.30		August	77.0	6.83		September	73.0	1.41		October†				November				December				Seasonal Precipitation	15.9 in.	Total Irrigation	0.0 in.	Date of Last Spring Frost:	9-Apr	Date of First Fall Frost:	28-Oct	Frost Free Period:	202 days
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Clarity	6 oz/a	1-Jul																																																																																																					
Lorsban	1 pt/a	4-Aug																																																																																																					
Fanfare	6.4 oz/a	4-Aug																																																																																																					
	Average Temp. °F	Precip. in.	Irrigation in.																																																																																																				
January																																																																																																							
February																																																																																																							
March																																																																																																							
April																																																																																																							
May	63.0	2.34																																																																																																					
June	77.8	2.98																																																																																																					
July	76.0	2.30																																																																																																					
August	77.0	6.83																																																																																																					
September	73.0	1.41																																																																																																					
October†																																																																																																							
November																																																																																																							
December																																																																																																							
Seasonal Precipitation	15.9 in.																																																																																																						
Total Irrigation	0.0 in.																																																																																																						
Date of Last Spring Frost:	9-Apr																																																																																																						
Date of First Fall Frost:	28-Oct																																																																																																						
Frost Free Period:	202 days																																																																																																						
Test Design: Replications: 3 Plot Length: 20 ft. Rows per Plot: 2 Row Spacing: 30 in. Seeding Rate: 60,000 seed/a																																																																																																							

Table 13B. New Mexico 2010 Dryland Forage Sorghum Performance Test - Agricultural Science Center at Clovis

Results

Brand/Company Name	Hybrid/Variety Name	Sorghum [†] Type	Moisture			CP	NDF	NDFD 48hr	Ash	TDN	NE _i	Milk/Ton	Milk/Acre
			Dry Forage	Green Forage	at Harvest								
			t/a	t/a	%	%	%	%	%	Mcal/lb	lb/t	lb/a	
Forage First	FS-5	Conv	7.0	18.3	61.7	7.4	50.3	64.5	5.6	65.1	0.67	3147	22086
Pioneer Hi-Bred Int.	841F	Conv	6.4	17.1	63.1	8.3	47.8	61.9	6.2	66.8	0.69	3291	20933
Eastern Colorado Seeds	HP95BMR	BMR	6.2	14.2	56.2	7.9	46.4	64.8	5.8	69.4	0.71	3513	21906
Pioneer Hi-Bred Int.	849F	Conv	5.7	14.5	60.7	8.4	49.6	65.6	5.6	65.8	0.68	3204	18274
B-H Genetics	BH 312FBD	BMR	5.6	15.8	63.9	7.9	49.5	62.8	6.9	66.3	0.68	3254	18338
Eastern Colorado Seeds	HP120BMR DW	BMR	5.6	16.2	65.7	8.6	49.4	63.5	6.9	67.5	0.70	3359	18897
Warner Seeds, Inc.	2 way F104	Conv	5.3	13.6	60.8	8.4	48.4	60.3	5.6	65.7	0.68	3196	17043
Eastern Colorado Seeds	HP1010BMR	BMR	4.9	14.4	65.8	8.6	49.4	65.3	6.5	69.0	0.71	3479	17167
B-H Genetics	BH 304FB	BMR	4.3	12.3	65.0	8.6	48.6	72.8	6.6	69.1	0.71	3492	15013
Trial Mean			5.7	15.2	62.5	8.3	48.8	64.6	6.2	67.2	0.69	3326	18850
LSD			NS	NS	4.0	NS	NS	NS	1.0	1.4	0.01	110	NS
LSD P >			0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
CV			18.6	17.1	3.7	7.7	4.7	9.3	9.2	1.2	1.2	1.2	17.9
F Test			0.1650	0.2143	0.0021	0.3117	0.6251	0.4476	0.0290	<0.0001	<0.0001	<0.0001	0.2308

[†] Sorghum Type: Conv = Conventional, BMR = Brown Midrib

Table 14B. New Mexico 2010 Forage Sorghum x Sudangrass Performance Test - Agricultural Science Center at Artesia

