

# New Mexico 2015 Corn and Sorghum Performance Tests



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

**New Mexico  
2015  
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

Authors:

M.A. Marsalis<sup>1</sup>, R.P. Flynn<sup>2</sup>, L.M. Lauriault<sup>3</sup>, A. Mesbah<sup>4</sup>, and M.K. O'Neill<sup>5</sup>

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J. Box, A. Cunningham, P. Cooksey, J. Jennings, S. Jennings, and H. D. Lopez, Farm/Ranch Manager, Research Assistant, Assoc. Admin. Assistant, and Senior Farm Laborers, respectively, Agricultural Science Center at Tucumcari

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<sup>1</sup> Superintendent and Extension Forage Specialist, Agricultural Science Center at Los Lunas

<sup>2</sup> Associate Professor and Extension Agronomist, Agricultural Science Center at Artesia

<sup>3</sup> Superintendent and Forage Crop Management Scientist, Agricultural Science Center at Tucumcari

<sup>4</sup> Superintendent and Agronomist, Agricultural Science Center at Clovis

<sup>5</sup> Professor of Agronomy, Agricultural Science Center at Farmington

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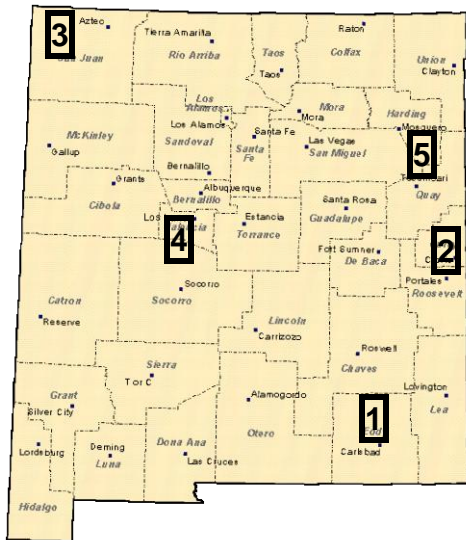
# New Mexico 2015 Corn and Sorghum Performance Tests

## 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, Los Lunas, and Tucumcari New Mexico in 2015 (Figure 1). This report contains information from all Agricultural Science Center corn and sorghum tests; however, it is possible that not all locations contain every test listed above.

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.

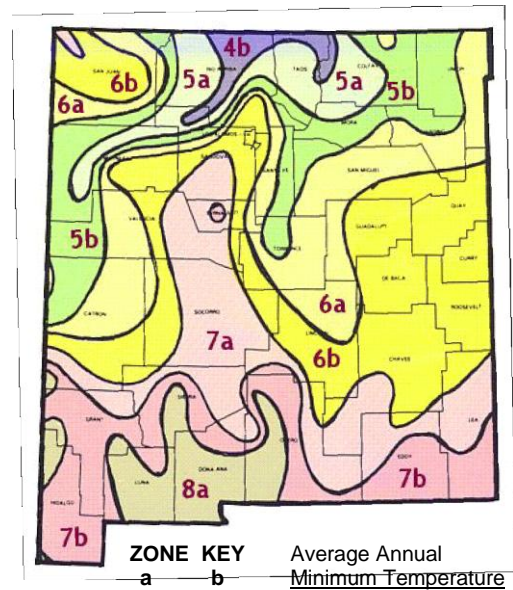


Table 1. Historical average monthly precipitation (inches) and temperatures (°F) for cooperating agricultural science centers.					
	Artesia	Clovis	Farmington	Los Lunas	Tucumcari
<b>Precipitation (inches)</b>					
January	0.40	0.35	0.49	0.37	0.37
February	0.42	0.38	0.57	0.43	0.47
March	0.45	0.69	0.74	0.53	0.74
April	0.61	0.84	0.70	0.47	1.14
May	1.25	1.99	0.57	0.46	2.02
June	1.45	2.39	0.21	0.63	1.90
July	1.60	2.81	0.88	1.24	2.63
August	1.77	2.97	1.15	1.71	2.70
September	1.77	1.85	1.09	1.19	1.56
October	1.20	1.64	0.91	1.07	1.29
November	0.51	0.56	0.81	0.50	0.69
December	0.47	0.48	0.44	0.49	0.55
Total	11.90	16.97	8.56	9.09	16.05
<b>Average Temperature (°F)</b>					
January	40.2	38.1	31.0	34.7	38.4
February	44.9	41.6	36.3	40.1	42.0
March	51.6	47.8	43.6	46.9	48.9
April	60.4	56.2	51.1	54.5	57.4
May	69.4	65.0	60.2	63.1	66.1
June	77.6	73.6	69.8	71.9	75.4
July	79.9	76.5	75.4	76.5	78.9
August	78.3	74.7	72.9	74.5	77.2
September	71.4	68.6	65.8	67.2	70.5
October	60.9	58.4	53.8	55.7	59.5
November	48.8	46.3	40.5	43.4	47.3
December	40.9	39.1	31.3	35.0	39.1
Average	60.4	57.2	52.6	55.3	58.4
Source: Western Region Climate Center: <a href="http://www.wrcc.dri.edu/summary/climsnm.html">http://www.wrcc.dri.edu/summary/climsnm.html</a>					

## 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 2015 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 Los Lunas, 1036 Miller Rd, Los Lunas, NM 87031, (505) 865-7340, <http://loslunassc.nmsu.edu/>. Entry forms for the 2016 Corn and Sorghum Performance Tests will be mailed to seed companies in February 2016. Additional 2016 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 variation (CV) and F test values. All LSD's are reported at the 95% probability level. If the F test value is greater than 0.05 the LSD is not used. 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 data or methodology. 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 NFTA-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 2015 corn and sorghum variety tests are shown in Tables 2-15 below. Test procedures for each test are presented in tables designated with an 'A' at each location. 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.

**Table 2A. New Mexico 2015 Grain Corn Performance Test - Agricultural Science Center at Clovis**

Investigators: A. Mesbah, A. Scott, and B. Niece

**Test Description**

Location:	Management Practices:	Growing Conditions:		
County/Area: Curry	Previous Crop: fallow			
Longitude: -103.22	Planting Date: 18-May			
Latitude: 34.60	Harvest Date: 29-Oct			
Elevation: 4435 ft.				
Soil Name: Olton				
Soil Texture: clay loam				
Soil Depth: >60 in.				
	<b>Production Inputs</b>			
	<u>Rate</u> <u>Date</u>			
	Fertilizer:			
	Nitrogen            13 lb/a            carryover			
	Nitrogen            16 lb/a*            17-Mar			
	P2O5                30 lb/a*            17-Mar			
	S                     1.3 lb/a*            17-Mar			
	Nitrogen            200 lb/a            17-May			
	Tilit Blue Zone    3 g/ac                17-May			
	S                     36.2 lb/ac            17-May			
	Zn                    3 qt/ac                17-May			
	Herbicides:			
	Bicep Lite II Mag    3 pt/a                18-May			
	Glyphosate            40 oz/ac              18-May			
	Brawl                 1 pt/ac                26-Jun			
	Insecticides:			
	Onager                16 oz/ac              26-Jun			
	Prevathon            14 oz/ac              26-Jun			
	Oberon                8 oz/ac                5-Aug			
	Prevathon            14 oz/ac              5-Aug			
	Fungicides:			
	Quadris               11 oz/ac              5-Aug			
	Tilt                    4 oz/ac                5-Aug			
<b>Test Design:</b>				
Replications: 3				
Plot Length: 20 ft.				
Rows per Plot: 2				
Row Spacing: 30 in.				
Seeding Rate: 27,000 seed/a				
Notes:				
*Strip Till				
		Average		
		Temp.	Precip.	Irrigation
		°F	in.	in.
		January	31.1	
		February	38.5	
		March	45.9	
		April	54.1	
		May	59.3	7.45
		June	72.1	1.77    2.50
		July	75.5	3.40    7.50
		August	74.5	4.00    3.66
		September	73.0	2.54    0.12
		October	58.5	8.08
		November		
		December		
		Seasonal Precipitation:	27.2 in.	
		Total Irrigation:	13.8 in.	
		Date of Last Spring Frost:	21-Apr	
		Date of First Fall Frost:	6-Nov	
		Frost Free Period:	195 days	

**Table 2B. New Mexico 2015 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 %				
Advanta US Inc.	Phoenix 6322A4	281.4	16.1	59.4	115.1	50.3	28-Jul
CPS Dyna-Gro Seed	D55VP77	272.8	15.4	62.3	108.3	46.3	24-Jul
CPS Dyna-Gro Seed	D53VC55	272.5	15.6	60.6	93.2	46.6	25-Jul
Advanta US Inc.	Phoenix 5552A4	271.3	15.0	59.6	105.5	41.9	26-Jul
CPS Dyna-Gro Seed	D52SS91	271.2	15.8	62.0	109.6	48.2	24-Jul
Advanta US Inc.	Phoenix 5942A4	268.7	15.2	61.6	107.1	47.8	25-Jul
Advanta US Inc.	Phoenix 6542A4	264.4	16.5	59.4	116.4	54.1	28-Jul
CPS Dyna-Gro Seed	D55QC73	249.4	15.3	63.8	115.5	50.3	26-Jul
Advanta US Inc.	Phoenix 6523A4	229.9	17.6	57.7	114.6	48.3	25-Jul
Advanta US Inc.	Phoenix 6012VZ	229.6	15.4	59.6	109.7	46.9	23-Jul
	Trial Mean	263.2	15.8	60.7	109.7	48.1	25-Jul
	LSD (P > 0.05)	16.1	0.5	0.7	10.6	5.2	-
	CV	3.59	1.75	0.65	5.69	6.38	-
	F Test	<0.0001	<0.0001	<0.0001	0.0370	0.0233	-



**Table 3B. New Mexico 2015 Early Season Grain Corn Performance Test - Agricultural Science Center at Farmington**

**Results**

<b>Brand/Company Name</b>	<b>Hybrid/Variety Name</b>	<b>Grain Yield</b>	<b>Moisture at Harvest</b>	<b>Test Weight</b>	<b>Plant Height</b>	<b>Ear Height</b>	<b>Silk Date</b>	<b>Plant Population</b>
		bu/a	%	lb/bu	in	in		
Mycogen Seeds	X13512	238.0	14.2	58.1	87	31	31-Jul	34412
CPS Dyna-Gro Seed	D39SS17	232.3	13.4	59.5	77	26	28-Jul	36155
DuPont Pioneer	P0589AM	224.4	13.7	58.9	84	29	30-Jul	32670
CPS Dyna-Gro Seed	D46SS46	224.1	13.6	59.2	81	28	30-Jul	32997
Roth Seed Co.	RSC-4030-3011A	222.4	13.5	57.8	89	28	31-Jul	33106
DuPont Pioneer	P0157AM	214.4	13.8	60.3	79	23	29-Jul	32343
Mycogen Seeds	2Y669	210.3	13.8	59.1	86	30	1-Aug	33977
Roth Seed Co.	RSC-4024-3000GT	208.2	14.0	58.8	88	29	29-Jul	34086
Mycogen Seeds	X14444	202.5	13.4	58.7	73	22	29-Jul	32343
Roth Seed Co.	RSC-3500-3000GT	196.2	14.2	56.5	75	22	30-Jul	31254
DuPont Pioneer	P0506AM	196.0	13.5	58.9	83	28	30-Jul	31690
CPS Dyna-Gro Seed	D42SS42	194.0	13.4	60.4	78	26	27-Jul	33106
DuPont Pioneer	P0419AMX	193.4	13.8	60.3	78	23	29-Jul	31690
Mycogen Seeds	2T498	186.1	12.7	58.3	82	28	28-Jul	30819
CPS Dyna-Gro Seed	D46SS62	177.7	13.7	59.7	79	29	29-Jul	33106
DuPont Pioneer	P0365AM	176.8	14.0	59.4	81	24	30-Jul	29512
DuPont Pioneer	P0339AMT	171.1	13.3	58.4	77	23	29-Jul	31799
CPS Dyna-Gro Seed	D37SS71	167.0	12.9	58.2	74	25	28-Jul	30819
Mycogen Seeds	2V489	157.0	12.7	57.7	80	27	31-Jul	31908
Mycogen Seeds	X14441	147.6	13.1	57.5	67	23	28-Jul	30819
	Trial Mean	197.0	13.5	58.8	80	26	29-Jul	32430
	LSD	50.7	0.5	0.8	7	4	-	2163
	LSD P >	0.05	0.05	0.05	0.05	0.05	-	0.05
	CV	18.2	2.4	1.0	6.3	9.9	-	4.7
	F Test	0.0226	0.0001	0.0001	0.0001	0.0001	-	0.0001



**Table 4B. New Mexico 2015 Full 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	Plant Population
			at Harvest %					
Advanta US Inc.	Phoenix 6322A4	221.1	14.1	57.2	91	33	4-Aug	32779
CPS Dyna-Gro Seed	D54DC94	218.8	14.1	57.9	82	28	2-Aug	32343
Advanta US Inc.	Phoenix 6012VZ	215.7	13.4	57.8	93	29	31-Jul	31363
CPS Dyna-Gro Seed	D55VP77	210.4	13.9	58.0	78	26	3-Aug	32779
CPS Dyna-Gro Seed	D52SS91	205.7	14.1	59.5	79	29	1-Aug	33323
CPS Dyna-Gro Seed	D55QC73	196.9	14.5	59.9	88	30	6-Aug	32888
Advanta US Inc.	Phoenix 5552A4	192.0	13.4	55.8	78	21	2-Aug	32343
Advanta US Inc.	Phoenix 6523A4	187.2	14.3	58.3	91	28	3-Aug	30928
CPS Dyna-Gro Seed	D53VC55	185.3	13.6	57.3	79	28	1-Aug	31799
Advanta US Inc.	Phoenix 5942A4	182.8	13.9	57.7	77	25	8-Aug	33541
Advanta US Inc.	Phoenix 6542A4	181.6	14.6	57.9	86	29	10-Aug	29839
	Trial Mean	199.8	14.0	57.9	84	28	4-Aug	32175
	LSD	NS	0.5	0.8	7	4	-	2203
	LSD P >	0.05	0.05	0.05	0.05	0.05	-	0.05
	CV	18.8	2.3	0.9	6.1	10.8	-	4.7
	F Test	0.7647	0.0001	0.0000	0.0001	0.0013	-	0.0555

