



2009 Soybean Variety Performance Tests



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Information on Soybean Variety Trials

Numerous soybean lines and varieties were evaluated in performance tests during 2009. Commercially available varieties, both public and private, and advanced experimental lines were included within the tests. Tests were designed to provide information to assist producers in identifying superior varieties and make crop management decisions. Tests include both early-season and full-season environments. Early-season tests were planted during April and contained maturity group (MG) III and IV. Full-season tests were planted during June and into the beginning of July and included varieties in MG IV, V, and VI.

Public varieties included in tests are considered to be competitive for the region, and are represented by established varieties, new releases, and advanced experimental lines. Varieties of private seed company origin are submitted based on decisions by the respective company.

2009 Soybean Crop Overview

The 2009 Oklahoma soybean crop has turned out to be excellent. Higher than average yields have been reported in most of the soybean production areas. In most cases high yields could be attributed to timely rainfall and normal temperatures during reproductive growth stages. Rainfall received in August had a positive influence on yield of this year's crop. The biggest problem many producers had was with harvest. Rainfall and cool temperatures delayed dry down of plants and pods.

Planted acreage of this year's soybean crop was estimated at 405,000 acres and an estimated 370,000 acres were harvested. Average yield at the time of this report was estimated at 28 bushels per acre. Soybean acreage was up probably a result of the higher commodity price early in the year.

Pest problems

Plant disease was minimal during the 2009 growing season, Asian soybean rust was not detected in Oklahoma until late in the growing season. Most all fields were beyond the R3 growth stage. For the most part no major widespread insect problems were observed during the 2009 growing season. Blister beetles were observed in some fields and treated for but overall pest problems were minor, especially in later planted soybean fields.

Methods

Early-season test locations were near Pauls Valley, Haskell, Newkirk, Lahoma, and Stillwater. Full-season test locations were near Haskell, Pauls Valley, Newkirk, Fort Cobb, Cherokee, Lahoma, Miami, and Stillwater. The Haskell location was not harvested due to a poor stand. All test plots were planted using four 30-inch rows that were 25 feet long. Plots were seeded at a rate of eight seeds per row foot (139,392 seeds per acre). At planting, *Bradyrhizobium japonicum* in a liquid formulation was applied with the seed. Tests were conducted using randomized complete block design with four replications. All locations were conventionally tilled prior to seeding with the exception of Cherokee, Miami, and Stillwater. Irrigation was used only at the Fort Cobb location. Two rows the entire length of the plot was harvested with a small plot combine to determine grain yield.

Interpreting Data

Details of establishment and management of each test are listed in footnotes below the tables. Least significant differences (LSD) are listed at the bottom of all but the Performance Summary tables. Differences between varieties are significant only if they are equal to or greater than the LSD value. If a given variety out yields another variety by as much or more than the LSD value, then we are 95% sure that the yield difference is real, with only a 5% probability that the difference is due to chance alone. For example, if variety X is 5 bushels/acre higher in yield than variety Y, then this difference is statistically significant if the LSD is 5 or less. If the LSD is 5 or greater, then we are less confident that variety X really is higher yielding than variety Y under the conditions of the test.

The CV value or coefficient of variation, listed at the bottom of each table is used as a measure of the precision of the experiment. Lower CV values will generally relate to lower experimental error in the trial. Uncontrollable or immeasurable variations in soil fertility, soil drainage, and other environmental factors contribute to greater experimental error and higher CV values.

Results reported here should be representative of what might occur throughout the state but would be most applicable under environmental and management conditions similar to those of the tests. The relative yields of all soybean varieties are affected by crop management and by environmental factors including soil type, summer conditions, soil moisture conditions, diseases, and insects.

Additional information on the Web

A copy of this publication as well as additional variety information and more information on soybean management can be found at

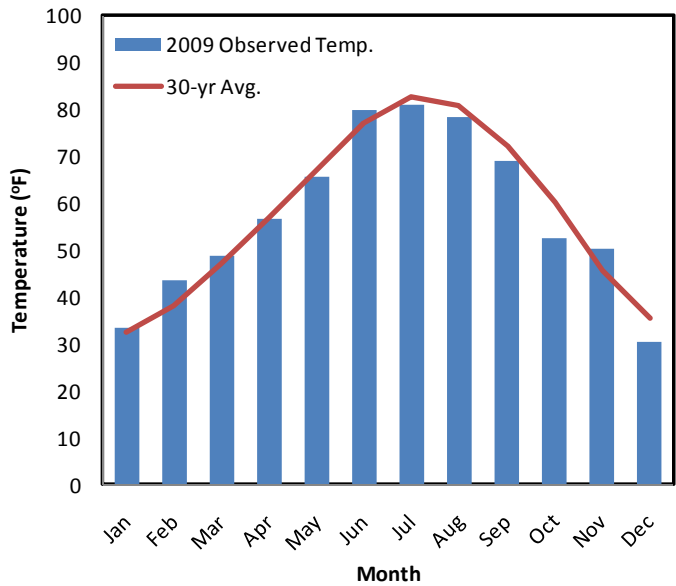
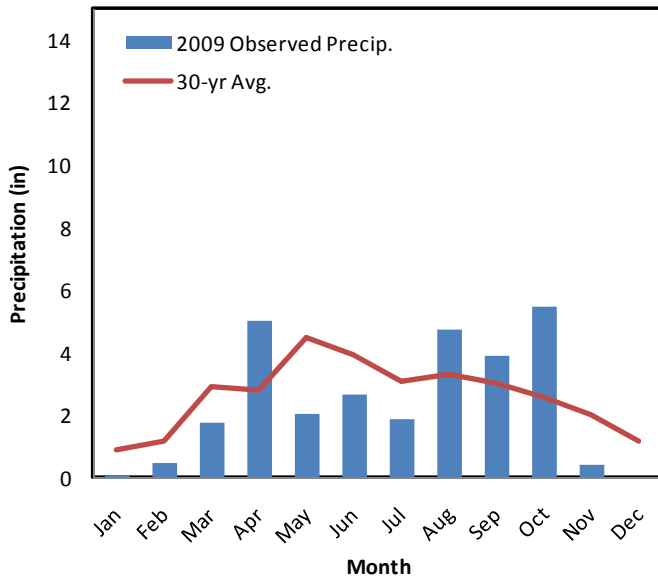
www.soybean.okstate.edu/

An individual is encouraged to review 2 to 3 years of variety test results before making a variety selection. Because soybean varieties change often multiple years of data are not compared in this publication but previous years data can be found at the previously mention website.

Table 1. Sources of Seed for the 2009 Soybean Performance Tests.