Results

Brand/Company Name	Hybrid/Variety Name	Dry Forage			Green Forage			Moisture		Milk per Ton		Milk per Acre	
		1st Cut	2nd Cut	Total	1st Cut	2nd Cut	Total	1st Cut	2nd Cut	1st Cut	2nd Cut	1st Cut	2nd Cut
		t/a	t/a		t/a	t/a		%	%	lb/t	lb/t	lb/a	lb/a
BH-Genetics	BH 221 SB	5.2	5.0	10.2	30.9	27.7	58.5	83.2	82.2	2195	2359	11431	11701
BH-Genetics	BH 201 SB	4.4	5.2	9.6	27.0	31.2	58.2	83.9	83.3	2136	2451	9295	12830
BH-Genetics	BH 211 SBD	3.8	2.2	6.0	23.1	12.0	35.1	83.7	82.0	2366	2630	8913	5773
	Trial Mean	4.5	4.1	8.6	28.5	23.5	52.1	84.2	82.4	2078	2428	9283	9913
	LSD	0.8	1.1	1.5	4.3	6.5	7.7	1.0	1.2	90.0	167	1491.5	3004
	LSD>	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	CV	11.3	17.3	10.9	9.5	17.3	9.2	0.8	0.9	2.7	4.3	10.0	18.9
	F test	0.0189	0.0008	0.0006	0.0024	0.0005	0.0002	0.0009	0.1468	<0.0001	0.0052	0.0016	0.0023

Table 14C. New Mexico 2010 Forage Sorghum x Sudangrass Performance Test - Agricultural Science Center at Artesia

Results

Brand/Company Hybrid/Variety		CP		ADF		NDF		NDFD-48 hr		TDN		NEI	
Name	Name	1st Cut	2nd Cut	1st Cut	2nd Cut	1st Cut	2nd Cut	1st Cut	2nd Cut	1st Cut	2nd Cut	1st Cut	2nd Cut
		%	%	%	%	%	%	%	%	%	%	Mcal/lb	Mcal/lb
BH-Genetics	BH 221 SB	8.8	7.3	43.2	46.2	67.9	67.9	55.8	61.0	52.9	54.6	0.54	0.55
BH-Genetics	BH 201 SB	8.0	7.5	44.4	46.5	69.7	68.2	55.9	63.2	52.1	55.6	0.52	0.56
BH-Genetics	BH 211 SBD	9.7	9.1	42.4	44.3	67.0	65.9	60.2	67.0	54.8	57.6	0.56	0.59
	Trial Mean	8.4	7.7	44.3	45.7	69.4	67.5	55.3	62.1	51.4	55.4	0.5	0.56
	LSD	0.5	1.1	1.4	2.1	1.5	1.6	1.2	1.6	1.1	2.2	0.01	0.02
	LSD>	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	CV	3.8	9.2	2.0	2.8	1.3	1.5	1.3	1.6	1.4	2.5	1.4	2.7
	F test	<0.0001	0.0102	0.0001	0.1571	<0.0001	0.0349	<0.0001	<0.0001	<0.0001	0.0199	<0.0001	0.0163

Appendix A

Companies and Contact Information for Participants in the Agricultural Science Center
Fee-Test Program

New Mexico 2010 Grain Corn Hybrid Performance Test

Company/Brand Name	Hybrid/Variety Name	Relative Maturity (days)
Dyna-Gro Seed (UAP Southwest)	Full Season:	
3492 Long Prairie Road, Suite 200	DG 56VP69	116
Flower Mound, TX 75022	CX 10115	115
(318) 282-9804	CX 10617	
Shawn Carter	CX 9218	118
Grand Valley Hybrids	Full Season:	
859 23 Rd.	X7P206	116
Grand Junction CO	X6P205	115
(970) 216-0635	X6P202	111
Bill Rooks	23T75	115
Monsanto Company	Full Season:	
800 N. Lindbergh Blvd.	Dekalb DKC 63-14	113
St. Louis, MO 63137	Dekalb DKC 64-69	114
(815) 754-4809	Dekalb DKC 66-96	116
Diane Freeman	Dekalb DKC 50-35	100
	Dekalb DKC 50-66	100
	Dekalb DKC 54-16	104
	Dekalb DKC 55-24	105
	Dekalb DKC 59-88	109
	Dekalb DKC 52-59	102
Pioneer Hi-Bred International, Inc.	Early Season:	
8100 S. 15th St.	PO 751 HR	107
Lincoln, NE 68512	36 V 75	102
(402) 328-4055	PO 541 HR	103
Bill McClure		
Triumph Seed Co., Inc.	Early Season:	
P.O. Box 1050	3212 X	103
Ralls, TX 79357	TRXO 10245	109
(888) 521-7333		
Ben Benton		
Warner Seeds Inc.	Full Season:	
120 South Lawton Ave.	W 4774 VT3	116
Hereford, TX 79045	W 4777 VT3	118
(806) 683-7506	W 4744 VT3	115
Kelsey Monk		