**Table 5A. New Mexico 2015 Dryland Grain Sorghum Performance Test - Agricultural Science Center at Clovis**

**Investigators:** A. Mesbah, A. Scott, and B. Niece

**Test Description**

<b>Location:</b>	<b>Management Practices:</b>	<b>Growing Conditions:</b>		
County/Area: Curry	Previous Crop: fallow			
Longitude: -103.22	Planting Date: 17-Jun			
Latitude: 34.60	Harvest Date: 4-Nov			
Elevation: 4435 ft.				
Soil Name: Olton				
Soil Texture: clay loam				
Soil Depth: >60 in.				
	<b>Production Inputs</b>			
	<u>Rate</u> <u>Date</u>			
	<b>Fertilizer:</b>			
	Nitrogen            36 lb/a            carryover			
	P2O5                30 lb/a*            17-Mar			
	S                     1.3 lb/a*            17-Mar			
	Nitrogen            16 lb/a*            17-Mar			
	Nitrogen            46 lb/a            17-Jun			
	S                     8.3 lb/a            17-Jun			
	<b>Herbicides:</b>			
	Glyphosate        48    oz/ac    preplant			
	Sharpen            1.5    oz/ac    preplant			
	Atrazine            8    oz/ac    preplant			
	Atrazine            1    pt/ac    17-Jun			
	Brawl               1.25   pt/ac    17-Jun			
	<b>Insecticides:</b>			
	Sivanto            6    oz/ac    27-Aug			
	Prevathon        8    oz/ac    27-Aug			
<b>Test Design:</b>				
Replications: 3				
Plot Length: 20 ft.				
Rows per Plot: 2				
Row Spacing: 30 in.				
Seeding Rate: 29,000 seed/a				
		Average		
		Temp.	Precip.	Irrigation
		°F	in.	in.
		January	31.1	
		February	38.5	
		March	45.9	
		April	54.1	
		May	59.3	
		June	72.1	1.77
		July	75.5	3.40
		August	74.5	4.00
		September	73.0	2.54
		October	58.5	8.20
		November	48.5	
		December		
		Seasonal Precipitation:	19.91 in.	
		Date of Last Spring Frost:	21-Apr	
		Date of First Fall Frost:	6-Nov	
		Frost Free Period:	195 days	



**Table 5B. New Mexico 2015 Dryland Grain Sorghum Performance Test - Agricultural Science Center at Clovis**

Brand/Company Name	Hybrid/Variety Name	Maturity Class	Head Date	Plant Height in.*	Head Exertion	Moisture %	Yield lb/A	Yield bu/A	Test Weight lb/bu
Mycogen Seeds	1G741	ML	12-Aug	26.9	3.4	15.6	7100	126.8	55.3
NuTech Seed, LLC	GS 725	ML	11-Aug	24.4	4.3	19.5	6664	119.0	52.3
NuTech Seed, LLC	GS 715	ML	11-Aug	27.8	0.9	20.8	6511	116.3	49.1
Chromatin, Inc./Sorghum Part.	NK 7633	ML	14-Aug	23.0	4.1	16.5	6396	114.2	54.3
Monsanto Company	DKS 37-07	ME	10-Aug	23.4	3.5	15.5	6329	113.0	54.9
Monsanto Company	DKS 44-20	M	12-Aug	26.1	5.1	14.9	6062	108.3	56.0
DuPont Pioneer	85P05	M	12-Aug	25.2	3.9	16.0	6039	107.9	55.2
DuPont Pioneer	84P72	ML	15-Aug	25.7	3.8	16.6	5864	104.7	55.3
Mycogen Seeds	1G688	M	15-Aug	26.8	3.4	21.7	5732	102.4	49.2
Chromatin, Inc./Sorghum Part.	NK 5418	M	9-Aug	22.5	5.4	11.9	5662	101.1	53.8
Texas A&M AgriLife Research	ATx2752xRTx430	ML	12-Aug	26.6	1.2	17.0	5593	99.9	53.8
NuTech Seed, LLC	GS 623	M	7-Aug	22.2	4.2	13.7	5583	99.7	53.3
Advanta US, Inc./Alta Seeds	AG 1101	E	8-Aug	17.7	2.1	14.4	5458	97.5	51.9
Terral Seed, Inc.	REV 9562	E	14-Aug	24.7	4.7	15.5	5315	94.9	55.2
Chromatin, Inc./Sorghum Part.	SP 3425	ME	8-Aug	21.3	3.9	13.1	5300	94.6	50.5
Texas A&M AgriLife Research	ATx399xRTx430	ML	16-Aug	24.9	3.3	15.7	5286	94.4	52.0
Advanta US, Inc./Alta Seeds	AG 2115	ME	12-Aug	20.6	4.2	14.2	5274	94.2	53.2
Monsanto Company	DKS 41-50	M	14-Aug	23.1	7.4	17.9	5220	93.2	54.0
Advanta US, Inc./Alta Seeds	AG 2105	ME	10-Aug	22.2	6.6	14.9	5172	92.4	56.1
Monsanto Company	DKS 29-28	E	7-Aug	20.2	3.5	11.0	5130	91.6	52.2
Terral Seed, Inc.	REV 9782	M	13-Aug	24.0	4.8	15.2	4951	88.4	55.3
Advanta US, Inc./Alta Seeds	AG 1301	ME	13-Aug	21.1	4.0	14.4	4903	87.6	54.5
Chromatin, Inc./Sorghum Part.	SP 6929	ML	13-Aug	23.7	4.5	16.3	4899	87.5	55.3
Advanta US, Inc./Alta Seeds	AG 1201	E	10-Aug	20.2	3.9	13.2	4834	86.3	49.6
Monsanto Company	DKS 28-05	E	8-Aug	24.4	3.9	10.9	4665	83.3	52.1
NuTech Seed, LLC	GS 693	ML	14-Aug	24.7	4.4	16.4	4654	83.1	53.2
Texas A&M AgriLife Research	ATx378xRTx430	ML	13-Aug	27.0	1.6	20.7	4432	79.2	51.4
Advanta US, Inc./Alta Seeds	AG 1203	ME	14-Aug	23.0	3.9	15.4	3125	55.8	53.5
	Trial Mean		12-Aug	23.6	3.9	15.6	5434	97.0	53.3
	LSD			2.6	3.9	2.0	1233	22.0	2.9
	LSD P >		0.05	0.05	0.05	0.05	0.05	0.05	0.05
	CV			0.7	9.9	36.8	7.7	13.8	3.3
	F Test		<0.0001	<0.0001	0.0008	<0.0001	<0.0001	<0.0001	<0.0001

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

**Table 6A. New Mexico 2015 Forage Corn Performance Test - Agricultural Science Center at Artesia**

**Investigators:** R.P. Flynn, R. Pacheco, and S. Bustillos

**Test Description**

<p><b>Location:</b></p> <p>County/Area: Eddy          Longitude: -104.38          Latitude: 32.75          Elevation: 3353 ft.          Soil Name: Pima          Soil Texture: silt loam          Soil Depth: &gt;60 in.</p> <p><b>Test Design:</b></p> <p>Replications: 3          Plot Length: 30 ft.          Rows per Plot: 2          Row Spacing: 40 in.</p> <p>Seeding Rate: 27000 seeds/a</p>	<p><b>Management Practices:</b></p> <p>Previous Crop: fallow          Planting Date: 25-May          Harvest Date: 8-Sep</p> <p><b>Production Inputs</b></p> <table border="1"> <thead> <tr> <th></th> <th>Rate</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td colspan="3"><b>Fertilizer:</b></td> </tr> <tr> <td>Nitrogen</td> <td>41 lb/a</td> <td>carryover</td> </tr> <tr> <td>Nitrogen</td> <td>90 lb/a</td> <td>15-Jun</td> </tr> <tr> <td>P<sub>2</sub>O<sub>5</sub></td> <td>40 lb/a</td> <td>15-Jun</td> </tr> </tbody> </table> <p><b>Herbicides:</b></p> <p>None</p> <p><b>Insecticides:</b></p> <p>None</p>		Rate	Date	<b>Fertilizer:</b>			Nitrogen	41 lb/a	carryover	Nitrogen	90 lb/a	15-Jun	P <sub>2</sub> O <sub>5</sub>	40 lb/a	15-Jun	<p><b>Growing Conditions:</b></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>36.5</td><td></td><td></td></tr> <tr><td>February</td><td>44.4</td><td></td><td></td></tr> <tr><td>March</td><td>50.8</td><td></td><td></td></tr> <tr><td>April</td><td>59.8</td><td>0.92</td><td>3.00</td></tr> <tr><td>May</td><td>65.6</td><td>2.47</td><td>2.55</td></tr> <tr><td>June</td><td>78.1</td><td>0.83</td><td>4.00</td></tr> <tr><td>July</td><td>81.7</td><td>1.19</td><td>9.75</td></tr> <tr><td>August</td><td>80.6</td><td>0.38</td><td>8.30</td></tr> <tr><td>September</td><td>76.0</td><td>0.93</td><td>1.25</td></tr> <tr><td>October</td><td>62.7</td><td></td><td></td></tr> <tr><td>November</td><td>49.1</td><td></td><td></td></tr> <tr><td>December</td><td>41.6</td><td></td><td></td></tr> </tbody> </table> <p>Seasonal Precipitation: 6.72 in.          Total Irrigation: 28.9 in.</p> <p>Date of Last Spring Frost: 29-Apr          Date of First Fall Frost: 6-Nov          Frost Free Period: 191 days</p>		Average Temp. °F	Precip. in.	Irrigation in.	January	36.5			February	44.4			March	50.8			April	59.8	0.92	3.00	May	65.6	2.47	2.55	June	78.1	0.83	4.00	July	81.7	1.19	9.75	August	80.6	0.38	8.30	September	76.0	0.93	1.25	October	62.7			November	49.1			December	41.6		
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**Table 6B. New Mexico 2015 Forage Corn Performance Test - Agricultural Science Center at Artesia**

**Results**

Brand/Company Name	Hybrid/Variety Name	Moisture			CP	NDFD			Ash	TDN	NE <sub>i</sub>	Milk/Ton	Milk/Acre
		Dry Forage	Green Forage	at Harvest		NDF	48hr	Starch					
		t/a	t/a	%	%	%	% NDF	%	%	%	Mcal/lb	lb/t	lb/ac
CPS Dyna-Gro Seed	D59HR50	<b>11.9</b>	<b>33.0</b>	64.2	8.6	43.4	58.4	29.0	3.6	65.1	0.667	3088	<b>36885</b>
Mycogen Seeds	T14749	<b>11.2</b>	<b>30.2</b>	62.7	8.0	40.2	<b>57.8</b>	33.4	3.2	66.1	0.683	3158	<b>35511</b>
Mycogen Seeds	TMFL825	<b>11.2</b>	<b>32.4</b>	<b>65.3</b>	8.0	44.4	<b>56.2</b>	28.5	3.2	64.4	0.660	3019	<b>34004</b>
Mycogen Seeds	TMF2L874	<b>11.0</b>	<b>34.6</b>	<b>68.5</b>	<b>9.5</b>	44.4	59.9	24.6	3.8	64.6	0.663	3070	<b>33956</b>
Mycogen Seeds	T14785	10.3	26.6	61.2	8.3	44.9	58.8	29.1	3.5	65.0	0.670	3089	31911
CPS Dyna-Gro Seed	D58QC72	10.2	27.1	61.4	9.0	41.0	59.6	33.1	<b>3.1</b>	<b>66.9</b>	<b>0.690</b>	<b>3233</b>	32851
CPS Dyna-Gro Seed	D53VC47	10.0	22.4	55.8	8.2	<b>38.7</b>	59.4	<b>35.0</b>	3.1	<b>67.2</b>	<b>0.693</b>	<b>3249</b>	32404
Mycogen Seeds	TMF2H747	9.9	25.7	61.4	8.1	40.7	<b>58.1</b>	31.4	3.7	65.4	0.670	3112	31000
CPS Dyna-Gro Seed	D55VP77	9.0	23.4	61.6	9.1	39.5	<b>57.4</b>	32.9	3.3	66.6	0.687	3190	28783
Golden Acres Genetics	G7601	9.0	25.0	64.1	9.3	45.0	58.8	24.6	3.7	63.8	0.657	2998	26947
Advanta US Inc.	Phoenix 6706A4	8.7	20.4	57.7	9.2	<b>38.7</b>	59.1	34.4	3.6	66.7	0.687	3212	27849
CPS Dyna-Gro Seed	CX15116	8.7	25.9	<b>66.0</b>	<b>10.2</b>	41.6	58.7	28.2	4.1	65.6	0.677	3125	27127
Golden Acres Genetics	X6525	8.6	26.0	<b>66.7</b>	<b>9.9</b>	43.1	58.6	27.5	4.1	64.8	0.663	3071	26493
Advanta US Inc.	Phoenix 6523A4	8.2	19.9	58.8	8.8	40.7	58.6	33.0	3.2	65.3	0.670	3105	25617
Advanta US Inc.	Phoenix 6542A4	8.1	20.5	60.6	8.4	41.0	59.9	<b>34.9</b>	<b>3.0</b>	66.5	0.683	3206	25917
Advanta US Inc.	Phoenix 6606A4	8.1	19.3	58.4	8.8	<b>39.1</b>	60.6	<b>35.8</b>	<b>3.0</b>	<b>67.1</b>	<b>0.693</b>	<b>3251</b>	26400
Advanta US Inc.	Phoenix 8400A4	7.9	19.8	60.3	<b>9.5</b>	42.8	60.0	30.2	3.8	65.9	0.677	3161	24961
Golden Acres Genetics	G7663	7.6	17.3	55.9	8.7	<b>38.7</b>	59.4	<b>35.4</b>	<b>3.0</b>	<b>67.2</b>	<b>0.690</b>	<b>3247</b>	24813
	Trial Mean	9.4	25.0	61.7	8.9	41.5	58.9	31.2	3.5	65.79	0.677	3143	29635
	STDEV	1.9	5.8	4.6	0.9	3.4	1.8	5.9	0.7	1.9	0.0	147	6412
	CV	20.4	23.3	7.4	9.6	8.2	3.1	19.0	21.4	2.9	3.1	4.7	21.6

\*Bold and underlined means are top 25% of the varieties tested.