Name/Address	Contact	Entries	Glyph. Resist.	Test	Maturity Group
Asgrow/Monsanto 800 N. Lindbergh Blvd. St. Louis, MO 63167	800-768-6387	AG4005	Yes	Early	4.0
		AG5605	Yes	Full	5.6
University of Arkansas 115 Plant Science Bldg Fayetteville, AR 72701	479-575-2230	UA4805	No	Full	4.8
		Ozark	No	Full	5.2
		Osage	No	Full	5.6
Midwest Seed Genetics 1551 Highway 210 Huxley, IA 50124	515-597-5903	XPR45-09	Yes	Full	4.5
		GR4833	Yes	Full	4.8
		GR5331	Yes	Full	5.3
		5651	Yes	Full	5.6
Terral Seed, Inc. PO Box 826 Lake Providence, LA 71254	318-559-2840	TV47R18	Yes	Full	4.7
		TV49R17	Yes	Full	4.9
		TV49R19	Yes	Full	4.9
		TV54R28	Yes	Full	5.4
		TV55R15	Yes	Full	5.5
Cache River Valley Seed, LLC PO Box 10 Cash, AR 72421	870-477-5427	Morsoy RT4485N	Yes	Both	4.4
		Morsoy RTs4824	Yes	Both	4.8
		Morsoy RTs4955N	Yes	Both	4.9
		Morsoy RT5168	Yes	Full	5.1
		Morsoy RT5388N	Yes	Full	5.3
Dyna Gro 530 Industrial Goddard Ks. 67020	800-950-2231	35G38	Yes	Early	3.8
		36C44	Yes	Early	4.4
		38C42	Yes	Early	4.2
		36Y48	Yes	Full	4.8
		31R54	Yes	Full	5.4
Hornbeck Seed, Co. PO Box 472 De Witt, AR 72042	870-946-2087	RS5227	Yes	Full	5.2
		R5425	Yes	Full	5.4
Syngenta Seeds Trey Ramirez	254-424-8570	S46-U6 Brand	Yes	Full	4.6
		S49-H7 Brand	Yes	Full	4.9
		S48-C9 Brand	Yes	Full	4.8

Cherokee



Location Summary:

Growing conditions at the Cherokee location were good and yields were excellent. Plots were seldom stressed for moisture for long durations. This was a full-season crop following grain sorghum on a producer's field. Average grain yield across all varieties was 60 bu/ac. Yields in this range should not be expected every year but if the environmental conditions cooperate this is an indication of yield potential in a good year.

Table 2. Information on soil chemical properties and management practices for the Soybean Production Test at Cherokee, OK in 2009.

Soil Properties	Result	Cultural Practice	Information
pH	5.6	Planting Date	6/11
Soil Test P Index	42	Seeding Rate (seeds/foot of row)	8
Soil Test K Index	526	Seeding Depth (in)	1
		Irrigation	none
Previous Crop	Sorghum	Harvest Date	11/6 ²
		Soil Moisture at Planting	good

¹Planting dates for the full season test.

²Harvest dates for full season test.

Table 3. Full-season glyphosate resistant soybean production variety trail Cherokee, OK 2009.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield
		Group	- in -	Score	Score		- bu/acre
Dyna Gro 36Y48	Dyna Gro	4.8	32	0	0	2600	72
Channel GR4833	Channel Bio. Corp.	4.8	26	0	0	2850	69
HBK RS 5227	Hornbeck Seed Co.	5.2	26	0	0	2950	67
Morsoy RTs4955N	Cache River Valley Seed	4.9	30	1	0	2550	66
Channel XPR45-09	Channel Bio. Corp.	4.5	28	0	0	2700	65
Terral TV47R18	Terral Seed Inc.	4.7	31	0	0	3200	65
Terral TV49R19	Terral Seed Inc.	4.9	29	0	0	2750	65
Asgrow AG5605	Monsanto	5.6	29	0	0	3350	63
Morsoy RT4485N	Cache River Valley Seed	4.4	25	0	0	3050	62
S49-H7	Syngenta Seeds	4.9	27	0	0	2750	61
Terral TV54R28	Terral Seed Inc.	5.4	30	0	0	2750	60
HBK 5425	Hornbeck Seed Co.	5.4	30	0	0	2800	59
Morsoy RT5388N	Cache River Valley Seed	5.3	31	0	0	3500	59
Morsoy RT5168	Cache River Valley Seed	5.1	31	0	0	2600	58
Channel GR5331	Channel Bio. Corp.	5.3	33	0	0	2600	57
Terral TV49R17	Terral Seed Inc.	4.9	38	0	0	3000	55
Terral TV55R15	Terral Seed Inc.	5.5	32	0	0	2650	55
S46-U6	Syngenta Seeds	4.6	27	0	0	2750	54
Morsoy RTs4824	Cache River Valley Seed	4.8	25	0	0	2600	54
S48-C9	Syngenta Seeds	4.8	26	1	0	2750	52
Channel 5651R RR	Channel Bio. Corp.	5.6	25	0	0	2750	51
Dyna Gro 31R54	Dyna Gro	5.4	28	0	0	3100	50
LSD (P=0.05)							14
CV							16

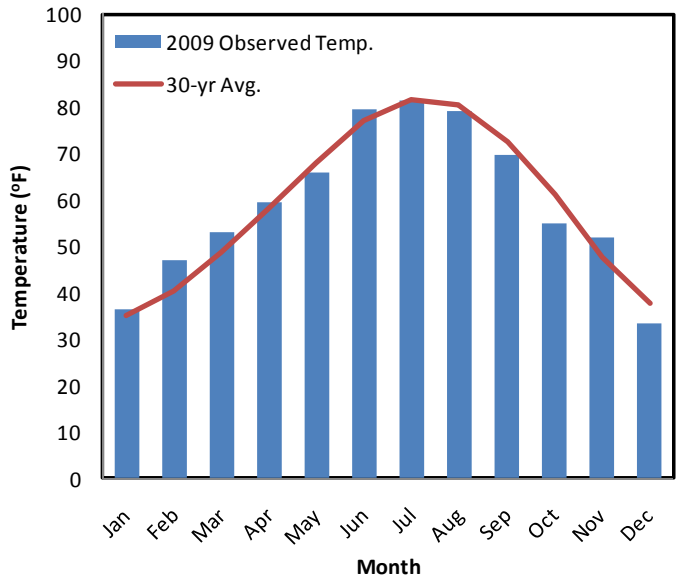
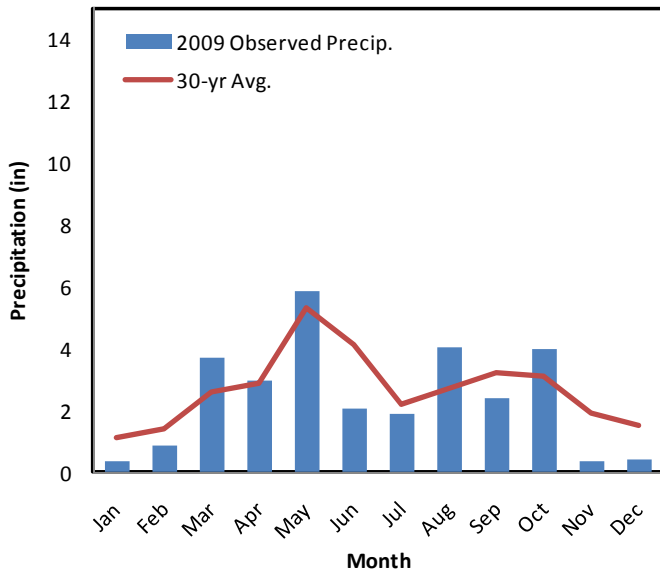
¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Table 4. Full-season conventional soybean production variety trail Cherokee, OK 2009.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield
		Group	- in -	Score	Score		- bu/acre
UA 4805	University of Arkansas	4.8	22	0	0	3650	66
OSAGE	University of Arkansas	5.6	26	0	0	3650	65
OZARK	University of Arkansas	5.2	27	0	0	3200	62
HUTCHESON		5	27	0	0	3050	56
JAKE	University of Missouri	5	24	0	0	3000	55
STODDARD	University of Missouri	5	20	0	0	3100	51
LSD (P=0.05)							7
CV							8

¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Fort Cobb



Location Summary:

Growing conditions at Fort Cobb were excellent. This location was irrigated and the previous crop was grain sorghum in 2008. Average grain yield across all varieties was 83 bu/ac. No pest pressure was observed during the growing season.