New Mexico 2010 Forage Corn Hybrid Performance Test

Company/Brand Name	Hybrid/Variety Name	Relative Maturity (days)
B-H Genetics	BH 8895 VTTP	118
5933 FM 1157	BH 8719 RR/HXT	117
Ganado, TX 77962	BH 9018 VTTP	119
(823) 344-6389	X9150 G	116
Keith Arnold	X9151 G	116
Dyna-Gro Seed (UAP Southwest)	CX 10115	115
3492 Long Prairie Road, Suite 200	CX 10617	
Flower Mound, TX 75022	CX 9218	118
(318) 282-9804	DG 56VP69	116
Shawn Carter		
Golden Acres Genetics	28V71	118
P.O. Box 579	28Z47	119
Buchanan Dam, TX 78609	X6515VT3	119
(512) 793-5205	X6022GTCB	117
James Allison		
Grand Valley Hybrids	X7G157	117
859 23 Road	X6Y156	115
Grand Junction, CO 81503	X7D215	117
(970) 243-3115	23T75	115
Bill Rooks		
Monsanto Company	Dekalb DKC52-59	102
800 N. Lindbergh Blvd.	Dekalb DKC54-16	104
St. Louis, MO 63137	Dekalb DKC59-35	109
(815) 754-4809		
Diane Freeman		
Mycogen Seeds	TMF 2H918	123
322 East Main St.	TMF 2N804	116
P.M.B. 244	F2F 700	113
Burley, ID 83318	F2F 622	109
(208) 312-7195	2T784	115
Terry Helms	TMF 2W727	113

New Mexico 2008 Forage Corn Hybrid Performance Test (cont.)

Company/Brand Name	Hybrid/Variety Name	Relative Maturity
		(days)
Triumph Seed Co., Inc.	8539R	118
P.O. Box 1050	1825V	118
Ralls, TX 79357	2288H	122
(888) 521-7333		
Ben Benton		
Warner Seeds Inc.	W4727 VT3	118
120 South Lawton Ave.		
Hereford, TX 79045		
(806) 683-7506		
Kelsey Monk		

New Mexico 2010 Grain Sorghum Hybrid Performance Test

Company/Brand Name	Hybrid/Variety Name	Maturity Group*
B-H Genetics	Dryland:	
5933 FM 1157	BH 3808	ME
Ganado, TX 77962	BH 3822	M
(823) 344-6389	BH 5227	M
Keith Arnold	BH 5350	M
Pioneer Hi-Bred International, Inc.	Dryland:	
8100 S. 15th St.	87P06	E
Lincoln, NE 68512	86G32	ME
(402) 328-4055	85G01	M
Bill McClure		

* E=early, ME=medium early, ML=medium late, L=late or PS=photoperiod sensitive

New Mexico 2010 Forage Sorghum Hybrid Performance Test

Company/Brand Name	Hybrid/Variety Name	Maturity Group*	Brown Midrib
B-H Genetics			
5933 FM 1157 Ganado, TX 77962 (823) 344-6389 Keith Arnold	Irrigated:		
	BH 304FB	ML	Y
	BH 312FBD	ML	Y
	BH 380F	L	N
Eastern Colorado Seeds, LLC			
P.O. Bx 546 Burlington, CO 80807 (719) 342-9316 Clay Smith	Irrigated:		
	HP95 BMR	ME	Y
	HP1010 BMR	ML	Y
	HP120 BMR	M	Y
	Dryland:		
	HP95 BMR	ME	Y
	HP1010 BMR	ML	Y
HP120 BMR	M	Y	
Pioneer Hi-Bred International, Inc.			
8100 S. 15th St. Lincoln, NE 68512 (402) 328-4055 Bill McClure	Irrigated:		
	849F	M	N
	841F	M	N
Warner Seeds Inc.			
120 South Lawton Ave. Hereford, TX 79045 (806) 683-7506 Kelsey Monk	Irrigated:		
	2 way F104	L	N

* E=early, ME=medium early, ML=medium late, L=late or PS=photoperiod sensitive

New Mexico 2010 Sorghum X Sudangrass Hybrid Performance Test

Company/Brand Name	Hybrid/Variety Name	Maturity Group*	Brown Midrib
B-H Genetics	Irrigated:		
5933 FM 1157	BH 201SB	ML	Y
Ganado, TX 77962	BH 211SBD	ML	Y
(823) 344-6389	BH 221SB	ML	Y
Keith Arnold			

* E=early, ME=medium early, ML=medium late, L=late or PS=photoperiod sensitive

Appendix B
Glossary of Terms

ADF (Acid Detergent Fiber): ADF consists primarily of cellulose, lignin and acid detergent fiber crude protein. In the past ADF was used as a predictor of indigestibility of forages, however in recent years, research has indicated that ADF is not as strongly correlated with decreased digestibility as once thought.

