



2007 Soybean Variety Performance



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Information on Soybean Variety Trials

Numerous soybean lines and varieties were evaluated in performance tests during 2007. 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 (Table 1). Early-season tests were planted during April and contained maturity group (MG) III and IV. Full-season test were planted during June and into the beginning of July and included varieties in MG IV, V, and VI. All varieties entered in 2007 were glyphosate resistant.

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.

2007 Soybean Crop Overview

The 2007 soybean production season in Oklahoma was characterized as extremely wet. For many areas in Oklahoma this past soybean growing season will go down among the wettest in recorded history. Planted acreage of this year's soybean crop was measured at 190,000 acres and an estimated 170,000 acres were harvested. Average yield at the time of this report was estimated at 24 bushels per acre. Soybean acreage was down probably as a result of the wet conditions and producers were not able to plant. Although several producers had difficulty planting their soybean crop during recommended planting dates good yields were still realized due to good growing conditions in late summer and early fall. Even though 2007 was a challenging production year in some aspects for soybean producers, soybean remains a good cropping choice for most areas of Oklahoma.

Pest problems

Plant disease was extremely high during the 2007 growing season, mainly due to the wet growing conditions. Asian soybean rust was wide-spread in

Oklahoma during the growing season from July on. Rust was detected in most of the Sentinel Plots OSU had throughout the state. Most fields, especially in the eastern part of the state were treated with fungicide to prevent the spread of rust. On most occasions fungicide application at the R3 growth stage reduced yield loss from foliar soybean diseases. For the most part no major widespread insect problems were observed during the 2006 growing season. Three-cornered alfalfa hoppers were observed in a few fields during the early part of the growing season.

Methods

Early-season test locations were near Chickasha, Haskell, Bixby, Lahoma, Stillwater, and Goodwell. The early-season test at Haskell was not harvested due to wet conditions that prevented a timely harvest. Full-season test locations were near Haskell, Bixby, Lahoma, Stillwater, Miami, and Goodwell. The Chickasha location was not planted due to wet conditions in June and July. All test plots were planted using four 30-inch rows that were 21 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 granular formulation was applied with the seed. Tests were conducted using randomized complete block design with three replications. All locations were conventionally tilled prior to seeding. Irrigation was used only at the Goodwell location. Three 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/

Sources of Seed for the 2007 Soybean Performance Tests

Dyna-Gro Seeds

101 East Corporate Dr. Suite 180
Lewisville, TX 75067

Telephone: 918-464-2012

Hornbeck Seed Co., Inc.