\*\*Bolted means are bottom 25% of the varieties tested.

**Table 7A. New Mexico 2015 Forage Corn Performance Test - Agricultural Science Center at Clovis**

**Investigators:** A. Mesbah, A. Scott, and B. Niece

**Test Description**

<b>Location:</b>	<b>Management Practices:</b>	<b>Growing Conditions:</b>
County/Area: Curry	Previous Crop: fallow	
Longitude: -103.22	Planting Date: 18-May	
Latitude: 34.60	Harvest Date: 2-Sep	
Elevation: 4435 ft.		
Soil Name: Olton		
Soil Texture: clay loam		
Soil Depth: >60 in.		
	<b>Production Inputs</b>	
	<u>Rate</u> <u>Date</u>	
	<b>Fertilizer:</b>	
	Nitrogen            17 lb/a            carryover	
	Nitrogen            16 lb/a*           17-Mar	
	P <sub>2</sub> O <sub>5</sub> 30 lb/a*           17-Mar	
	S                      1.3 lb/a*           17-Mar	
	Nitrogen            200 lb/a           17-May	
	Tilit Blue Zone    3 g/ac             17-May	
	S                      36.2 lb/ac        17-May	
	Zn                    3 qt/ac            17-May	
	<b>Herbicides:</b>	
	Bicep Lite II Mag    3 pt/a             18-May	
	Glyphosate         40 oz/ac           18-May	
	Brawl                1 pt/ac            26-Jun	
	<b>Insecticides:</b>	
	Onager              16 oz/ac           26-Jun	
	Prevathon           14 oz/ac           26-Jun	
	Oberon              8 oz/ac            5-Aug	
	Prevathon           14 oz/ac           5-Aug	
	<b>Fungicides:</b>	
	Quadris             11 oz/ac           5-Aug	
	Tilt                   3 oz/ac            4-Aug	
<b>Test Design:</b>		
Replications: 3		
Plot Length: 20 ft.		
Rows per Plot: 2		
Row Spacing: 30 in.		
Seeding Rate: 27000 seed/a		
<b>Notes:</b>		
* Strip Till		
		<u>Average</u>
		<u>Temp.</u> <u>Precip.</u> <u>Irrigation</u>
		°F            in.            in.
		January       31.1
		February      38.5
		March          45.9
		April           54.1
		May            59.3        7.45
		June           72.1        1.77        2.50
		July            75.5        3.40        7.50
		August        74.5        4.00        3.66
		September†   73.0        2.54
		October       58.5        8.08
		November
		December
		Seasonal Precipitation:       27.2 in.
		Total Irrigation:        13.7 in.
		Date of Last Spring Frost:    21-Apr
		Date of First Fall Frost:    6-Nov
		Frost Free Period:        195 days

**Table 7B. New Mexico 2015 Forage Corn Performance Test - Agricultural Science Center at Clovis**

**Results**

Brand/Company Name	Hybrid/Variety Name	Moisture			CP	NDF	NDFD 48hr	Starch	Ash	TDN	NE <sub>i</sub>	Milk/ Ton	Milk/ Acre
		Dry Forage	Green Forage	Harvest at									
		t/a	t/a	%	%	%	%	%	%	Mcal/lb	lb/t	lb/a	
Blue River Hybrids	72L99	9.6	29.0	66.7	8.5	46.3	59.1	29.6	2.5	65.6	0.675	3135	30134
Golden Acres	G7601	9.3	29.5	68.6	8.7	42.8	59.2	30.4	2.5	67.0	0.690	3232	29913
Mycogen Seeds	T14785	9.2	28.8	68.0	8.2	43.8	58.1	33.0	2.2	65.8	0.676	3136	29064
CPS Dyna-Gro	D59HR 50	9.2	31.1	70.5	8.7	43.1	58.3	32.8	2.7	65.8	0.677	3141	28863
Browning Seed Inc.	11901	9.2	31.4	70.9	8.7	44.6	57.3	29.1	2.9	65.2	0.670	3090	28328
B-H Genetics	BH 8732VTTP	9.1	29.2	68.8	8.8	43.5	59.5	30.3	2.7	66.6	0.685	3205	29104
Masters Choice	MC EXP633 E	9.1	30.3	70.0	8.7	41.9	61.1	32.2	2.2	68.0	0.701	3320	30147
Golden Acres	X 6525	9.0	29.4	69.5	9.0	43.8	58.5	30.3	2.4	66.5	0.684	3192	28623
Mycogen Seeds	T 14749	8.9	29.0	69.2	8.7	46.4	59.5	27.2	3.0	65.7	0.675	3139	28068
B-H Genetics	BH 8735VTTP	8.9	28.8	69.1	8.5	44.1	59.3	30.9	2.4	66.5	0.684	3200	28529
Mycogen Seeds	TMF 2L825	8.9	31.0	71.4	7.9	51.0	56.8	23.7	2.3	63.6	0.652	2968	26380
B-H Genetics	X 15033VT2P	8.9	28.3	68.7	8.4	13.3	59.2	33.3	2.1	66.6	0.686	3205	28374
Mycogen Seeds	TMF 2H747	8.8	30.4	71.1	8.6	45.8	58.8	28.9	2.9	65.4	0.672	3112	27327
B-H Genetics	X 14020RR	8.7	28.2	69.1	8.2	44.5	59.0	32.0	2.1	66.3	0.682	3177	27706
B-H Genetics	BH 8830VTTP	8.6	27.0	68.1	8.7	45.0	56.5	30.4	2.6	64.9	0.666	3057	26306
CPS Dyna-Gro	D58QC72	8.6	29.2	70.5	8.8	42.1	59.0	32.9	2.2	67.0	0.690	3231	27811
B-H Genetics	X 13007 VIP 3110	8.6	29.0	70.4	9.1	44.3	59.2	28.2	2.8	66.1	0.680	3171	27236
Masters Choice	MCT 6733	8.5	26.1	67.4	8.5	41.1	59.5	35.0	2.1	67.3	0.693	3258	27744
Mycogen Seeds	TMF 2L874	8.5	31.8	73.4	9.2	47.3	58.5	23.7	3.0	64.5	0.623	3048	25787
CPS Dyna-Gro	D53VC47	8.4	26.0	67.7	8.4	41.8	60.0	35.6	2.5	66.9	0.689	3234	27102
Advanta US, Inc.	Phoenix 6606A4	8.4	26.9	69.0	8.3	41.9	59.9	33.4	2.5	66.9	0.689	3235	27045
Advanta US, Inc.	Phoenix 6706A4	8.3	26.2	68.1	8.4	43.3	59.3	33.4	2.3	66.6	0.685	3204	26699
CPS Dyna-Gro	D55VP77	8.2	26.7	69.2	8.8	42.8	56.3	31.0	2.5	65.7	0.676	3118	25718
Blue River Hybrids	68N65	8.2	25.9	68.2	8.3	45.2	58.8	30.3	2.2	66.4	0.683	3186	26254
Advanta US, Inc.	Phoenix 6542A4	8.2	27.3	69.8	8.3	45.3	59.9	30.6	2.5	66.3	0.681	3186	26228
CPS Dyna-Gro	CX 15116	8.2	24.2	66.1	8.8	42.7	59.7	34.2	2.2	67.0	0.689	3235	26551
B-H Genetics	BH 7810VT2P	8.2	23.9	65.7	8.3	41.7	60.9	34.9	2.3	67.7	0.698	3303	27089
B-H Genetics	XP 7646VT2PRIB	8.2	24.9	67.0	8.4	40.1	59.2	37.1	2.1	67.4	0.694	3259	26729
Golden Acres	G7663	8.2	26.1	68.7	8.8	44.4	59.3	31.0	2.8	66.0	0.678	3160	25756
Advanta US, Inc.	Phoenix 8400A4	8.1	25.4	68.1	8.7	42.3	59.1	32.9	2.5	66.6	0.686	3205	26046
B-H Genetics	BH 8688DG2P	8.1	25.4	68.2	8.9	44.6	58.7	30.9	2.7	65.8	0.677	3144	25416
Blue River Hybrids	77C53	8.0	26.3	69.6	8.6	44.1	58.5	31.4	2.3	66.1	0.680	3163	25305
Masters Choice	MC EXP651P	8.0	27.8	71.4	8.5	47.4	59.4	29.3	2.7	65.1	0.669	3102	24679
Browning Seed Inc.	11801	8.0	26.4	69.9	8.9	43.4	59.7	33.0	2.6	66.4	0.683	3193	25385
Masters Choice	MCT 6363	7.9	24.9	68.2	8.5	41.3	59.8	34.1	2.5	67.3	0.693	3258	25895
Masters Choice	MC EXP600M	7.9	24.7	67.9	8.5	40.3	60.3	36.5	2.5	67.2	0.690	3260	25840
Advanta US, Inc.	Phoenix 6523A4	7.9	24.0	67.1	8.5	41.9	59.0	34.0	2.3	66.8	0.688	3217	25481
B-H Genetics	XP 7125SS	7.9	21.8	64.0	8.3	41.2	59.9	36.6	2.3	67.0	0.690	3241	25465
Blue River Hybrids	68B37	7.5	25.0	69.8	8.9	44.2	59.0	30.2	3.0	66.1	0.680	3168	23912
Blue River Hybrids	73L30	7.5	24.5	69.3	8.6	43.4	57.8	30.5	2.3	65.8	0.677	3138	23661
Blue River Hybrids	70A47	7.0	24.4	71.3	8.5	45.3	58.4	29.7	2.6	65.6	0.674	3126	21950
	Trial Mean	8.4	27.2	68.9	8.6	43.7	59.0	31.6	2.47	66.3	0.682	3179	26820
	LSD	0.8	2.0	2.7	0.50	4.1	1.8	5.6	0.8	1.8	0.020	144	3493
	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	6.1	4.5	2.4	3.6	5.7	1.9	10.9	19.3	1.7	1.840	2.8	8.0
	F Test	<0.0001	<0.0001	<0.0001	0.0014	0.0020	0.0004	0.0016	0.5751	0.0113	0.0116	0.0087	0.0035



**Table 8B. New Mexico 2014 Forage Corn Performance Test - Agricultural Science Center at Farmington**

**Results**

Brand/Company Name	Hybrid/Variety Name	Moisture					CP	NDFD			Ash	TDN	Milk/Ton	Milk/Acre
		Dry Forage	Green Forage	at Harvest	Plant Height	Ear Height		48hr	Starch	%				
		t/a	t/a	%	in	in	%	%	%	%	%	lb/t	lb/a	
CPS Dyna-Gro Seed	D59HR50	12.9	37.6	65.5	108	40	8.0	45.4	58.8	19.3	20.2	58.4	2252	28958
CPS Dyna-Gro Seed	D58QC72	12.4	32.6	62.1	98	32	8.2	38.6	57.8	28.0	18.9	62.1	2570	32079
CPS Dyna-Gro Seed	CX15116	11.8	28.6	59.1	89	29	8.4	38.8	58.3	27.2	17.4	62.0	2556	30026
CPS Dyna-Gro Seed	D55VP77	10.9	32.0	65.5	84	30	7.8	42.5	57.4	24.5	20.5	60.2	2419	26560
CPS Dyna-Gro Seed	D53VC47	9.6	26.1	63.3	83	25	7.5	42.8	59.3	25.5	18.7	62.0	2546	24596
	Trial Mean	11.5	31.4	63.1	92	31	8.0	41.6	58.3	24.9	95.6	60.9	2468	28444
	LSD	NS	NS	3.3	4	3	NS	4.9	NS	5.6	0.5	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
	CV	16.6	17.5	3.4	2.9	6.5	7.5	7.7	3.9	14.7	6.8	4.0	7.2	18.2
	F Test	0.1852	0.0976	0.0060	0.0001	0.0001	0.2960	0.0483	0.7576	0.0402	0.0364	0.1842	0.1182	0.3307