Ash: Ash is the percentage of residue (minerals) remaining after all organic matter in a sample has been completely incinerated.

CP (Crude Protein): CP is termed 'crude' because it is not a direct measurement of protein. CP is an estimation of total protein based on the nitrogen content of a sample. This fraction consists of non-protein nitrogen as well.

Days to Half Silk: Days to Half Silk is the number of days from planting until 50% of plants have begun to show silks.

Dry Forage: Dry Forage is green forage converted to a 100% dry matter basis by deducting the amount of Moisture at Harvest.

Ear Height: Ear Height is the average distance from the ground to the base of the ear.

Green Forage: Green Forage is the harvested yield from the entire plot area, except for the basal part of the stem and the roots, multiplied by a conversion factor to convert the harvested plot yield to a per acre equivalent.

Grain Yield: Grain Yield is the harvested grain yield adjusted to a standard moisture and a standard bushel weight then converted to a per acre equivalent. For grain corn, the standard moisture is 15.5% and the standard bushel weight is 56 pounds.

Lodging: Lodging is a visual estimate of the percentage of plants with stalks broken below the head or leaning at an angle in excess of 45 degrees.

Milk/acre (Milk production per acre): Milk/acre is Milk/ton multiplied by Dry Forage (ton/ac).

Milk/ton (Milk production per ton of dry matter forage): Milk/ton is an index of forage quality. Milk/ton is calculated from the Milk2006 Excel spreadsheet <http://www.uwex.edu/ces/forage/pubs/milk2006.xls>. This index uses forage analyses (CP, NDF, NDFD 48hr, Starch and non-fiber carbohydrate) to estimate energy content, and DMI and NDFD 48hr to predict milk/ton. Forage corn quality was predicted using the new Milk2006 program.

Moisture at Harvest: Moisture at Harvest is the percentage of the green forage sample or grain sample weight that is moisture at the time of harvest.

NDF (Neutral Detergent Fiber): NDF is an estimate of the total fiber content of the forage. The NDF or cell wall fraction contains cellulose, hemicellulose and lignin. NDF

gives the best estimate of the total fiber content of the feed and is associated with feed intake.

NDFD 48hr (Neutral Detergent Fiber Digestibility - 48hr): NDFD 48hr is a measure of 48 hr digestibility of the NDF component. The NDFD 48 hr procedure employs a 48-hour *in vitro* fermentation. NDFD 48hr is expressed as a percent of NDF.

NE_L (Net Energy for Lactation): NE_L is the energy value of feeds for lactating cows.

N Removal: N Removal is the total amount of nitrogen, in pounds per acre that is removed from the field at harvest. $N \text{ Removal} = \text{dry forage (t/a)} \times 2000 \times N (\%); \text{ where } N (\%) = CP (\%) / 6.25.$

Plant Height: Plant Height is the average height of the plant measured from the ground to the top of the canopy at harvest.

Population: Population is the number of plants per acre based on a count of the number of plants in a plot converted to a per-acre equivalent.

RFV (Relative Feed Value): RFV is an index that estimates the overall quality of the forage to a ruminant. The equation uses ADF to estimate the digestible dry matter content of the forage. This is then combined with an estimate of dry matter intake, which is an estimate of the amount of forage an animal will eat in a given time period. RFV is the most widely used forage quality index in the United States. It is scaled so that full-bloom alfalfa hay would score 100. Typically, hay must score above 150 RVF to be considered 'dairy quality' hay.

RFQ (Relative Forage Quality): RFQ is similar to RFV in that it is an estimate of overall quality of a forage, but it differs in the way it is calculated. It takes total digestible nutrients (TDN) into account rather than DDM calculated from ADF values. This TDN, combined with dry matter intake (DMI), is derived from *in vitro* estimates of digestible fiber. The RFQ value is considered an improved method over RFV and is rapidly becoming the new 'standard' in forage quality testing.

Silk Date: Silk Date is the date when 50% of plants have begun to show silks.

Starch: Starch is the percentage of starch in the forage.

TDN (Total Digestible Nutrients): TDN represents the sum of digestible crude protein, digestible carbohydrates, digestible nitrogen-free extract and digestible fat. TDN is highly correlated with the energy content of the feed and is used in calculations of net energy values.

Test Weight: Test Weight is the bushel weight equivalent of a sample of grain.