Table 5. Information on soil chemical properties and management practices for the Soybean Production Test at Fort Cobb, OK in 2009.

Soil Properties	Result	Cultural Practice	Information
pH	7.2	Planting Date	5/29 ¹
Soil Test P Index	74	Seeding Rate (seeds/foot of row)	8
Soil Test K Index	342	Seeding Depth (in)	1
		Harvest Dates	10/28 ²
Previous Crop	Sorghum	Irrigation	as needed

¹Planting dates for the full season tests.

²Harvest dates for the full season tests.

Table 6. Full-season glyphosate resistant soybean production variety trail Fort Cobb, OK 2009.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield
		Group		Score	Score		
			- in -				bu/acre
Morsoy RT5168	Cache River Valley Seed	5.1	28	0	0	2600	99
Asgrow AG5605	Monsanto	5.6	35	0	0	3100	98
Channel XPR45-09	Channel Bio. Corp.	4.5	27	0	0	2550	97
Morsoy RTs4824	Cache River Valley Seed	4.8	31	0	0	2450	95
Terral TV54R28	Terral Seed Inc.	5.4	29	0	1	2700	95
S48-C9	Syngenta Seeds	4.8	33	0	0	2650	92
HBK RS 5227	Hornbeck Seed Co.	5.2	30	0	1	2650	91
Morsoy RT4485N	Cache River Valley Seed	4.4	33	1	0	2900	91
Morsoy RTs4955N	Cache River Valley Seed	4.9	33	1	0	2500	86
Morsoy RT5388N	Cache River Valley Seed	5.3	29	0	1	2900	86
Terral TV55R15	Terral Seed Inc.	5.5	37	0	1	2450	86
Channel GR4833	Channel Bio. Corp.	4.8	30	0	0	2700	84
Terral TV47R18	Terral Seed Inc.	4.7	35	0	0	2850	84
Channel 5651R RR	Channel Bio. Corp.	5.6	30	0	0	2550	83
Channel GR5331	Channel Bio. Corp.	5.3	36	0	0	2400	83
Terral TV49R17	Terral Seed Inc.	4.9	33	0	0	3000	83
S46-U6	Syngenta Seeds	4.6	33	0	0	2650	81
Dyna Gro 31R54	Dyna Gro	5.4	27	0	0	3150	80
HBK 5425	Hornbeck Seed Co.	5.4	35	0	1	2500	79
S49-H7	Syngenta Seeds	4.9	36	0	0	2600	79
Dyna Gro 36Y48	Dyna Gro	4.8	31	0	0	2600	74
Terral TV49R19	Terral Seed Inc.	4.9	32	0	0	2950	68
	LSD (P=0.05)						9
	CV						7

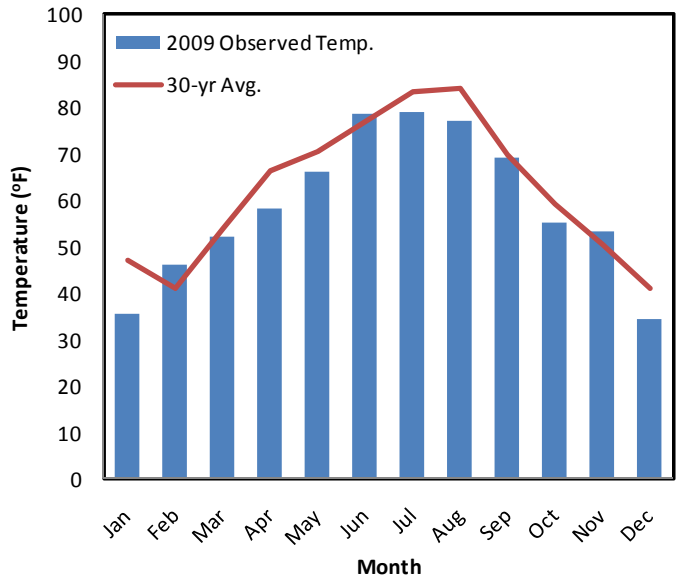
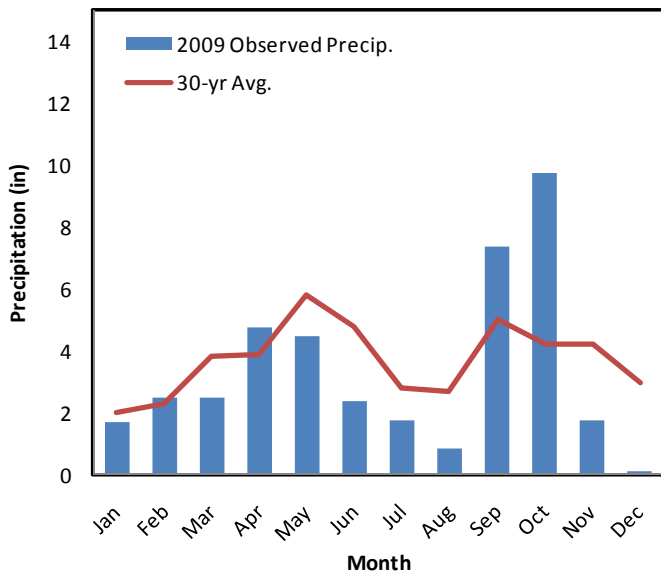
¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Table 7. Full-season conventional soybean production variety trail Fort Cobb, OK 2009.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield
		Group		Score	Score		
			- in -				bu/acre
STODDARD	University of Missouri	5	24	0	0	2950	75
OSAGE	University of Arkansas	5.6	26	0	0	3100	74
JAKE	University of Missouri	5	28	0	0	2450	74
OZARK	University of Arkansas	5.2	25	0	0	2900	70
UA 4805	University of Arkansas	4.8	25	0	0	3400	66
HUTCHESON		5	30	0	0	2500	63
	LSD (P=0.05)						10
	CV						9

¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Haskell



Location Summary:

Growing conditions throughout the year at Haskell varied. The early season test could not be planted in April due to wet soil conditions. The planting date of the early test was May 22nd which may have lowered yield potential. During June and July below normal rainfall was received and plots were stressed for moisture during this time. The average yield for the early season and full season test was 28 and 34 bu/acre, respectively.

Table 8. Information on soil chemical properties and management practices for the Soybean Production Test at Haskell, OK in 2009.

Soil Properties	Result	Cultural Practice	Information
pH	5.7	Planting Date	5/22 and 5/26 ¹
Soil Test P Index	91	Seeding Rate (seeds/foot of row)	8
Soil Test K Index	271	Seeding Depth (in)	1
		Irrigation	none
		Harvest Date	11/11 for both tests
		Soil Moisture at Planting	excellent

¹Planting dates for the early and full season tests, respectively.