**Table 9A. New Mexico 2015 Forage Sorghum (Single Cut) Performance Test - Agricultural Science Center at Artesia**

**Investigators:** R. Flynn, R. Pacheco, and S. Bustillos

**Test Description**

<p><b>Location:</b></p> <p>County/Area: Eddy          Longitude: -104.38          Latitude: 32.75          Elevation: 3353 ft.          Soil Name: Reeves          Soil Texture: loam          Soil Depth: &gt;60 in.</p> <p><b>Test Design:</b></p> <p>Replications: 3          Plot Length: 30 ft.          Rows per Plot: 2          Row Spacing: 40 in.</p> <p>Seeding Rate: 95000 seeds/a</p>	<p><b>Management Practices:</b></p> <p>Previous Crop: fallow          Planting Date: 18-May          Harvest Date: 18-Sep</p> <p><b>Production Inputs</b></p> <table border="1"> <thead> <tr> <th></th> <th>Rate</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td colspan="3"><b>Fertilizer:</b></td> </tr> <tr> <td>Nitrogen</td> <td>41 lb/a</td> <td>carryover</td> </tr> <tr> <td>Nitrogen</td> <td>68 lb/a</td> <td>24-May</td> </tr> <tr> <td>P2O5</td> <td>40 lb/a</td> <td>24-May</td> </tr> </tbody> </table> <p><b>Herbicides:</b></p> <p>None</p> <p><b>Insecticides:</b></p> <p>None</p>		Rate	Date	<b>Fertilizer:</b>			Nitrogen	41 lb/a	carryover	Nitrogen	68 lb/a	24-May	P2O5	40 lb/a	24-May	<p><b>Growing Conditions:</b></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>36.5</td><td></td><td></td></tr> <tr><td>February</td><td>44.4</td><td></td><td></td></tr> <tr><td>March</td><td>50.8</td><td></td><td></td></tr> <tr><td>April</td><td>59.8</td><td>0.92</td><td></td></tr> <tr><td>May</td><td>65.6</td><td>2.47</td><td>4.49</td></tr> <tr><td>June</td><td>78.1</td><td>0.83</td><td>6.64</td></tr> <tr><td>July</td><td>81.7</td><td>1.19</td><td>7.35</td></tr> <tr><td>August</td><td>80.6</td><td>0.38</td><td>9.00</td></tr> <tr><td>September</td><td>76.0</td><td>0.93</td><td></td></tr> <tr><td>October</td><td>62.7</td><td></td><td></td></tr> <tr><td>November</td><td>49.1</td><td></td><td></td></tr> <tr><td>December</td><td>41.6</td><td></td><td></td></tr> </tbody> </table> <p>Seasonal Precipitation: 6.7 in.          Total Irrigation: 27.5 in.</p> <p>Date of Last Spring Frost: 29-Apr          Date of First Fall Frost: 6-Nov          Frost Free Period: 191 days</p>		Average Temp. °F	Precip. in.	Irrigation in.	January	36.5			February	44.4			March	50.8			April	59.8	0.92		May	65.6	2.47	4.49	June	78.1	0.83	6.64	July	81.7	1.19	7.35	August	80.6	0.38	9.00	September	76.0	0.93		October	62.7			November	49.1			December	41.6		
	Rate	Date																																																																			
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**Table 9B. New Mexico 2015 Forage Sorghum (Single Cut) Performance Test - Agricultural Science Center at Artesia**

**Results**

Brand/Company Name	Hybrid/Variety Name	Sorghum <sup>†</sup> Type	Maturity <sup>§</sup> Group	Moisture			CP	NDF	NDFD 48hr	Ash	TDN	NE <sub>i</sub> Mcal/lb	Milk/ Ton lb/t	Milk/ Acre lb/a
				Dry Forage t/a	Green Forage t/a	at Harvest %								
Ceres, Inc.	EJ 7282	Conv	L	<b>7.5</b>	<b>27.0</b>	72.2	7.44	<b>50.65</b>	67.80	<b>4.31</b>	57.86	0.589	2649	<b>19881</b>
Ceres, Inc.	EJ 7281	Conv	L	<b>7.0</b>	<b>26.1</b>	<b>73.3</b>	6.93	53.47	66.18	<b>4.45</b>	57.12	0.580	2583	<b>18002</b>
CPS Dyna-Gro Seed	705F	Conv	ME	<b>6.5</b>	22.4	71.0	7.18	57.46	<b>62.55</b>	6.38	58.12	0.591	2625	17052
Gayland Ward Seed	Ensilé Master	Conv	L	<b>6.5</b>	<b>23.6</b>	72.5	6.67	<b>49.40</b>	66.11	<b>4.79</b>	56.95	0.578	2570	16629
Advanta US Inc./Alta Seeds	AF8301	Conv	M	6.4	21.0	69.4	6.93	58.51	<b>62.41</b>	6.12	<b>58.47</b>	<b>0.595</b>	2650	<b>17139</b>
Ceres, Inc.	DS 7853	Conv	PS	6.4	<b>27.3</b>	<b>76.4</b>	7.00	68.57	<b>62.33</b>	6.01	57.45	0.584	2575	16558
Advanta US Inc./Alta Seeds	AF7401	BMR	L	6.1	21.3	71.4	7.81	55.58	66.29	6.74	<b>60.53</b>	<b>0.618</b>	<b>2829</b>	<b>17179</b>
Gayland Ward Seed	GW-400 BMR	BMR	ME	5.9	20.8	71.7	7.28	51.46	66.80	<b>5.38</b>	<b>58.36</b>	<b>0.594</b>	<b>2677</b>	15736
CPS Dyna-Gro Seed	F75FS13	Conv	M	5.8	21.1	72.7	7.06	52.03	64.92	5.65	57.52	0.585	2601	14951
Gayland Ward Seed	GW-600 BMR	BMR	ML	5.6	19.8	71.4	7.98	53.61	68.69	6.35	57.91	0.589	<b>2659</b>	14967
Gayland Ward Seed	Silo-Pro BMR Dwarf	BMR	E	5.6	19.9	72.0	7.59	52.25	67.77	5.70	57.40	0.583	2615	14596
Warner Seeds	Sweet Bee BMR	BMR	L	5.5	20.5	73.1	<b>8.11</b>	56.22	66.52	6.82	57.16	0.581	2588	14312
CPS Dyna-Gro Seed	F75FS28 BMR	BMR	M	5.3	18.7	71.6	<b>8.64</b>	53.71	69.37	6.40	<b>59.11</b>	<b>0.602</b>	<b>2750</b>	14619
Blue River Hybrids	Warbler			5.2	20.1	<b>74.0</b>	<b>8.14</b>	51.19	68.64	6.31	56.46	0.573	2555	13373
Advanta US Inc./Alta Seeds	AF7301	BMR	M	5.2	19.8	<b>73.6</b>	7.37	53.72	67.27	6.11	56.67	0.575	2559	13532
Gayland Ward Seed	GW-2120	Conv	L	4.9	17.6	72.2	<b>8.09</b>	51.29	<b>63.25</b>	5.89	55.68	0.564	2456	12044
Advanta US Inc./Alta Seeds	AF7202	BMR	ME	4.7	16.5	71.3	7.50	<b>50.85</b>	68.01	6.51	57.14	0.581	2599	12273
Advanta US Inc./Alta Seeds	AF7102	BMR	E	4.6	16.7	72.6	8.03	<b>50.52</b>	67.35	6.10	57.75	0.587	2637	12005
Trial Mean				5.8	21.1	72.4	7.5	53.9	66.2	5.9	57.6	0.586	2621	15269
STDEV				0.9	3.6	1.8	0.7	4.7	2.8	1.0	1.5	0.017	120	2604
CV				16.1	17.0	2.5	9.5	8.8	4.2	16.8	2.7	2.9	4.6	17.1

<sup>†</sup> Sorghum Type: Conv = Conventional, BMR = Brown Midrib, BD = Brachytic Dwarf, SxS = Sorghum-Sudangrass Hybrid

<sup>§</sup> Maturity Group: E = Early, M = Medium, L = Late, PS = Photoperiod Sensitive

\*Bold and underlined means are top 25% of the varieties tested.

\*\*Bolted means are bottom 25% of the varieties tested.

**Table 10A. New Mexico 2015 Irrigated Forage Sorghum & Sorghum Sudangrass (Multi-Cut) Performance Test - Agricultural Science Center at Artesia**

**Investigators:** R. Flynn, R. Pacheco, and S. Bustillos

**Test Description**

<b>Location:</b>		<b>Management Practices:</b>			<b>Growing Conditions:</b>		
County/Area:	Eddy	Previous Crop:	fallow		Average		
Longitude:	-104.38	Planting Date:	18-May		Temp.	Precip.	Irrigation
Latitude:	32.75	First Harvest Date:	20-Jul		°F	in.	in.
Elevation:	3353 ft.	Second Harvest Date:	20-Sep		January 36.5		
Soil Name:	Pima	<b>Production Inputs</b>			February 44.4		
Soil Texture:	silt loam	Rate                      Date			March 50.8		
Soil Depth:	>60 in.	<b>Fertilizer:</b>			April 59.8                      0.92		
		Nitrogen	41 lb/a	carryover	May 65.6                      2.47                      4.49		
<b>Test Design:</b>		Nitrogen	68 lb/a	24-May	June 78.1                      0.83                      6.64		
Replications:	3	P2O5	40 lb/a	24-May	July 81.7                      1.19                      7.35		
Plot Length:	30 ft.				August 80.6                      0.38                      9.00		
Rows per Plot:	2				September 76.0                      0.93		
Row Spacing:	40 in.				October 62.7		
					November 49.1		
Seeding Rate:	95000 seeds/a	<b>Herbicides:</b>			December 41.6		
		None			Seasonal Precipitation 6.7 in.		
		<b>Insecticides:</b>			Total Irrigation 27.5 in.		
		None			Date of Last Spring Frost: 29-Apr		
					Date of First Fall Frost: 6-Nov		
					Frost Free Period: 191 days		

**Table 10B. New Mexico 2015 Irrigated Forage Sorghum & Sorghum Sudangrass (Multi-Cut) Performance Test - Agricultural Science Center at Artesia**

**Results**

Brand/Company Name	Hybrid/Variety Name	Type <sup>1</sup>	Harvest 1					Harvest 2					Total	
			Dry Forage	Green Forage	Harvest Moisture	Milk/Ton	Milk/Acre	Dry Forage	Green Forage	Harvest Moisture	Milk/Ton	Milk/Acre	Dry Forage	Milk/Acre
			t/a	t/a	%	lb/t	lb/a	t/a	t/a	%	lb/t	lb/a	t/a	lb/a
Browning Seed	Cadan 99B WMR	SxS	3.4	13.6	75.3	1858	12954	4.0	17.0	76.6	1621	10720	7.3	23674
Blue River Hybrids	Heron 6	SxS	2.1	11.9	81.9	2501	11060	1.9	10.8	82.3	2007	7334	6.7	18394
Gayland Ward Seed	Nutra-King BMR6	SxS	2.7	14.2	80.9	2605	11159	3.2	18.1	82.1	2072	12602	6.3	23761
Browning Seed	Sweet Sioux WMR	SxS	3.2	14.6	78.0	2073	13991	3.1	12.7	75.7	1721	11582	6.3	25574
Gayland Ward Seed	Super Sugar DM	SxS	3.2	16.6	80.7	2004	13137	3.1	15.8	80.7	1901	9408	6.3	22545
CPS Dyna-Gro Seed	Full Graze	SxS	2.3	9.9	77.0	2051	9599	3.9	22.2	82.4	1852	12945	6.2	22543
Advanta US Inc./Alta Seeds	AS-6201	SxS	2.6	14.2	81.6	2421	11746	3.2	17.2	81.1	2115	13063	6.0	24809
Gayland Ward Seed	Super Sugar	SxS	3.3	16.5	80.3	2596	11685	3.1	15.6	80.3	2057	10065	6.0	21750
Gayland Ward Seed	Sweet Six BMR	SxS	3.2	14.8	78.6	2275	14419	3.5	16.0	77.9	2106	13687	6.0	28105
Advanta US Inc./Alta Seeds	AS-5201	SxS	2.9	15.1	80.6	2012	10964	2.7	13.4	80.0	1879	9465	5.9	20429
Ceres, Inc.	CB-7290	SxS	1.9	12.5	84.6	2283	8284	2.0	12.3	83.6	1995	8697	5.6	16981
Blue River Hybrids	Blackhawk	SxS	2.5	13.2	80.7	2173	10163	3.5	19.0	81.6	1934	12512	5.6	22675
Browning Seed	Sweet Sioux BMR	SxS	3.0	15.8	81.3	2368	14398	2.6	15.4	83.2	2067	8726	5.5	23124
Advanta US Inc./Alta Seeds	AS-6401	SxS	1.9	11.1	82.7	2605	10393	3.4	19.5	82.7	2229	12008	5.3	22401
Gayland Ward Seed	Sweet Forever BMR	SxS	2.6	14.7	82.4	2241	11824	2.6	16.5	84.2	1883	7099	5.2	18923
CPS Dyna-Gro Seed	Full Graze BMR	SxS	2.5	13.9	82.2	2348	12015	2.0	13.0	84.6	1853	7597	4.5	19612
Ceres, Inc.	F2P134	SxS	2.2	12.1	82.2	2275	10522	2.2	15.2	85.5	1677	8020	4.4	18542
Advanta US Inc./Alta Seeds	AS-9302	SxS	2.7	13.6	80.2	2051	11685	3.3	16.1	79.3	2385	14336	4.1	26021
Blue River Hybrids	Seahwk 6	SxS	2.4	10.5	77.5	2387	10650	3.2	13.6	76.3	2219	14143	4.1	24793
Warner Seeds, Inc.	Sucross 7R-BMR	SxS	2.7	14.9	81.9	2415	12101	2.6	14.2	81.7	2042	10217	3.9	22317
Advanta US Inc./Alta Seeds	AS-6402	SxS	2.3	12.0	80.5	2596	12459	1.6	9.2	82.9	2089	6862	3.9	19321
	Trial Mean		2.6	13.6	80.5	2292	11677	2.9	15.4	81.2	1967	10528	5.5	22204
	LSD		0.7	2.3	3.0	258	2591	0.8	3.8	3.1	233	3489	1.4	2868
	CV		26.5	16.9	3.7	11.2	22.2	27.8	24.9	3.8	11.8	33.1	24.9	12.9

<sup>1</sup>FS and SxS signify forage sorghum and sorghum x sudangrass, respectively.