Table 9. Early-season soybean production variety trail Haskell, OK 2009.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield
		Group		Score	Score		
			- in -				- bu/acre -
RTs4824	Cache River Valley Seed	4.8	26	0	0	2400	36
RT4485N	Cache River Valley Seed	4.4	34	0	0	2950	34
RTs4955N	Cache River Valley Seed	4.9	38	0	0	2600	31
Dyna Gro 37A44	Dyna Gro	4.4	32	0	0	2850	31
Dyna Gro 38C42	Dyna Gro	4.2	19	0	0	3150	26
AG 4005	Monsanto	4	25	0	0	2500	22
Dyna Gro 35G38	Dyna Gro	3.8	16	0	0	2600	18
LSD (P=0.05)							6
CV							14

¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Table 10. Full-season glyphosate resistant soybean production variety trail Haskell, OK 2009.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield
		Group		Score	Score		
			- in -				- bu/acre -
Morsoy RT5388N	Cache River Valley Seed	5.3	38	1	1	2800	53
Channel XPR45-09	Channel Bio. Corp.	4.5	30	1	0	2250	41
Dyna Gro 31R54	Dyna Gro	5.4	27	1	0	2550	39
HBK RS 5227	Hornbeck Seed Co.	5.2	33	0	1	2500	38
Terral TV55R15	Terral Seed Inc.	5.5	36	1	0	2450	37
Asgrow AG5605	Monsanto	5.6	29	1	0	2750	37
Terral TV54R28	Terral Seed Inc.	5.4	30	1	1	2750	36
Channel 5651R RR	Channel Bio. Corp.	5.6	37	1	1	2550	36
HBK 5425	Hornbeck Seed Co.	5.4	30	0	0	2550	35
S49-H7	Syngenta Seeds	4.9	34	1	0	2200	34
Morsoy RT5168	Cache River Valley Seed	5.1	31	0	0	2250	34
Morsoy RTs4955N	Cache River Valley Seed	4.9	33	1	1	2250	33
Morsoy RT4485N	Cache River Valley Seed	4.4	32	0	0	2550	32
S48-C9	Syngenta Seeds	4.8	30	1	0	2800	31
Morsoy RTs4824	Cache River Valley Seed	4.8	29	0	0	2300	29
Dyna Gro 36Y48	Dyna Gro	4.8	27	1	0	2250	29
S46-U6	Syngenta Seeds	4.6	34	0	0	2200	29
Terral TV49R17	Terral Seed Inc.	4.9	34	1	0	2450	27
Channel GR5331	Channel Bio. Corp.	5.3	34	1	0	2450	26
Terral TV49R19	Terral Seed Inc.	4.9	24	1	0	2700	25
Terral TV47R18	Terral Seed Inc.	4.7	28	1	0	2650	25
Channel GR4833	Channel Bio. Corp.	4.8	27	1	0	2300	25
LSD (P=0.05)							9
CV							20

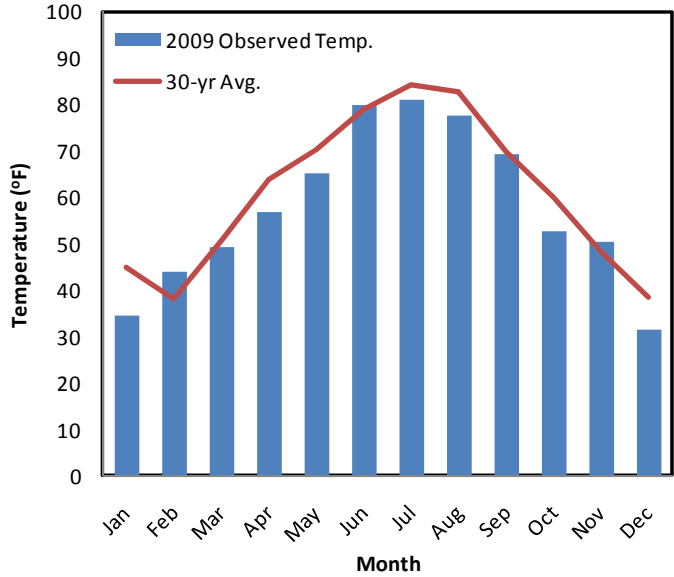
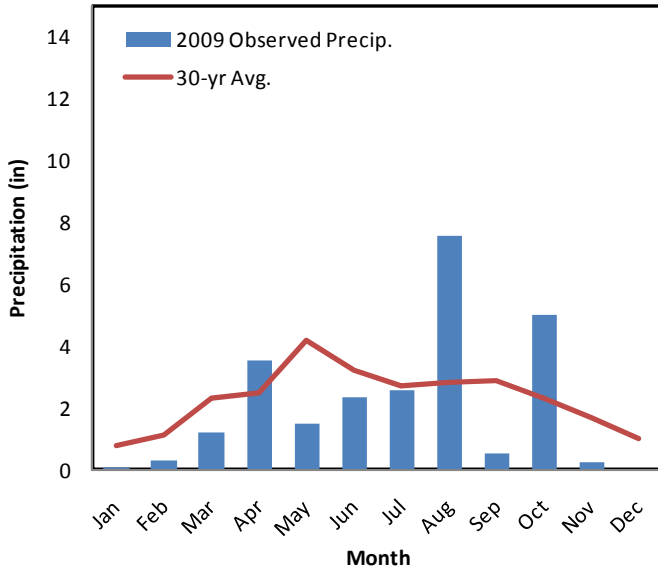
¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Table 11. Full-season conventional soybean production variety trail Haskell, OK 2009.

Variety	Company	Maturity Group	Height - in -	Shattering ¹ Score	Lodging ¹ Score	Seed/Lb	Yield - bu/acre -
OSAGE	University of Arkansas	5.6	25	1	0	3050	39
UA 4805	University of Arkansas	4.8	20	0	0	3100	38
HUTCHESON		5	27	1	0	2450	36
OZARK	University of Arkansas	5.2	33	0	1	2450	35
STODDARD	University of Missouri	5	24	1	0	2650	32
JAKE	University of Missouri	5	25	0	0	2650	31
LSD (P=0.05)							10
CV							20

¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Lahoma



Location Summary:

Growing conditions throughout the year at Lahoma were good. In June, plots were beginning to be stressed for moisture but normal rainfall in July and above rainfall in August made the crop. Yields for both the early- and full-season tests were average to above average. Early season yields were excellent. All tests were sprayed to control blister beetle at R1 growth stage.

Table 12. Information on soil chemical properties and management practices for the Soybean Production Test at Lahoma, OK in 2009.

Soil Properties	Result	Cultural Practice	Information
pH	na ¹	Planting Date	4/23 and 5/29 ²
Soil Test P Index	na	Seeding Rate (seeds/foot of row)	8
Soil Test K Index	na	Seeding Depth (in)	1.5
		Irrigation	none
Previous crop	Soybean	Harvest Dates	9/18 and 11/24 ³
		Soil Moisture at Planting	good

¹Not available.

²Planting dates for the early and full season tests, respectively.

Table 13. Early-season soybean production variety trail Lahoma, OK 2009.

Variety	Company	Maturity Group	Height - in -	Shattering ¹ Score	Lodging ¹ Score	Seed/Lb	Yield - bu/acre -
Dyna Gro 37A44	Dyna Gro	4.4	32	0	0	2850	82
RT4485N	Cache River Valley Seed	4.4	34	0	0	2950	70
Dyna Gro 38C42	Dyna Gro	4.2	19	0	0	3150	69
AG 4005	Monsanto	4	25	0	0	2500	65
Dyna Gro 35G38	Dyna Gro	3.8	16	0	0	2600	63
RTs4824	Cache River Valley Seed	4.8	26	0	0	2400	52
RTs4955N	Cache River Valley Seed	4.9	38	0	0	2600	50
LSD (P=0.05)							13
CV							10

¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Table 14. Full-season glyphosate resistant soybean production variety trail Lahoma, OK 2009.

Variety	Company	Maturity Group	Height - in -	Shattering ¹ Score	Lodging ¹ Score	Seed/Lb	Yield - bu/acre -
Channel XPR45-09	Channel Bio. Corp.	4.5	26	0	0	2700	73
S48-C9	Syngenta Seeds	4.8	24	0	0	2850	67
Terral TV54R28	Terral Seed Inc.	5.4	36	0	0	2850	60
Asgrow AG5605	Monsanto	5.6	24	0	0	3250	58
Morsoy RT5168	Cache River Valley Seed	5.1	24	0	0	2750	58
Morsoy RTs4824	Cache River Valley Seed	4.8	27	0	0	2600	56
Terral TV49R17	Terral Seed Inc.	4.9	33	0	0	3300	51
Terral TV47R18	Terral Seed Inc.	4.7	28	0	0	3350	50
HBK 5425	Hornbeck Seed Co.	5.4	24	0	0	2650	49
Morsoy RT5388N	Cache River Valley Seed	5.3	22	0	0	3300	49
Terral TV49R19	Terral Seed Inc.	4.9	29	1	0	3050	49
Channel GR5331	Channel Bio. Corp.	5.3	27	1	0	2550	48
Terral TV55R15	Terral Seed Inc.	5.5	36	0	0	2700	48
S46-U6	Syngenta Seeds	4.6	30	0	0	2800	47
Morsoy RT4485N	Cache River Valley Seed	4.4	26	2	0	3250	47
Morsoy RTs4955N	Cache River Valley Seed	4.9	27	1	0	2500	47
Dyna Gro 31R54	Dyna Gro	5.4	24	0	0	3000	45
HBK RS 5227	Hornbeck Seed Co.	5.2	21	0	0	2850	44
S49-H7	Syngenta Seeds	4.9	27	0	0	2900	44
Dyna Gro 36Y48	Dyna Gro	4.8	27	0	0	2900	42
Channel GR4833	Channel Bio. Corp.	4.8	23	2	0	3200	41
Channel 5651R RR	Channel Bio. Corp.	5.6	23	0	0	3250	36
LSD (P=0.05)							10
CV							15

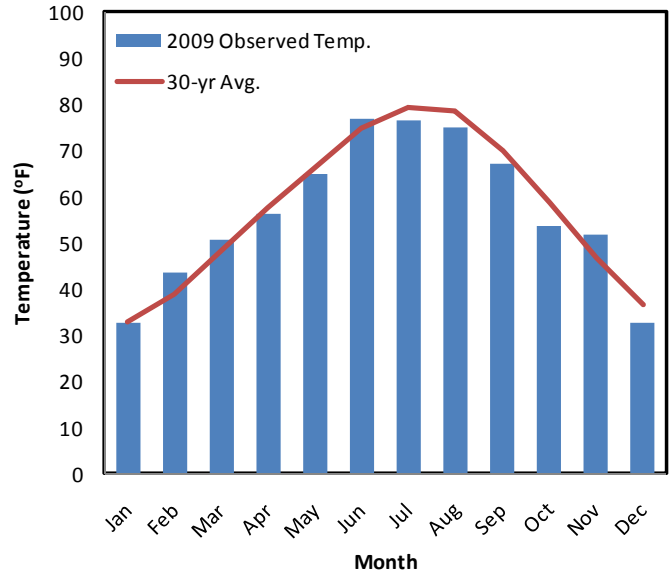
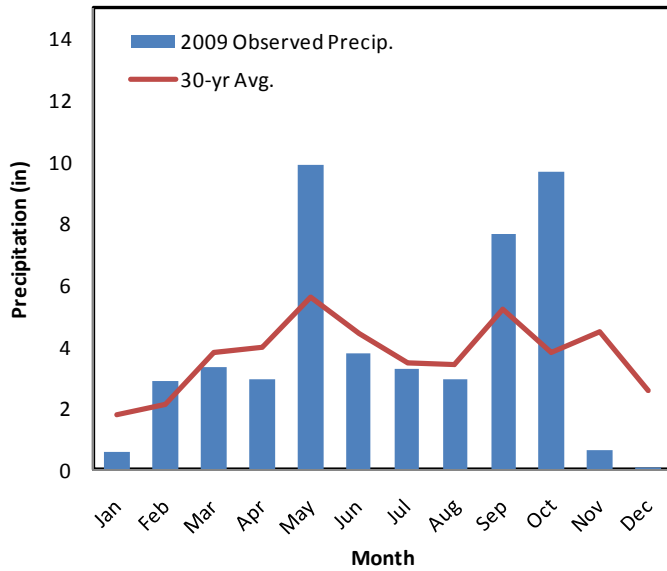
¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Table 15. Full-season conventional soybean production variety trial Lahoma, OK 2009.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield
		Group		Score	Score		
			- in -				- bu/acre -
OZARK	University of Arkansas	5.2	16	0	0	3000	52
HUTCHESON		5	20	1	0	2700	45
STODDARD	University of Missouri	5	18	1	0	3650	44
UA 4805	University of Arkansas	4.8	19	1	0	3300	44
OSAGE	University of Arkansas	5.6	18	1	0	3300	44
JAKE	University of Missouri	5	21	0	0	2950	43
LSD (P=0.05)							7
CV							9

¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Miami



Location Summary:

Growing conditions for the full-season test at Miami were excellent. This was a double-crop test planted after wheat on a producer's field. The RR test and Conventional test was not located in the same field. Both locations were planted immediately following wheat harvest. Average grain yield across all varieties in the RR test was 51 bu/ac, while the average for the Conventional test was 42 bu/ac. No insect or disease problems were observed in the plot area.

Table 17. Information on soil chemical properties and management practices for the Soybean Production Test at Miami, OK in 2009.

Soil Properties	Result	Cultural Practice	Information
pH	6.0 ¹	Planting Date	6/22 and 6/26 ²
Soil Test P Index	24	Seeding Rate (seeds/foot of row)	8
Soil Test K Index	163	Seeding Depth (in)	1
		Irrigation	none
		Harvest Date	11/9/2009 ³
		Soil Moisture at Planting	good

¹Soil characteristics for the conventional test only.

²Planting dates for the full season Glyphosate resistant test and conventional test, respectively.

³Harvest dates for both full season tests.