**Table 10C. New Mexico 2015 Irrigated Forage Sorghum & Sorghum Sudangrass (Multi-Cut) Performance Test - Agricultural Science Center at Artesia**

**Results**

Brand/Company Name	Hybrid/Variety Name	Type <sup>1</sup>	Harvest 1						Harvest 2					
			NDFD						NDFD					
			CP	NDF	48hr	RFQ	TDN	NE <sub>i</sub>	CP	NDF	48hr	RFQ	TDN	NE <sub>i</sub>
%	%	%	%	%	Mcal/lb	%	%	%	%	%	Mcal/lb			
Browning Seed	Cadan 99B WMR	SxS	11.1	69.1	47.9	72.9	49.3	0.494	8.5	70.3	44.2	63.8	46.6	0.463
Blue River Hybrids	Heron 6	SxS	13.0	63.3	57.8	104.4	57.0	0.579	9.5	65.9	52.0	83.7	50.8	0.510
Gayland Ward Seed	Nutra-King BMR6	SxS	12.6	65.0	54.3	93.2	54.2	0.547	8.8	64.5	50.4	84.9	51.9	0.523
Browning Seed	Sweet Sioux WMR	SxS	11.9	66.1	49.9	82.6	52.0	0.524	9.0	68.9	45.4	68.0	47.8	0.477
Gayland Ward Seed	Super Sugar DM	SxS	12.2	66.3	50.4	81.5	51.0	0.512	9.3	66.1	48.2	77.4	49.9	0.500
CPS Dyna-Gro Seed	Full Graze	SxS	12.9	65.5	50.2	83.2	51.7	0.520	9.5	66.3	47.3	75.4	49.3	0.494
Advanta US Inc./Alta Seeds	AS-6201	SxS	13.2	63.9	56.8	100.3	56.0	0.568	9.4	63.4	50.1	87.0	52.6	0.530
Gayland Ward Seed	Super Sugar	SxS	12.5	64.9	51.8	89.3	52.9	0.533	9.7	64.4	48.5	83.2	52.0	0.524
Gayland Ward Seed	Sweet Six BMR	SxS	12.6	65.1	56.4	97.5	55.4	0.561	9.1	65.4	50.4	84.5	52.4	0.528
Advanta US Inc./Alta Seeds	AS-5201	SxS	11.7	68.4	50.8	79.6	51.1	0.513	8.8	68.5	47.5	73.6	49.7	0.498
Ceres, Inc.	CB-7290	SxS	12.6	64.1	54.8	95.0	54.3	0.549	9.5	64.7	49.8	82.4	51.0	0.512
Blue River Hybrids	Blackhawk	SxS	11.3	68.4	53.8	85.9	52.9	0.533	8.7	70.4	50.0	75.1	50.1	0.502
Browning Seed	Sweet Sioux BMR	SxS	12.7	63.7	55.2	97.8	55.4	0.562	10.1	64.2	51.4	86.2	51.7	0.521
Advanta US Inc./Alta Seeds	AS-6401	SxS	13.3	61.5	59.3	111.1	58.2	0.593	9.4	65.1	53.5	90.8	53.7	0.542
Gayland Ward Seed	Sweet Forever BMR	SxS	13.0	64.7	53.5	91.7	53.9	0.544	8.7	66.9	49.2	77.3	49.5	0.496
CPS Dyna-Gro Seed	Full Graze BMR	SxS	12.6	63.3	54.9	97.4	55.2	0.559	8.0	67.1	48.3	75.5	49.2	0.492
Ceres, Inc.	F2P134	SxS	13.2	63.1	53.7	95.1	54.3	0.549	8.9	68.3	46.9	69.3	46.9	0.467
Advanta US Inc./Alta Seeds	AS-9302	SxS	14.4	61.2	59.5	112.3	58.5	0.595	9.8	63.4	55.6	98.9	55.6	0.564
Blue River Hybrids	Seahwk 6	SxS	12.5	64.4	55.7	97.9	55.6	0.564	9.0	64.0	50.9	89.4	53.9	0.545
Warner Seeds, Inc.	Sucross 7R-BMR	SxS	12.6	64.9	57.0	99.4	55.9	0.566	9.0	67.0	51.3	82.3	51.4	0.517
Advanta US Inc./Alta Seeds	AS-6402	SxS	13.8	62.0	59.4	110.4	58.1	0.591	10.2	66.7	53.7	86.2	51.7	0.521
	Trial Mean		12.7	64.7	54.4	94.2	54.4	0.550	9.2	66.2	49.6	80.5	50.8	0.510
	LSD		1.0	2.9	3.8	13.2	3.1	0.035	0.8	2.7	3.4	10.2	2.8	0.031
	CV		8.1	4.5	7.0	14.0	5.7	6.3	8.4	4.1	6.8	12.7	5.5	6.1

<sup>1</sup>FS and SxS signify forage sorghum and sorghum x sudangrass, respectively.

**Table 11A. New Mexico 2015 Irrigated Forage Sorghum Performance Test - Agricultural Science Center at Clovis**

**Investigators:** A. Mesbah, A. Scott, and B. Niece

**Test Description**

<p><b>Location:</b>          County/Area: Curry          Longitude: -103.22          Latitude: 34.60          Elevation: 4435 ft.          Soil Name: Olton          Soil Texture: clay loam          Soil Depth: &gt;60 in.</p>	<p><b>Management Practices:</b>          Previous Crop: fallow          Planting Date: 27-May          Harvest Date: 30-Sep</p> <p><b>Production Inputs</b></p> <table border="1"> <thead> <tr> <th></th> <th>Rate</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td colspan="3"><b>Fertilizer:</b></td> </tr> <tr> <td>Nitrogen</td> <td>150 lb/ac</td> <td>26-May</td> </tr> <tr> <td>P<sub>2</sub>O<sub>5</sub></td> <td>45 lb/ac</td> <td>26-May</td> </tr> <tr> <td>S</td> <td>24.7 lb/ac</td> <td>26-May</td> </tr> <tr> <td>Zn</td> <td>3 qt/ac</td> <td>26-May</td> </tr> <tr> <td colspan="3"><b>Herbicides:</b></td> </tr> <tr> <td>Aatrex</td> <td>2 pt/a</td> <td>27-May</td> </tr> <tr> <td colspan="3"><b>Insecticides:</b></td> </tr> <tr> <td>Sivanto</td> <td>6 oz/ac</td> <td>26-Aug</td> </tr> <tr> <td>Prevathon</td> <td>8 oz/ac</td> <td>26-Aug</td> </tr> </tbody> </table>		Rate	Date	<b>Fertilizer:</b>			Nitrogen	150 lb/ac	26-May	P <sub>2</sub> O <sub>5</sub>	45 lb/ac	26-May	S	24.7 lb/ac	26-May	Zn	3 qt/ac	26-May	<b>Herbicides:</b>			Aatrex	2 pt/a	27-May	<b>Insecticides:</b>			Sivanto	6 oz/ac	26-Aug	Prevathon	8 oz/ac	26-Aug	<p><b>Growing Conditions:</b></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>31.1</td><td></td><td></td></tr> <tr><td>February</td><td>38.5</td><td></td><td></td></tr> <tr><td>March</td><td>45.9</td><td></td><td></td></tr> <tr><td>April</td><td>54.1</td><td></td><td></td></tr> <tr><td>May</td><td>59.3</td><td>7.45</td><td></td></tr> <tr><td>June</td><td>72.1</td><td>1.77</td><td>1.00</td></tr> <tr><td>July</td><td>75.5</td><td>3.40</td><td>3.80</td></tr> <tr><td>August</td><td>74.5</td><td>4.00</td><td>3.00</td></tr> <tr><td>September</td><td>73.0</td><td>2.54</td><td></td></tr> <tr><td>October</td><td>58.5</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>Seasonal Precipitation:</td> <td></td> <td>19.2 in.</td> <td></td> </tr> <tr> <td>Total Irrigation:</td> <td></td> <td>7.8 in.</td> <td></td> </tr> <tr> <td>Date of Last Spring Frost:</td> <td></td> <td>21-Apr</td> <td></td> </tr> <tr> <td>Date of First Fall Frost:</td> <td></td> <td>6-Nov</td> <td></td> </tr> <tr> <td>Frost Free Period:</td> <td></td> <td>195 days</td> <td></td> </tr> </tbody> </table>		Average Temp. °F	Precip. in.	Irrigation in.	January	31.1			February	38.5			March	45.9			April	54.1			May	59.3	7.45		June	72.1	1.77	1.00	July	75.5	3.40	3.80	August	74.5	4.00	3.00	September	73.0	2.54		October	58.5			November				December				Seasonal Precipitation:		19.2 in.		Total Irrigation:		7.8 in.		Date of Last Spring Frost:		21-Apr		Date of First Fall Frost:		6-Nov		Frost Free Period:		195 days	
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<p><b>Test Design:</b>          Replications: 3          Plot Length: 20 ft.          Rows per Plot: 2          Row Spacing: 30 in.          Seeding Rate: 75000 seed/a</p>																																																																																																											

**Table 11B. New Mexico 2015 Irrigated Forage Sorghum Performance Test - Agricultural Science Center at Clovis**

**Results**

Brand/Company Name	Hybrid/Variety Name	Sorghum <sup>†</sup> Type	Maturity <sup>§</sup> Group	Moisture			CP %	NDF %	NDFD 48hr %	Ash %	TDN %	NE <sub>i</sub> Mcal/lb	Milk/Ton lb/t	Milk/Acre lb/a
				Dry Forage t/a	Green Forage t/a	at Harvest %								
Ceres, Inc.	DS 7853**	Conv	PS	8.2	36.8	77.6	7.8	62.1	60.7	6.1	53.8	0.543	2301	18892
Ceres, Inc.	EJ 7282*	Conv	L	8.2	29.0	71.8	7.0	56.0	60.5	4.5	60.5	0.618	2779	22631
Advanta US Inc./Alta Seeds	AF7401	BMR	L	8.2	18.3	56.1	8.0	47.9	64.2	7.0	64.1	0.658	3068	25399
CPS Dyna-Gro Seed	705F	Conv	ME	8.1	17.8	54.6	8.7	40.3	58.9	4.3	65.3	0.671	3106	25153
Ceres, Inc.	EJ 7281*	Conv	L	8.0	27.9	71.2	7.1	53.7	61.5	4.1	61.0	0.623	2823	22542
Gayland Ward Seed	Ensile Master	Conv		7.5	19.1	60.4	7.1	52.4	58.3	4.9	61.1	0.625	2805	20984
Advanta US Inc./Alta Seeds	AF8301	Conv	L	7.3	16.0	54.4	6.7	54.5	59.0	6.0	61.0	0.623	2800	20690
Blue River Hybrids	Blackhawk 12	BMR		6.8	18.4	62.8	8.3	49.5	61.1	3.8	64.8	0.666	3092	21052
Browning Seed, Inc.	Silage Master	Conv	ML	6.7	19.2	65.1	8.5	45.7	61.5	4.9	63.7	0.654	3016	20245
Gayland Ward Seed	GW 600 BMR	BMR		6.7	15.4	56.7	7.9	45.7	60.9	5.0	63.7	0.653	3009	20207
Gayland Ward Seed	GW 2120			6.7	17.9	62.7	8.0	45.1	60.6	4.9	61.3	0.627	2838	18959
CPS Dyna-Gro Seed	F75FS13	Conv	M	6.5	18.8	65.7	8.0	48.4	61.7	5.1	62.4	0.683	2922	18875
Gayland Ward Seed	GW 400 BMR	BMR		6.4	19.5	66.9	8.2	48.1	64.4	6.1	59.2	0.604	2718	17438
Advanta US Inc./Alta Seeds	AF7301	BMR	M	6.2	17.0	63.8	7.7	49.3	66.6	6.5	61.7	0.631	2915	18137
Blue River Hybrids	Seahawk 6	BMR		5.9	14.3	58.8	8.4	49.8	58.3	5.0	60.9	0.622	2785	16425
CPS Dyna-Gro Seed	F75FS28 BMR	BMR	M	5.8	14.2	59.0	8.6	44.9	64.5	3.9	66.7	0.627	3254	19129
Blue River Hybrids	Heron 6	BMR		5.8	14.1	58.7	8.4	46.7	64.5	5.5	63.0	0.646	2992	17535
Advanta US Inc./Alta Seeds	AF7102	BMR	E	5.7	14.7	61.1	8.6	42.4	62.6	5.4	62.3	0.638	2926	16700
Warner Seeds, Inc.	Sweet Bee BMR	BMR	L	5.7	12.3	53.6	6.8	52.7	66.7	7.4	64.1	0.658	3086	17402
Advanta US Inc./Alta Seeds	AF7202	BMR	ME	5.5	14.0	61.1	9.1	36.5	63.4	5.0	66.9	0.689	3259	17833
Blue River Hybrids	Warbler	BMR		5.2	11.8	55.9	7.2	51.5	68.1	7.3	65.3	0.671	3185	16536
Gayland Ward Seed	Silo-Pro BMR Dwarf	BMR		5.2	12.5	58.3	8.3	42.1	65.9	6.0	66.4	0.683	3243	16897
Trial Mean				6.6	18.1	61.6	7.9	48.4	62.4	5.392	62.7	0.642	2951	19529
LSD				NS	5.3	3.9	1.3	8.2	3.1	1.6	3.6	0.040	260	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				21.4	17.6	3.9	9.8	10.3	3.0	17.6	3.5	3.8	5.4	23.0
F Test				0.1153	<0.0001	<0.0001	0.0145	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	0.4645