Table 18. Full-season glyphosate resistant soybean production variety trail Miami, OK 2009.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield
		Group		Score	Score		
			- in -				- bu/acre -
Morsoy RTs4824	Cache River Valley Seed	4.8	40	0	1	2500	62
Morsoy RT5168	Cache River Valley Seed	5.1	37	0	1	2700	59
S48-C9	Syngenta Seeds	4.8	34	0	0	2850	56
Morsoy RTs4955N	Cache River Valley Seed	4.9	39	0	2	2500	56
Dyna Gro 36Y48	Dyna Gro	4.8	36	0	1	2650	56
Terral TV49R17	Terral Seed Inc.	4.9	40	0	1	2600	56
Morsoy RT4485N	Cache River Valley Seed	4.4	38	0	1	3150	55
Terral TV47R18	Terral Seed Inc.	4.7	35	0	0	3100	55
Terral TV49R19	Terral Seed Inc.	4.9	33	0	0	2600	55
S46-U6	Syngenta Seeds	4.6	39	0	0	2550	54
Channel XPR45-09	Channel Bio. Corp.	4.5	34	0	0	2200	53
S49-H7	Syngenta Seeds	4.9	36	0	0	2650	51
HBK RS 5227	Hornbeck Seed Co.	5.2	38	0	0	3200	50
Asgrow AG5605	Monsanto	5.6	42	0	1	3950	50
Channel GR4833	Channel Bio. Corp.	4.8	39	0	0	2750	49
Dyna Gro 31R54	Dyna Gro	5.4	41	0	1	3350	49
Terral TV54R28	Terral Seed Inc.	5.4	36	0	1	2850	49
Channel 5651R RR	Channel Bio. Corp.	5.6	41	0	2	3700	45
Channel GR5331	Channel Bio. Corp.	5.3	41	0	0	2850	45
Morsoy RT5388N	Cache River Valley Seed	5.3	40	0	2	4000	44
HBK 5425	Hornbeck Seed Co.	5.4	30	0	0	2550	43
Terral TV55R15	Terral Seed Inc.	5.5	42	0	2	2550	30
LSD (P=0.05)							5
CV							7

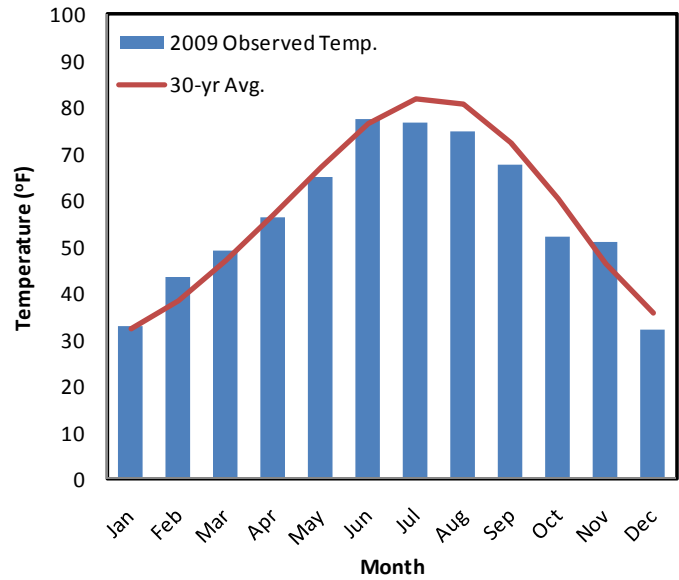
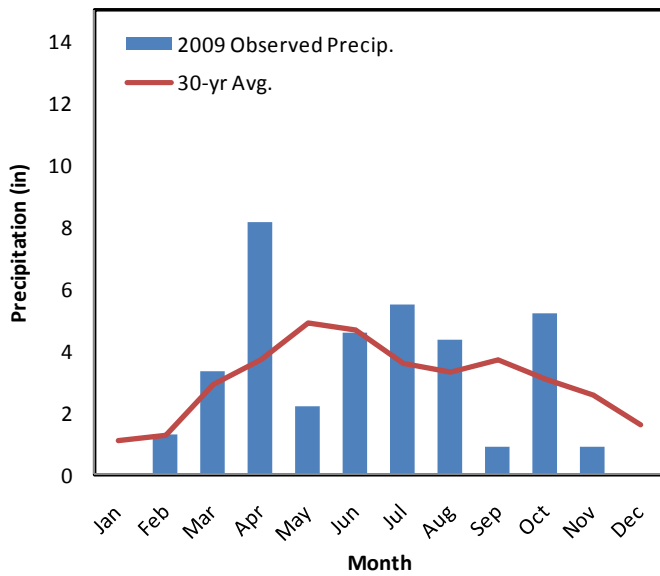
¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Table 19. Full-season conventional soybean production variety trail Miami, OK 2009.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield
		Group		Score	Score		
			- in -				- bu/acre -
OZARK	University of Arkansas	5.2	29	0	0	3100	46
JAKE	University of Missouri	5	20	0	0	2900	46
UA 4805	University of Arkansas	4.8	27	0	0	3600	44
OSAGE	University of Arkansas	5.6	33	0	0	3500	42
STODDARD	University of Missouri	5	24	0	0	3050	38
HUTCHESON		5	30	0	0	3100	37
LSD (P=0.05)							4
CV							6

¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Newkirk



Location Summary:

The Newkirk location had excellent growing conditions all year as indicated by the excellent yields. Due to wet field conditions in April the early season test was not planted until June 1. Above normal rainfall in July and August help contribute to very high yields. No pest pressure was observed in the plots.

Table 20. Information on soil chemical properties and management practices for the Soybean Production Test at New Kirk, OK in 2009.

Soil Properties	Result	Cultural Practice	Information
pH	5.4	Planting Date	6/1 for all tests
Soil Test P Index	28	Seeding Rate (seeds/foot of row)	8
Soil Test K Index	434	Seeding Depth (in)	1
		Irrigation	none
		Harvest Date	11/4 for all tests
		Soil Moisture at Planting	good

Table 21. Early-season soybean production variety trail Newkirk, OK 2009.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield
		Group		Score	Score		- bu/acre -
			- in -				
RTs4824	Cache River Valley Seed	4.8	36	0	1	2500	74
Dyna Gro 37A44	Dyna Gro	4.4	32	0	0	2700	73
RT4485N	Cache River Valley Seed	4.4	32	1	0	2700	72
AG 4005	Monsanto	4	34	0	0	2450	72
RTs4955N	Cache River Valley Seed	4.9	34	0	0	2650	66
Dyna Gro 38C42	Dyna Gro	4.2	30	0	0	2650	63
Dyna Gro 35G38	Dyna Gro	3.8	29	1	0	2500	47
LSD (P=0.05)							7
CV							7

¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Table 22. Full-season glyphosate resistant soybean production variety trail Newkirk, OK 2009.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield
		Group		Score	Score		- bu/acre -
			- in -				
Channel XPR45-09	Channel Bio. Corp.	4.5	30	0	0	2400	76
S46-U6	Syngenta Seeds	4.6	38	0	0	2450	72
Morsoy RTs4824	Cache River Valley Seed	4.8	32	0	0	2500	72
S49-H7	Syngenta Seeds	4.9	36	0	0	2700	71
Terral TV49R19	Terral Seed Inc.	4.9	33	0	0	2900	71
HBK RS 5227	Hornbeck Seed Co.	5.2	39	0	0	3300	69
Dyna Gro 31R54	Dyna Gro	5.4	34	0	0	3350	69
Terral TV54R28	Terral Seed Inc.	5.4	32	0	0	2850	69
Morsoy RT4485N	Cache River Valley Seed	4.4	33	0	0	2950	67
Morsoy RT5168	Cache River Valley Seed	5.1	32	0	0	2600	67
Channel GR4833	Channel Bio. Corp.	4.8	31	0	0	2800	67
Morsoy RT5388N	Cache River Valley Seed	5.3	38	0	0	3650	65
Morsoy RTs4955N	Cache River Valley Seed	4.9	33	0	0	2550	64
Dyna Gro 36Y48	Dyna Gro	4.8	33	0	0	2650	64
HBK 5425	Hornbeck Seed Co.	5.4	37	0	0	2800	63
S48-C9	Syngenta Seeds	4.8	31	0	0	2750	63
Channel GR5331	Channel Bio. Corp.	5.3	36	0	0	2500	63
Terral TV55R15	Terral Seed Inc.	5.5	38	0	0	2700	63
Asgrow AG5605	Monsanto	5.6	40	0	0	2750	61
Channel 5651R RR	Channel Bio. Corp.	5.6	38	0	0	3350	60
Terral TV47R18	Terral Seed Inc.	4.7	39	0	0	2800	59
Terral TV49R17	Terral Seed Inc.	4.9	35	0	0	2850	54
LSD (P=0.05)							9
CV							10

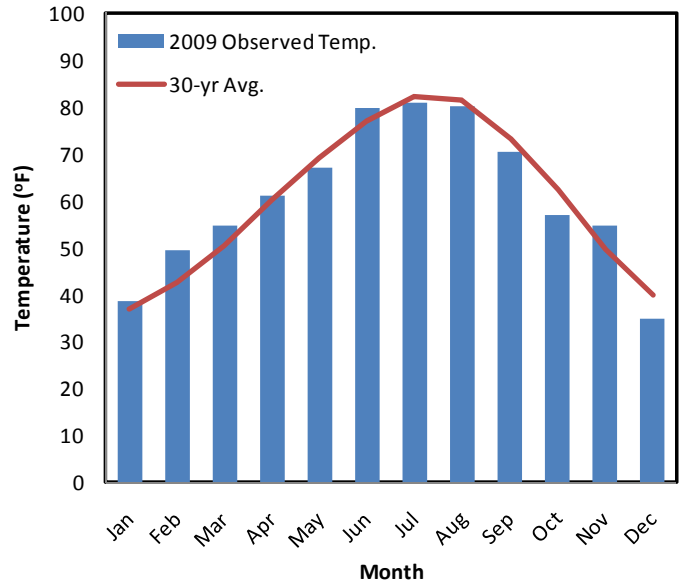
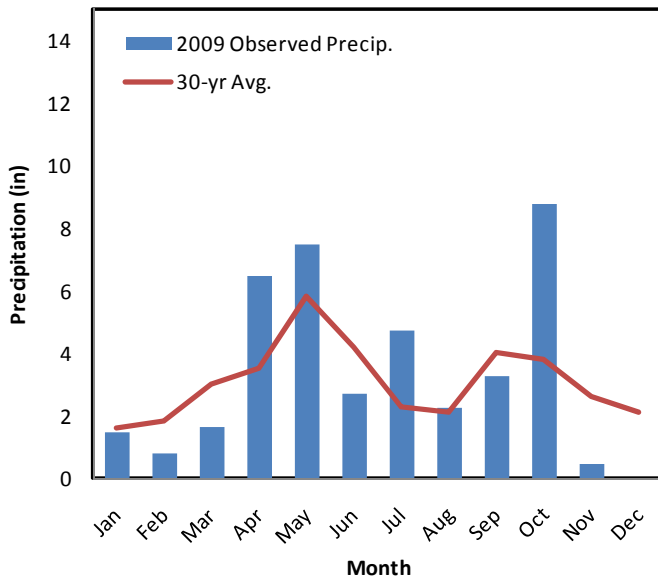
¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Table 23. Full-season conventional soybean production variety trail Newkirk, OK 2009.

Variety	Company	Maturity Group	Height - in -	Shattering ¹ Score	Lodging ¹ Score	Seed/Lb	Yield - bu/acre -
OSAGE	University of Arkansas	5.6	30	0	0	3350	72
UA 4805	University of Arkansas	4.8	28	0	0	3500	70
OZARK	University of Arkansas	5.2	33	0	0	2950	70
JAKE	University of Missouri	5	36	0	0	2800	69
STODDARD	University of Missouri	5	31	0	0	3100	69
HUTCHESON		5	35	0	0	3200	67
LSD (P=0.05)							7
CV							7

¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Pauls Valley



Location Summary:

The Pauls Valley location was located in a producer's field. The location was conventionally tilled. Soil moisture at planting was excellent for both tests. The average yield for the early season and full season test was 35 and 66 bu/acre, respectively. The early season test was stressed in June due to below normal rainfall. This did not affect the full season test as much since it was planted in June.

Table 24. Information on soil chemical properties and management practices for the Soybean Production Test at Pauls Valley, OK in 2009.

Soil Properties	Result	Cultural Practice	Information
pH	6.9	Planting Dates	4/22 and 5/29 ¹
Soil Test P Index	17	Seeding Rate (seeds/foot of row)	8
Soil Test K Index	194	Seeding Depth (in)	1
		Irrigation	none
		Harvest Dates	9/5 and 11/4 ²
		Soil Moisture at Planting	excellent

¹Planting dates for the early and full season tests, respectively.

²Harvest dates for the early and full season tests, respectively.

Table 25. Early-season soybean production variety trail Pauls Valley, OK 2009.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield
		Group		Score	Score		
			- in -				- bu/acre -
Dyna Gro 35G38	Dyna Gro	3.8	33	0	1	3000	40
AG 4005	Monsanto	4	32	0	1	2950	39
Dyna Gro 37A44	Dyna Gro	4.4	38	0	2	3350	39
RT4485N	Cache River Valley Seed	4.4	36	0	1	2500	38
Dyna Gro 38C42	Dyna Gro	4.2	28	0	1	3900	36
RTs4955N	Cache River Valley Seed	4.9	34	1	1	2650	29
RTs4824	Cache River Valley Seed	4.8	35	0	1	2300	25
LSD (P=0.05)							4
CV							8

¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Table 26. Full-season glyphosate resistant soybean production variety trail Pauls Valley, OK 2009.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield
		Group		Score	Score		
			- in -				- bu/acre -
Morsoy RT5388N	Cache River Valley Seed	5.3	38	1	1	3200	78
Asgrow AG5605	Monsanto	5.6	30	0	1	3600	76
Channel 5651R RR	Channel Bio. Corp.	5.6	34	1	1	2700	76
HBK 5425	Hornbeck Seed Co.	5.4	36	0	0	2450	73
Morsoy RTs4824	Cache River Valley Seed	4.8	33	1	1	2550	72
Channel XPR45-09	Channel Bio. Corp.	4.5	33	1	1	2500	72
Dyna Gro 31R54	Dyna Gro	5.4	30	0	0	3300	72
Terral TV55R15	Terral Seed Inc.	5.5	42	0	2	2850	71
Terral TV54R28	Terral Seed Inc.	5.4	35	0	1	3000	67
HBK RS 5227	Hornbeck Seed Co.	5.2	32	2	0	2550	64
Morsoy RT5168	Cache River Valley Seed	5.1	35	1	2	2550	64
Channel GR5331	Channel Bio. Corp.	5.3	42	1	2	2400	64
S49-H7	Syngenta Seeds	4.9	36	1	1	2700	63
S46-U6	Syngenta Seeds	4.6	38	1	0	2650	62
S48-C9	Syngenta Seeds	4.8	31	1	0	3050	60
Morsoy RT4485N	Cache River Valley Seed	4.4	37	2	1	3200	59
Terral TV47R18	Terral Seed Inc.	4.7	40	2	2	2850	56
Terral TV49R19	Terral Seed Inc.	4.9	34	0	0	2950	56
Channel GR4833	Channel Bio. Corp.	4.8	33	2	1	2700	54
Morsoy RTs4955N	Cache River Valley Seed	4.9	35	1	2	2800	52
Terral TV49R17	Terral Seed Inc.	4.9	50	2	1	3000	50
Dyna Gro 36Y48	Dyna Gro	4.8	32	2	1	2600	48
LSD (P=0.05)							12
CV							13