\* planted 50,000/ac

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<sup>†</sup> Sorghum Type: Conv = Conventional, BMR = Brown Midrib

<sup>§</sup>Maturity Group: E = Early, M = Medium, L = Late, PS = Photoperiod Sensitive

**Table 12A. New Mexico 2015 Dryland Forage Sorghum Performance Test - Agricultural Science Center at Clovis**

**Investigators:** A. Mesbah, A. Scott, and B. Niece

**Test Description**

<b>Location:</b>	<b>Management Practices:</b>	<b>Growing Conditions:</b>																																																																																																																																
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: 17-Jun Harvest Date: 31-Oct  <hr/> <b>Production Inputs</b> <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"><b>Fertilizer:</b></td> </tr> <tr> <td>Nitrogen</td> <td>28 lb/a</td> <td>carryover</td> </tr> <tr> <td>Nitrogen</td> <td>16 lb/ac</td> <td>17-Mar</td> </tr> <tr> <td>P<sub>2</sub>O<sub>5</sub></td> <td>30 lb/ac</td> <td>17-Mar</td> </tr> <tr> <td>S</td> <td>1.3 lb/ac</td> <td>17-Mar</td> </tr> <tr> <td>Nitrogen</td> <td>46 lb/ac</td> <td>17-Jun</td> </tr> <tr> <td>S</td> <td>8.3 lb/ac</td> <td>17-Jun</td> </tr> <tr> <td colspan="3"><b>Herbicides:</b></td> </tr> <tr> <td>Atrazine</td> <td>8 oz/ac</td> <td>12-Jun</td> </tr> <tr> <td>Glyphosate</td> <td>48 oz/ac</td> <td>12-Jun</td> </tr> <tr> <td>Sharpen</td> <td>1.5 oz/ac</td> <td>12-Jun</td> </tr> <tr> <td>Atrazine</td> <td>1 pt/ac</td> <td>17-Jun</td> </tr> <tr> <td colspan="3"><b>Insecticides:</b></td> </tr> <tr> <td>Sivanto</td> <td>6 oz/ac</td> <td>27-Aug</td> </tr> <tr> <td>Prevathon</td> <td>8 oz/ac</td> <td>27-Aug</td> </tr> </tbody> </table>		Rate	Date	<b>Fertilizer:</b>			Nitrogen	28 lb/a	carryover	Nitrogen	16 lb/ac	17-Mar	P <sub>2</sub> O <sub>5</sub>	30 lb/ac	17-Mar	S	1.3 lb/ac	17-Mar	Nitrogen	46 lb/ac	17-Jun	S	8.3 lb/ac	17-Jun	<b>Herbicides:</b>			Atrazine	8 oz/ac	12-Jun	Glyphosate	48 oz/ac	12-Jun	Sharpen	1.5 oz/ac	12-Jun	Atrazine	1 pt/ac	17-Jun	<b>Insecticides:</b>			Sivanto	6 oz/ac	27-Aug	Prevathon	8 oz/ac	27-Aug	<hr/> <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>31.1</td><td></td><td></td></tr> <tr><td>February</td><td>38.5</td><td></td><td></td></tr> <tr><td>March</td><td>45.9</td><td></td><td></td></tr> <tr><td>April</td><td>54.1</td><td></td><td></td></tr> <tr><td>May</td><td>59.3</td><td></td><td></td></tr> <tr><td>June</td><td>72.1</td><td>1.77</td><td></td></tr> <tr><td>July</td><td>75.5</td><td>3.40</td><td></td></tr> <tr><td>August</td><td>74.5</td><td>4.00</td><td></td></tr> <tr><td>September</td><td>73.0</td><td>2.54</td><td></td></tr> <tr><td>October</td><td>58.5</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"><hr/></td></tr> <tr> <td>Seasonal Precipitation:</td> <td></td> <td>11.7 in.</td> <td></td> </tr> <tr> <td>Total Irrigation:</td> <td></td> <td>0.0 in.</td> <td></td> </tr> <tr><td colspan="4"><hr/></td></tr> <tr> <td>Date of Last Spring Frost:</td> <td colspan="3">21-Apr</td> </tr> <tr> <td>Date of First Fall Frost:</td> <td colspan="3">6-Nov</td> </tr> <tr> <td>Frost Free Period:</td> <td colspan="3">195 days</td> </tr> </tbody> </table>		Average Temp. °F	Precip. in.	Irrigation in.	January	31.1			February	38.5			March	45.9			April	54.1			May	59.3			June	72.1	1.77		July	75.5	3.40		August	74.5	4.00		September	73.0	2.54		October	58.5			November				December				<hr/>				Seasonal Precipitation:		11.7 in.		Total Irrigation:		0.0 in.		<hr/>				Date of Last Spring Frost:	21-Apr			Date of First Fall Frost:	6-Nov			Frost Free Period:	195 days		
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**Table 12B. New Mexico 2015 Dryland Forage Sorghum Performance Test - Agricultural Science Center at Clovis**

**Results**

Brand/Company Name	Hybrid/Variety Name	Sorghum <sup>†</sup> Type	Maturity <sup>§</sup> Group	Moisture			CP	NDF	NDFD 48hr	Ash	TDN	NE <sub>i</sub> Mcal/lb	Milk/ Ton lb/t	Milk/ Acre lb/a
				Dry Forage t/a	Green Forage t/a	at Harvest %								
CPS Dyna-Gro Seed	705F	Conv	ME	6.0	17.9	66.3	9.9	41.5	56.5	4.5	64.2	0.659	3008	18119
Advanta US Inc./Alta Seeds	AF8301	BMR	M	5.9	16.7	64.7	9.4	43.1	56.7	4.3	64.2	0.658	3007	17708
Gayland Ward	Super Sugar			5.6	18.2	69.2	8.8	46.9	54.3	3.7	59.1	0.602	2620	14726
Advanta US Inc./Alta Seeds	AF7401	BMR	L	4.9	16.6	70.7	9.5	41.8	58.4	5.0	61.8	0.632	2852	13873
Advanta US Inc./Alta Seeds	AF7301	BMR	M	4.2	13.3	68.6	9.6	42.4	63.2	4.6	65.0	0.668	3127	13102
Gayland Ward	GW 2120			4.1	10.9	62.7	9.1	41.9	57.7	3.7	65.5	0.673	3113	12739
Blue River Hybrids	Heron 6	BMR		4.0	12.1	67.4	9.5	44.4	61.3	4.5	62.3	0.638	2916	11560
Blue River Hybrids	Blackhawk 12	BMR		3.7	12.0	68.8	9.2	51.5	59.8	5.0	61.4	0.628	2838	10617
Blue River Hybrids	Warbler	BMR		3.7	13.5	72.7	10.6	44.2	63.1	6.2	57.8	0.588	2610	9539
CPS Dyna-Gro Seed	F75FS13	Conv	M	3.6	10.7	66.7	8.5	47.2	54.9	5.0	60.5	0.617	2724	9814
Advanta US Inc./Alta Seeds	AF7202	BMR	ME	3.2	9.0	64.4	8.8	41.3	60.1	4.9	64.6	0.664	3072	9831
Advanta US Inc./Alta Seeds	AF7102	BMR	E	3.0	8.2	63.9	8.8	42.5	59.2	4.5	64.6	0.663	3063	9053
CPS Dyna-Gro Seed	F75FS28 BMR	BMR	M	2.6	7.4	64.4	9.1	46.3	63.1	3.9	66.9	0.689	3259	8629
Blue River Hybrids	Seahawk 6	BMR		2.4	6.7	63.5	9.8	43.6	53.9	3.7	63.2	0.648	2915	7160
Trial Mean				4.1	12.4	66.7	9.3	44.2	58.7	4.5	62.9	0.645	2937	11890
LSD				0.7	1.7	3.0	1.0	NS	3.0	1.2	1.1	0.046	308	2769
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				10.6	8.0	2.7	6.3	11.0	3.0	16.4	3.9	4.2	6.2	13.9
F Test				<0.0001	<0.0001	<0.0001	0.0169	0.4352	<0.0001	0.0225	0.0045	0.0044	0.0044	<0.0001

<sup>†</sup> Sorghum Type: Conv = Conventional, BMR = Brown Midrib

<sup>§</sup> Maturity Group: E = Early, M = Medium, L = Late, PS = Photoperiod Sensitive



**Table 13A. New Mexico 2015 Irrigated Forage Sorghum Performance Test - Agricultural Science Center at Los Lunas**

**Investigators:** M.A. Marsalis, C. Havik, and M. Place

**Test Description**

<b>Location:</b>		<b>Management Practices:</b>			<b>Growing Conditions:</b>																																																																														
County/Area:	Valencia	Previous Crop:	fallow		<table border="1"> <thead> <tr> <th></th> <th>Average Temp.</th> <th>Precip.</th> <th>Irrigation</th> </tr> <tr> <th></th> <th>°F</th> <th>in.</th> <th>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>54.9</td><td>0.87</td><td></td></tr> <tr><td>May</td><td>62.3</td><td>1.47</td><td>3.00</td></tr> <tr><td>June</td><td>76.5</td><td>0.33</td><td>3.00</td></tr> <tr><td>July</td><td>76.8</td><td>3.60</td><td>3.50</td></tr> <tr><td>August</td><td>76.4</td><td>0.81</td><td>3.50</td></tr> <tr><td>September</td><td>71.0</td><td>0.54</td><td>1.95</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="2">Seasonal Precipitation</td><td colspan="2">7.62 in.</td></tr> <tr><td colspan="2">Total Irrigation</td><td colspan="2">14.95 in.</td></tr> <tr><td colspan="2">Date of Last Spring Frost:</td><td colspan="2">20-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">191 days</td></tr> </tbody> </table>				Average Temp.	Precip.	Irrigation		°F	in.	in.	January				February				March				April	54.9	0.87		May	62.3	1.47	3.00	June	76.5	0.33	3.00	July	76.8	3.60	3.50	August	76.4	0.81	3.50	September	71.0	0.54	1.95	October				November				December				Seasonal Precipitation		7.62 in.		Total Irrigation		14.95 in.		Date of Last Spring Frost:		20-Apr		Date of First Fall Frost:		28-Oct		Frost Free Period:		191 days	
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Longitude:	-106.45	Planting Date:	26-May																																																																																
Latitude:	34.46	Harvest Date:	16-Sep																																																																																
Elevation:	4840 ft.	<b>Production Inputs</b>																																																																																	
Soil Name:	Gila		<b>Rate</b>	<b>Date</b>																																																																															
Soil Texture:	loam	<b>Fertilizer:</b>																																																																																	
Soil Depth:	60 in.																																																																																		
		Nitrogen	5 lb/a	Carryover																																																																															
		Nitrogen	40 lb/a	20-May																																																																															
		Nitrogen	143 lb/a	26-Jun																																																																															
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**Table 13B. New Mexico 2015 Irrigated Forage Sorghum Performance Test - Agricultural Science Center at Los Lunas**

**Results**

Brand/Company Name	Hybrid/Variety Name	Sorghum <sup>†</sup> Type	Maturity <sup>§</sup> Group	Brown Midrib	65% Adj Moisture			CP	NDF	NDFD 48hr	Ash	TDN	NE <sub>i</sub>	Milk/ Ton	Milk/ Acre
					Dry Forage	Green Forage	at Harvest								
					t/a	t/a	%	%	%	%	%	Mcal/lb	lb/t	lb/a	
Chromatin Inc./Sorg. Part.	SP1615	FS	PS	Conv	12.3	35.1	72.2	6.4	64.1	59.4	6.6	54.0	0.545	2301	28542
Chromatin Inc./Sorg. Part.	SPX28414	FS	L	Conv	11.4	32.5	70.2	6.6	60.7	59.3	6.1	53.3	0.538	2253	25677
Chromatin Inc./Sorg. Part.	SS405	FS	L	Conv	11.2	31.9	65.8	7.5	54.7	57.3	6.7	55.4	0.562	2388	26618
Chromatin Inc./Sorg. Part.	Trudan Headless	SxS	PS	Conv	10.9	31.1	69.1	5.6	63.1	55.3	5.6	51.4	0.517	2083	22583
Chromatin Inc./Sorg. Part.	Sordan Headless	SxS	PS	Conv	10.7	30.5	72.0	5.5	62.0	57.9	6.3	52.8	0.533	2207	23563
Browning Seed, Inc.	Silage Master	FS	ML	Conv	10.0	28.6	67.7	7.1	49.0	61.0	6.3	56.7	0.576	2513	25114
Browning Seed, Inc.	Sweet Sioux WMR	SxS	M	Conv	9.2	26.3	56.7	6.3	56.7	54.4	6.1	53.7	0.543	2236	20544
Gayland Ward Seed Co.	GW-600 BMR	FS	ML	BMR	8.0	22.8	65.5	7.3	51.2	63.1	7.3	58.0	0.590	2622	20872
Advanta US, Inc./Alta Seeds	AF8301	FS	M	Conv	7.3	20.8	70.5	5.4	59.1	60.6	7.3	59.0	0.602	2675	19377
Chromatin Inc./Sorg. Part.	NK300	FS	M	Conv	7.2	20.7	66.8	7.7	64.1	63.9	9.3	59.0	0.601	2696	19520
Warner Seeds, Inc.	Sweet Bee BMR	FS	L	BMR	7.2	20.4	70.1	6.7	56.6	65.9	8.1	60.7	0.620	2835	20554
Browning Seed, Inc.	Cadan 99B WMR	SxS	M	Conv	6.9	19.6	61.2	5.7	57.2	54.1	5.9	54.4	0.550	2283	15689
Advanta US, Inc./Alta Seeds	AF7301	FS	M	BMR	6.5	18.5	71.8	6.9	53.8	66.2	7.5	55.1	0.557	2437	15799
Chromatin Inc./Sorg. Part.	SP3903BD	FS-BD	ML	BMR	5.9	16.9	71.8	8.1	49.6	66.5	7.9	63.2	0.648	3020	17902
Advanta US, Inc./Alta Seeds	AF7202	FS-BD	ME	BMR	5.9	16.8	73.1	8.9	43.1	66.5	7.0	64.8	0.665	3133	18427
Browning Seed, Inc.	Sweet Sioux BMR	SxS	M	BMR	5.6	16.0	70.2	7.1	50.7	58.8	7.2	58.6	0.597	2628	14890
Advanta US, Inc./Alta Seeds	AF7102	FS-BD	E	BMR	5.2	14.9	70.4	8.0	47.1	66.3	7.5	64.1	0.658	3084	16161
Advanta US, Inc./Alta Seeds	AF7401	FS-BD	L	BMR	5.2	14.7	74.1	10.1	42.2	64.1	7.5	64.1	0.658	3067	15864
Gayland Ward Seed Co.	Silo-Pro BMR	FS-BD	ML	BMR	5.1	14.6	73.5	7.8	58.9	61.5	7.9	55.6	0.564	2437	12331
Trial Mean					8.0	22.8	69.1	7.2	54.4	61.3	7.1	57.8	0.588	2590	19431
LSD					1.7	4.9	3.0	1.4	9.9	4.3	1.6	4.2	0.047	321	5267
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					13.3	13.2	2.6	11.9	11.0	4.2	13.5	4.4	4.9	7.5	16.4
F Test					<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0062	<0.0001	<0.0001	<0.0001	<0.0001

<sup>†</sup> Sorghum Type: FS=Forage Sorghum, BD = Brachytic Dwarf, SxS = Sorghum-Sudangrass Hybrid

<sup>§</sup>Maturity Group: E = Early, M = Medium, L = Late, PS = Photoperiod Sensitive

Brown Midrib Trait: BMR = Brown Midrib, Conv = Conventional

**Table 14A. New Mexico 2015 Irrigated Forage Sorghum & Sorghum Sudangrass (Single Cut) Performance Test - Agricultural Science Center at Tucumcari**

**Investigators:** L.M. Lauriault, A. Cunningham, J. Box, P.L. Cooksey, S. Jennings, J. Jennings, and D. Lopez

**Test Description**

<b>Location:</b>	<b>Management Practices:</b>	<b>Growing Conditions:</b>																																																																																																																	
County/Area: Quay Longitude: -103.68 Latitude: 35.20 Elevation: 4086 ft. Soil Name: Canez Soil Texture: Fine sandy loam Soil Depth: >60 in.	Previous Crop: Small grain forage Planting Date: 3-Jun Harvest Dates: 29-Oct  <hr/> 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>23 lb/a</td> <td>carryover</td> </tr> <tr> <td>Nitrogen</td> <td>lb/a</td> <td></td> </tr> <tr> <td>P2O5</td> <td>lb/a</td> <td></td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td>Nitrogen</td> <td>lb/a</td> <td></td> </tr> <tr> <td colspan="3">Herbicides:</td> </tr> <tr> <td colspan="3">None</td> </tr> <tr> <td colspan="3">Insecticides:</td> </tr> <tr> <td>Prevathon</td> <td>10 oz/a</td> <td>29-Jul</td> </tr> </tbody> </table>		Rate	Date	Fertilizer:			Nitrogen	23 lb/a	carryover	Nitrogen	lb/a		P2O5	lb/a					Nitrogen	lb/a		Herbicides:			None			Insecticides:			Prevathon	10 oz/a	29-Jul	<hr/> <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>36.0</td><td>1.44</td><td>0.00</td></tr> <tr><td>February</td><td>42.0</td><td>0.89</td><td>0.49</td></tr> <tr><td>March</td><td>50.0</td><td>0.38</td><td>2.94</td></tr> <tr><td>April</td><td>58.0</td><td>1.93</td><td>2.73</td></tr> <tr><td>May</td><td>62.0</td><td>4.02</td><td>0.00</td></tr> <tr><td>June</td><td>76.0</td><td>2.07</td><td>2.00</td></tr> <tr><td>July</td><td>79.0</td><td>7.56</td><td>0.50</td></tr> <tr><td>August</td><td>78.0</td><td>2.03</td><td>2.00</td></tr> <tr><td>September</td><td>76.0</td><td>1.31</td><td>3.23</td></tr> <tr><td>October</td><td>61.0</td><td>2.36</td><td>1.00</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"> </td></tr> <tr> <td>Seasonal Precipitation</td> <td></td> <td>24.0 in.</td> <td></td> </tr> <tr> <td>Total Irrigation</td> <td></td> <td>14.9 in.</td> <td></td> </tr> <tr><td colspan="4"> </td></tr> <tr> <td>Date of Last Spring Frost:</td> <td colspan="3">6-Mar</td> </tr> <tr> <td>Date of First Fall Frost:</td> <td colspan="3">12-Nov</td> </tr> <tr> <td>Frost Free Period:</td> <td colspan="3">251 days</td> </tr> </tbody> </table>		Average Temp. °F	Precip. in.	Irrigation in.	January	36.0	1.44	0.00	February	42.0	0.89	0.49	March	50.0	0.38	2.94	April	58.0	1.93	2.73	May	62.0	4.02	0.00	June	76.0	2.07	2.00	July	79.0	7.56	0.50	August	78.0	2.03	2.00	September	76.0	1.31	3.23	October	61.0	2.36	1.00	November				December								Seasonal Precipitation		24.0 in.		Total Irrigation		14.9 in.						Date of Last Spring Frost:	6-Mar			Date of First Fall Frost:	12-Nov			Frost Free Period:	251 days		
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<b>Test Design:</b> Replications: 4 Plot Length: 20 ft. Rows per Plot: 2 Row Spacing: 30 in.  Seeding Rate: 80,000 seeds/ac																																																																																																																			

**Table 14B. New Mexico 2015 Irrigated Forage Sorghum & Sorghum Sudangrass (Single Cut) Performance Test - Agricultural Science Center at Tucumcari**

**Results**

Brand/Company Name	Hybrid/Variety Name	Sorghum <sup>†</sup> Type	Maturity <sup>§</sup> Group	Moisture			CP	NDF	NDFD 48hr	Ash	TDN	NE <sub>i</sub>	Milk/Ton	Milk/Acre
				Dry Forage	Green Forage	at Harvest								
				t/a	t/a	%	%	%	% NDF	%	%	Mcal/lb	lb/t	lb/a
Chromatin Inc./Sorghum Part.	SS405	Conv	L	8.5	24.1	64.9	6.9	61.5	62.2	4.2	57.9	0.590	2609	22145
Chromatin Inc./Sorghum Part.	SP1615	Conv	PS	7.1	24.2	70.6	7.3	62.8	67.3	4.6	60.6	0.619	2838	20296
Advanta US Inc./Alta Seeds	AF8301	Conv	M	3.7	12.2	69.4	6.5	64.5	63.2	5.6	56.1	0.569	2484	9311
Chromatin Inc./Sorghum Part.	NK300	Conv	M	2.9	9.4	68.9	6.9	61.5	66.3	6.1	56.6	0.575	2549	7453
Trial Mean				4.8	15.3	69.3	7.6	62.0	65.7	5.6	58.4	0.595	2763	12795
LSD				0.8	3.1	4.4	1.8	2.8	3.0	0.9	3.2	0.036	251	3149
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	13.1	4.1	15.3	3.0	3.0	10.2	3.6	3.9	6.1	16.0
F Test				0.0001	0.0001	0.0228	0.0034	0.0378	0.0010	0.0001	0.0182	0.0178	0.0151	0.0001

<sup>†</sup> Sorghum Type: Conv = Conventional, BMR = Brown Midrib

<sup>§</sup> Maturity Group: E = Early, M = Medium, L = Late, PS = Photoperiod Sensitive

Other entries planted included Advanta US Inc./Alta Seeds AF7102, AF7202, AF7301, and AF7401 and Gayland Ward Seed SiloPro BMR Dwarf. While these established reasonable stands, they were not harvested because all stems had been selectively girdled by rodents, likely a species of field rat, and regrowth was not sufficient for harvest, being <8 inches tall.

**Table 15A. New Mexico 2015 Irrigated Forage Sorghum & Sorghum Sudangrass (Multi-Cut) Performance Test - Agricultural Science Center at Tucumcari**

**Investigators:** L.M. Lauriault, A. Cunningham, J. Box, P.L. Cooksey, S. Jennings, J. Jennings, and D. Lopez

**Test Description**

Location:	Management Practices:	Growing Conditions:																																																																																																											
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P2O5	lb/a																																																																																																												
<b>Herbicides:</b>																																																																																																													
None																																																																																																													
<b>Insecticides:</b>																																																																																																													
Prevathon	10 oz/a	29-Jul																																																																																																											
	Average																																																																																																												
	Temp.	Precip.	Irrigation																																																																																																										
	°F	in.	in.																																																																																																										
January	36.0	1.44	0.00																																																																																																										
February	42.0	0.89	0.49																																																																																																										
March	50.0	0.38	2.94																																																																																																										
April	58.0	1.93	2.73																																																																																																										
May	62.0	4.02	0.00																																																																																																										
June	76.0	2.07	2.00																																																																																																										
July	79.0	7.56	0.50																																																																																																										
August	78.0	2.03	2.00																																																																																																										
September	76.0	1.31	3.23																																																																																																										
October	61.0	2.36	1.00																																																																																																										
November																																																																																																													
December																																																																																																													
Seasonal Precipitation	24.0 in.																																																																																																												
Total Irrigation	14.9 in.																																																																																																												
Date of Last Spring Frost:	6-Mar																																																																																																												
Date of First Fall Frost:	12-Nov																																																																																																												
Frost Free Period:	251 days																																																																																																												
<b>Test Design:</b> Replications: 4 Plot Length: 20 ft. Rows per Plot: 8 Row Spacing: 6 in.  Seeding Rate: 25 lb/ac																																																																																																													

**Table 15B. New Mexico 2015 Irrigated Forage Sorghum & Sorghum Sudangrass (Multi-Cut) Performance Test - Agricultural Science Center at Tucumcari**

**Results**

Brand/Company Name	Hybrid/Variety Name	Type <sup>1</sup>	Harvest 1					Harvest 2					Total	
			Dry Forage	Green Forage	Harvest Moisture	Milk/Ton	Milk/Acre	Dry Forage	Green Forage	Harvest Moisture	Milk/Ton	Milk/Acre	Dry Forage	Milk/Acre
			t/a	t/a	%	lb/t	lb/a	t/a	t/a	%	lb/t	lb/a	t/a	lb/a
Chromatin Inc./Sorghum Part.	SS405	FS	2.1	10.1	79.6	3104	6389	3.0	19.4	70.8	2788	8255	5.1	9178
Chromatin Inc./Sorghum Part.	SP1615	FS	1.8	7.3	75.8	3151	5521	2.9	20.1	69.2	2917	8493	4.7	8438
Gayland Ward Seed	Sweet Six BMR	SxS	2.5	10.3	76.1	3148	7800	2.1	21.0	60.8	2809	5869	4.6	10609
Gayland Ward Seed	Super Sugar DM	SxS	1.7	7.5	77.3	3010	5110	2.8	26.2	65.8	2733	7554	4.5	7843
Advanta US Inc./Alta Seeds	AS5201	SxS	1.9	8.1	76.5	3103	5875	2.5	26.8	59.9	2674	6618	4.4	8549
Advanta US Inc./Alta Seeds	AS6402	SxS	2.0	9.1	77.7	3229	6478	2.0	18.2	65.6	2849	5656	4.0	9327
Advanta US Inc./Alta Seeds	AS6201	SxS	1.8	8.6	78.7	3111	5723	1.9	21.0	57.3	2646	4936	3.7	8370
Advanta US Inc./Alta Seeds	AS9302	SxS	1.7	7.5	76.3	3194	5559	1.7	20.9	61.0	2929	5041	3.5	8488
Chromatin Inc./Sorghum Part.	NK300	FS	1.8	7.6	76.7	3216	5713	1.7	19.5	63.4	2616	4514	3.5	8329
Advanta US Inc./Alta Seeds	AS6401	SxS	1.8	8.4	79.1	3226	5650	1.6	19.2	67.3	3016	4810	3.4	8665
	Trial Mean		1.8	8.1	77.1	3150	5616	2.1	21.0	64.1	2792	5959	4.0	8608
	LSD		0.4	1.6	2.5	NS	1193	0.8	3.4	4.1	188	2190	0.9	1208
	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		14.6	13.5	2.3	3.2	14.2	26.8	11.2	4.4	4.7	25.4	14.8	9.7
	F Test		0.0007	0.0001	0.0048	0.1126	0.0004	0.0002	0.0001	0.0001	0.0021	0.0009	0.0001	0.0003

<sup>1</sup>FS and SxS signify forage sorghum and sorghum x sudangrass, respectively.