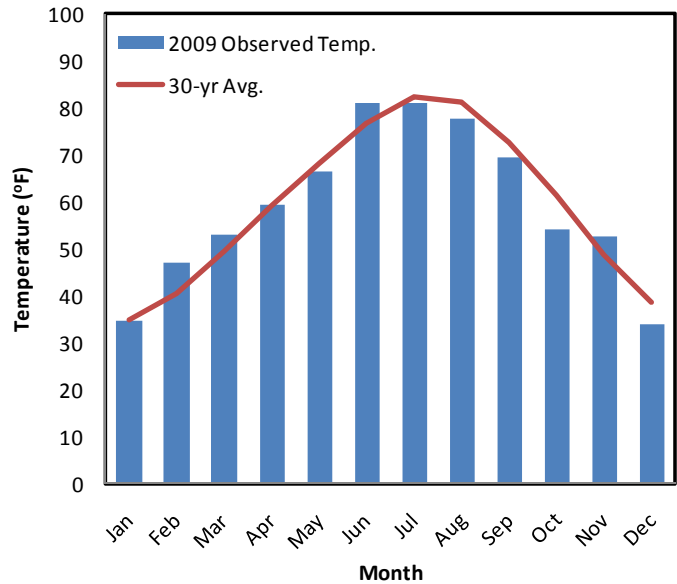
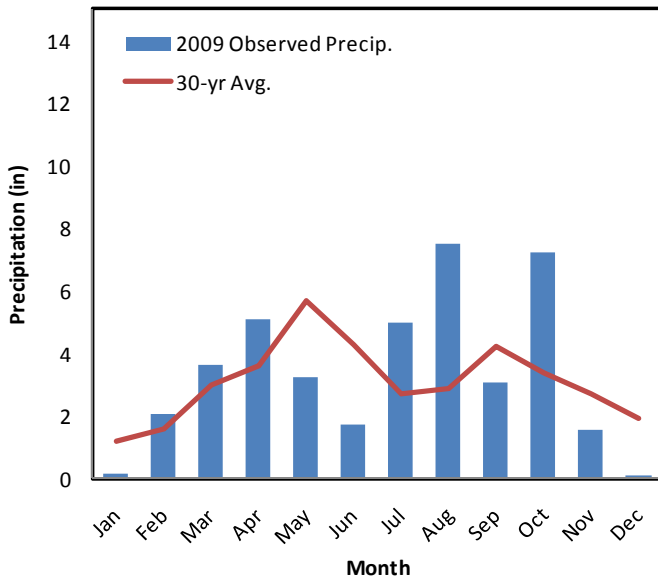
¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Table 27. Full-season conventional soybean production variety trial Pauls Valley, OK 2009.

Variety	Company	Maturity Group	Height - in -	Shattering ¹ Score	Lodging ¹ Score	Seed/Lb	Yield - bu/acre -
OZARK	University of Arkansas	5.2	24	0	0	2750	87
HUTCHESON		5	27	0	0	2600	73
OSAGE	University of Arkansas	5.6	22	0	0	3250	71
STODDARD	University of Missouri	5	19	1	0	2950	69
UA 4805	University of Arkansas	4.8	19	0	0	3700	68
JAKE	University of Missouri	5	29	0	0	2850	63
LSD (P=0.05)							7
CV							7

¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Stillwater



Location Summary:

The Stillwater locations were located in different fields. The early season test was planted on more of an upland type soil. After planting the early season test the soil surface crusted and a rotary hoe was used to break up the crust. Stands were still considered adequate. The full-season test was planted no-till after wheat harvest. The later planting date probably influenced the yields in this test. The average yield for the early season and full season test was 32 and 23 bu/acre, respectively.

Table 28. Information on soil chemical properties and management practices for the Soybean Production Test at Stillwater, OK in 2009.

Soil Properties	Result	Cultural Practice	Information
pH	6.2	Planting Date	5/11 and 7/10 ¹
Soil Test P Index	28	Seeding Rate (seeds/foot of row)	8
Soil Test K Index	324	Seeding Depth (in)	1.5
		Irrigation	none
		Harvest Date	10/19 and 12/1 ²
		Soil Moisture at Planting	good

¹Planting dates for the early and full season tests, respectively.

²Harvest dates for the early and full season tests, respectively.

Table 29. Early-season soybean production variety trail Stillwater, OK 2009.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield
		Group		Score	Score		- bu/acre -
			- in -				
RTs4955N	Cache River Valley Seed	4.9	34	0	0	2400	40
RTs4824	Cache River Valley Seed	4.8	32	0	0	2400	38
RT4485N	Cache River Valley Seed	4.4	24	0	0	2450	34
Dyna Gro 37A44	Dyna Gro	4.4	26	0	0	2500	31
Dyna Gro 38C42	Dyna Gro	4.2	15	0	0	2600	30
AG 4005	Monsanto	4	27	0	0	2350	25
Dyna Gro 35G38	Dyna Gro	3.8	19	0	0	2200	23
LSD (P=0.05)							7
CV							14

¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

Table 30. Full-season glyphosate resistant soybean production variety trail Stillwater, OK 2009.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield
		Group		Score	Score		- bu/acre -
			- in -				
Terral TV49R17	Terral Seed Inc.	4.9	36	0	0	2500	35
Channel XPR45-09	Channel Bio. Corp.	4.5	25	0	0	2400	32
Terral TV55R15	Terral Seed Inc.	5.5	31	0	0	2750	28
Morsoy RTs4824	Cache River Valley Seed	4.8	15	0	0	2700	27
S46-U6	Syngenta Seeds	4.6	22	0	0	2750	26
Morsoy RT5388N	Cache River Valley Seed	5.3	25	0	0	2650	26
Asgrow AG5605	Monsanto	5.6	25	0	0	3850	26
Channel 5651R RR	Channel Bio. Corp.	5.6	23	0	0	3350	26
Terral TV49R19	Terral Seed Inc.	4.9	25	0	0	2900	25
HBK 5425	Hornbeck Seed Co.	5.4	19	0	0	2900	25
HBK RS 5227	Hornbeck Seed Co.	5.2	18	0	0	3000	24
Terral TV54R28	Terral Seed Inc.	5.4	21	0	0	3050	24
Dyna Gro 31R54	Dyna Gro	5.4	26	0	0	3100	23
Morsoy RT5168	Cache River Valley Seed	5.1	17	0	0	2750	22
Terral TV47R18	Terral Seed Inc.	4.7	27	0	0	2850	20
Dyna Gro 36Y48	Dyna Gro	4.8	24	0	0	2600	20
S49-H7	Syngenta Seeds	4.9	22	0	0	2750	19
S48-C9	Syngenta Seeds	4.8	21	0	0	2750	18
Morsoy RT4485N	Cache River Valley Seed	4.4	13	0	0	2850	17
Channel GR4833	Channel Bio. Corp.	4.8	17	0	0	2750	16
Morsoy RTs4955N	Cache River Valley Seed	4.9	19	0	0	2750	13
Channel GR5331	Channel Bio. Corp.	5.3	22	0	0	2500	11
LSD (P=0.05)							4
CV							11

¹0 = no shattering or lodging, 5 = very severe shattering or lodging.

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