**Table 15C. New Mexico 2015 Irrigated Forage Sorghum & Sorghum Sudangrass (Multi-Cut) Performance Test - Agricultural Science Center at Tucumcari**

**Results**

Brand/Company Name	Hybrid/Variety Name	Type <sup>1</sup>	Harvest 1							Harvest 2						
			NDFD							NDFD						
			CP	NDF	48hr	Starch	Ash	TDN	NE <sub>i</sub>	CP	NDF	48hr	Starch	Ash	TDN	NE <sub>i</sub>
%	%	%	%	%	%	Mcal/lb	%	%	%	%	%	%	Mcal/lb			
Chromatin Inc./Sorghum Part.	SS405	FS	12.0	58.4	72.2	2.1	7.5	63.7	0.654	7.4	56.6	69.8	5.6	5.4	59.6	0.608
Chromatin Inc./Sorghum Part.	SP1615	FS	11.8	57.9	72.1	3.5	7.4	64.4	0.661	6.7	58.7	72.7	4.6	5.8	61.1	0.624
Gayland Ward Seed	Sweet Six BMR	SxS	11.8	57.1	73.9	2.6	7.3	64.2	0.659	5.9	61.3	71.7	1.9	7.0	59.7	0.609
Gayland Ward Seed	Super Sugar DM	SxS	12.0	57.2	71.1	2.4	7.7	62.6	0.641	5.5	60.3	68.7	4.9	5.6	58.9	0.601
Advanta US Inc./Alta Seeds	AS5201	SxS	11.5	58.0	72.8	2.4	7.2	63.7	0.653	5.7	60.4	67.2	4.9	5.7	58.3	0.593
Advanta US Inc./Alta Seeds	AS6402	SxS	13.2	56.8	74.1	2.3	8.2	65.3	0.671	7.5	59.6	72.3	1.5	6.9	60.2	0.614
Advanta US Inc./Alta Seeds	AS6201	SxS	12.4	55.6	73.9	2.5	7.6	63.7	0.653	6.3	59.0	69.0	2.8	6.8	57.7	0.587
Advanta US Inc./Alta Seeds	AS9302	SxS	12.5	56.4	75.4	1.3	7.9	64.7	0.664	6.1	62.3	73.2	1.4	6.9	61.2	0.626
Chromatin Inc./Sorghum Part.	NK300	FS	12.1	60.0	72.2	2.5	7.3	65.3	0.671	6.0	61.6	67.4	2.2	6.5	57.4	0.584
Advanta US Inc./Alta Seeds	AS6401	SxS	12.8	55.4	75.3	2.9	7.9	65.1	0.669	7.2	60.8	75.0	1.7	7.4	62.2	0.637
	Trial Mean		12.3	57.1	73.3	2.5	7.6	64.3	0.660	6.6	60.0	70.5	3.1	6.4	59.6	0.608
	LSD		0.8	2.5	2.0	0.9	0.4	NS	NS	0.8	2.5	3.1	1.9	0.8	2.3	0.026
	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		4.7	3.0	1.9	25.8	4.1	2.0	2.2	8.7	2.9	3.0	43.2	9.0	2.7	2.9
	F Test		0.0012	0.0203	0.0200	0.0101	0.0007	0.1286	0.1287	0.0001	0.0056	0.0126	0.0001	0.0003	0.0035	0.0034

<sup>1</sup>FS and SxS signify forage sorghum and sorghum x sudangrass, respectively.

## Appendix A

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



## New Mexico 2015 Grain Corn Hybrid Performance Test

<b>Company/Brand Name</b>	<b>Hybrid/Variety Name</b>	<b>Relative Maturity</b>
<b>Advanta US Inc.</b> 301 S. Polk, Suite 350 Amarillo, TX 79101 Travis Kidd 806-340-2031	Phoenix 5552A4	
	Phoenix 5942A4	
	Phoenix 6012VZ	
	Phoenix 6322A4	
	Phoenix 6523A4	115
	Phoenix 6542A4	116
<b>CPS Dyna-Gro Seed</b> 3492 Long Prairie Rd., Ste 200 Flower Mound, TX 75028 Shawn Carter 972-691-9680	D53VC55	113
	D52SS91	112
	D54DC94	114
	D55VP77	115
	D55QC73	115
	D37SS71	97
	D39SS17	99
	D42SS42	102
	D46SS46	106
	D46SS62	106
<b>DuPont Pioneer</b> 6519 72nd St. Lubbock, TX 79424 Grant Groene 620-229-0465	P0157AM	101
	P0365AM	103
	P0339AMT	103
	P0419AMX	104
	P0506AM	105
	P0589AM	105
<b>Mycogen Seeds</b> P.O. Box 1050 Ralls, TX 79357 Ben Benton 806-253-2584	X13512	103
	2T498	99
	2V489	98
	X14444	101
	X14441	100
	2Y669	104

## New Mexico 2015 Forage Corn Hybrid Performance Test

Company/Brand Name	Hybrid/Variety Name	Relative Maturity
<b>Advanta US Inc.</b>	Phoenix 6523A4	115
301 S. Polk, Suite 350	Phoenix 6542A4	116
Amarillo, TX 79101	Phoenix 6606A4	116
Travis Kidd	Phoenix 6706A4	116
806-340-2031	Phoenix 8400A4	117
<b>Blue River Hybrids</b>	73L30	116
2326 230th St.	72L99	114
Ames, IA 50014	70A47	113
Scott Ausborn	68N65	112
800-370-7979	68B37	112
	77C53	117
<b>Browning Seed, Inc.</b>	11801	118
3101 S. I-27	11901	118
Plainview, TX 79072		
Rodney Smith		
806-293-5271		
<b>B-H Genetics</b>	BH 8830VTTP	116
5933 FM 1157	BH 8735VTTP	117
Ganado, TX 77962	BH 8732VTTP	117
Travis Janak	BH 8688DG2P	114
361-771-2755	BH 7810VT2P	108
	XP 7646VT2PRIB	107
	XP 7125SS	101
	X14020RR	118
	X13007VIP3110	118
	X15033VT2P	117
<b>CPS Dyna-Gro Seed</b>	D53VC47	113
3492 Long Prairie Rd., Ste 200	D55VP77	115
Flower Mound, TX 75028	D58QC72	118
Shawn Carter	D59HR50	119
972-691-9680	CX15116	116

## New Mexico 2015 Forage Corn Hybrid Performance Test, Con't.

<b>Company/Brand Name</b>	<b>Hybrid/Variety Name</b>	<b>Relative Maturity</b>
<b>Golden Acres Genetics</b>	G7601	117
P.O. Box 20787	G7663	117
Waco, TX 76702	X6525	118
James Allison		
512-793-5205		
<hr/>		
<b>Masters Choice</b>	MCT 6363	113
3010 State Rt 146 East	MCT 6733	117
Anna, IL 62906	MC EXP651P (non-RR)	115
Kevin Koone	MC EXP600M	115
618-833-6552	MC EXP633E	115
<hr/>		
<b>Mycogen Seeds</b>	T14785	117
P.O. Box 1050	T14749	114
Ralls, TX 79357	TMF2L825	117
Ben Benton	TMF2H747	113
806-253-2584	TMF2L874	116

## New Mexico 2015 Grain Sorghum Hybrid Performance Test

<b>Company/Brand Name</b>	<b>Hybrid/Variety Name</b>	<b>Maturity Group*</b>
<b>Advanta US Inc./Alta Seeds</b>	AG1201	E
301 S. Polk, Suite 350	AG1203	ME
Amarillo, TX 79101	AG2105	M
Travis Kidd	AG2115	M
806-340-2031	AG1203	ME
	AG2103	M
	AG2105	M
	AG3101	ML
	AG3201	ML

<b>Gayland Ward Seed</b>	GW 9417
4395 Hwy 60	GW 9460
Hereford, TX 79045	GW 1160
Carson Ward	
806-258-7394	

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

## New Mexico 2015 Forage Sorghum/SxS Hybrid Performance Test (Single Cut)

Company/Brand Name	Hybrid/Variety Name	Maturity Group*	Brown Midrib
<b>Advanta US</b>	AF7102	E	Y
301 S. Polk, Suite 350	AF7202	ME	Y
Amarillo, TX 79101	AF7301	M	Y
Travis Kidd	AF7401	L	Y
806-340-2031	AF8301	M	N
<hr/>			
<b>Blue River Hybrids</b>	Blackhawk 12		Y
2326 230th St.	Seahawk 6		Y
Ames, IA 50014	Heron 6		Y
Scott Ausborn	Warbler		Y
800-370-7979			
<hr/>			
<b>Browning Seed, Inc.</b>	Silage Master	ML	N
3101 S. I-27	Cadan 99B WMR	M	N
Plainview, TX 79072	Sweet Sioux WMR	M	N
Rodney Smith	Sweet Sioux BMR	M	Y
806-293-5271			
<hr/>			
<b>CPS Dyna-Gro Seed</b>	705F	ME	N
3492 Long Prairie Rd., Ste 200	F75FS13	M	N
Flower Mound, TX 75028	F75FS28 BMR	M	Y
Shawn Carter			
972-691-9680			
<hr/>			
<b>Ceres, Inc.</b>	EJ 7281*	L	N
1535 Rancho Conejo Blvd	EJ 7282*	L	N
Thousand Oaks, CA 91320	DS 7853**	PS	N
Sam Harris			
805-375-7811			

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

**New Mexico 2015 Forage Sorghum/SxS Hybrid Performance Test (Single Cut),  
Con't.**

<b>Company/Brand Name</b>	<b>Hybrid/Variety Name</b>	<b>Maturity Group*</b>	<b>Brown Midrib</b>
<b>Chromatin, Inc.</b>	SPX28414	L	N
8509 Venita Ave.	SS405	L	N
Lubbock, TX 79424	SP 3903 BD	MF	Y
Ling Zhang/Alfredo Pineda	NK300	M	N
806-577-4384	SP1615	PS	N
806-790-6542	Sordan Headless	PS	N
	Trudan Headless	PS	N
<b>Gayland Ward Seed</b>	Silo-Pro BMR Dwarf		
4395 Hwy 60	GW-600 BMR		
Hereford, TX 79045	GW-400 BMR		
Carson Ward	GW-2120		
806-258-7394	Super Sugar (DM)		
	Ensile Master		
<b>Warner Seeds, Inc.</b>	Sweet Bee BMR	L	Y
P.O. Box 1877 / 120 S. Lawton Ave.			
Hereford, TX 79045			
Tom Prata			
806-364-4470			

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

## New Mexico 2015 Forage Sorghum/SxS Hybrid Performance Test (Multi Cut)

<b>Company/Brand Name</b>	<b>Hybrid/Variety Name</b>	<b>Maturity Group*</b>	<b>Brown Midrib</b>
<b>Advanta US</b>	AS5201	M	N
301 S. Polk, Suite 350	AS6201	ME	Y
Amarillo, TX 79101	AS6401	ML	Y
Travis Kidd	AS6402	ML	Y
806-340-2031	AS9302	M	Y
<b>Blue River Hybrids</b>	Blackhawk 12		Y
2326 230th St.	Seahawk 6		Y
Ames, IA 50014	Heron 6		Y
Scott Ausborn			
800-370-7979			
<b>Browning Seed, Inc.</b>	Cadan 99B WMR	M	N
3101 S. I-27	Sweet Sioux WMR	M	N
Plainview, TX 79072	Sweet Sioux BMR	M	Y
Rodney Smith			
806-293-5271			
<b>CPS Dyna-Gro Seed</b>	FullGraze	L	N
3492 Long Prairie Rd., Ste 200	FullGraze BMR	L	Y
Flower Mound, TX 75028			
Shawn Carter			
972-691-9680			
<b>Ceres, Inc.</b>	CB 7290	PS	N
1535 Rancho Conejo Blvd	F2P134	PS	N
Thousand Oaks, CA 91320			
Sam Harris			
805-375-7811			

**New Mexico 2015 Forage Sorghum/SxS Hybrid Performance Test (Multi Cut),  
Con't.**

<b>Company/Brand Name</b>	<b>Hybrid/Variety Name</b>	<b>Maturity Group*</b>	<b>Brown Midrib</b>
<b>Chromatin, Inc./Sorghum Partners</b> 8509 Venita Ave. Lubbock, TX 79424 Ling Zhang/Alfredo Pineda 806-577-4384 806-790-6542	Sordan Headless	PS	N
	Trudan Headless	PS	N
	Sweet Six BMR		
<b>Gayland Ward Seed</b> 4395 Hwy 60 Hereford, TX 79045 Carson Ward 806-258-7394	Nutra-King BMR 6/Sweet Forever BMR		
	Super Sugar		
	Super Sugar (DM)		
	Sweet Six BMR		
<b>Warner Seeds, Inc.</b> P.O. Box 1877 / 120 S. Lawton Ave. Hereford, TX 79045 Tom Prata 806-364-4470	Sucrose 7R-BMR	M	Y

\*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 Silk: Days to 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 nutritive value. 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.

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<sub>L</sub> (Net Energy for Lactation): NE<sub>L</sub> 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.  $N \text{ Removal} = \text{dry forage (t/a)} \times 2000 \times N (\%)$ ; 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 RFV 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 becoming the new 'standard' in forage quality testing.

Silk Date: Silk Date is the date when 50% of ears have silks fully emerged.

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

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.