PO Box 472
Dewitt, AR 72042

Telephone: 870-946-2087

Monsanto

102 W. Carol Ave.
Cortland, IL 60112

Telephone: 815-754-4809

NK Brand Seeds

6711 Hare Hill Dr.
Arlington, IN 38002

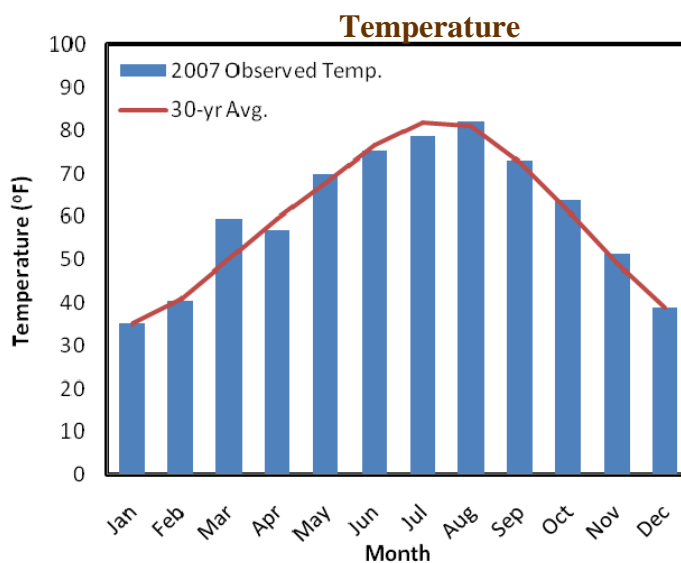
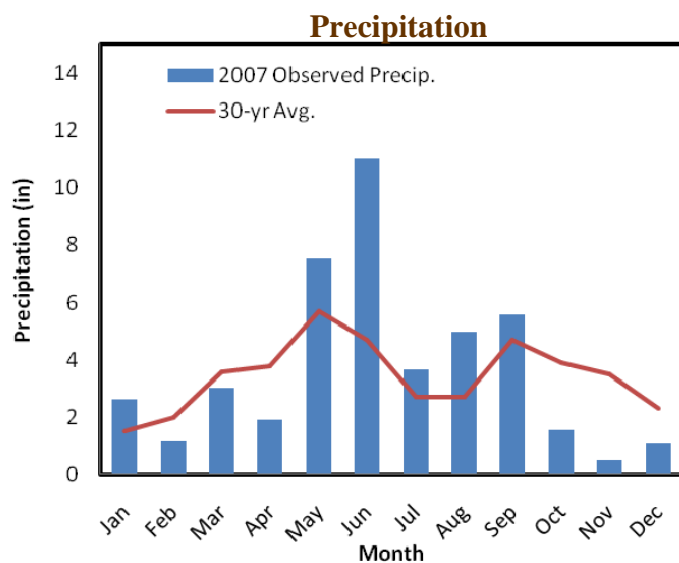
Telephone: 901-382-5265

NC+

1551 Highway 210
Huxley, IA 50124

Telephone: 515-314-1003

2007 Bixby Trial Data



Growing conditions throughout the year at Bixby varied. In June, plots were saturated by the above normal rainfall which may have decreased plant growth and had a negative effect on yield. Plants were seldom stressed for moisture during the growing season. Grain yields of varieties included in the early-season test were lower than normal. This may have been due to the presence of soybean cyst nematodes (SCN). A soil test taken from the plot area indicated the presence of SCN. The results should be considered to be influenced by the presence of SCN. Varieties containing resistance to SCN would be expected to perform better in an environment such as this. Full-season grain yields were normal but also were planted in an area that tested positive for SCN. Presence of Asian soybean rust was observed but did not impact trial results.

Table 1. Information on soil chemical properties and management practices for the Soybean Production Test at Bixby, OK in 2007.

Soil Properties	Result	Cultural Practice	Information
pH	6.1	Planting Dates	4/20 and 6/6 ¹
Soil Test P Index	95	Seeding Rate (seeds/foot of row)	8
Soil Test K Index	257	Seeding Depth (in)	1.5
		Irrigation	none
		Harvest Dates	9/17 and 11/1 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 2. Early-season glyphosate resistant soybean production variety trail Bixby, OK 2007.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield ²
		Group		Score	Score		
			- in -				- bu/acre -
HBK R5123	Hornbeck Seed Co. Inc.	5.1	39	0	0	2900	22.6
AG 4103	Monsanto	4	29	0	0	3650	18.4
HBK R4527	Hornbeck Seed Co. Inc.	4.5	39	0	0	3250	18.4
HBK R4924	Hornbeck Seed Co. Inc.	4.9	38	0	0	3300	18.2
AG 3905	Monsanto	3	32	0	0	3600	16.3
HBK R4727	Hornbeck Seed Co. Inc.	4.7	37	0	0	3000	16.3
DG 33Y45	Dynagro Seed UAP	4.5	31	1	0	3650	14.2
HBK HX4843	Hornbeck Seed Co. Inc.	4.8	39	0	0	3150	13.7
HBK R3824	Pioneer Hi-Bred Intl.Inc.	3.9	32	0	0	3450	12.2
SXO 6545	Dynagro Seed UAP	4.5	31	0	0	3100	10.3
AG 3803	Monsanto	3	30	1	0	3700	9.6
DG 35D44	Dynagro Seed UAP	4.4	30	1	0	3250	9.4

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

²Mean yield = 15.0 Bu/Acre. LSD @.05 = 4.3 Bu/acre. C.V. = 12.5%.

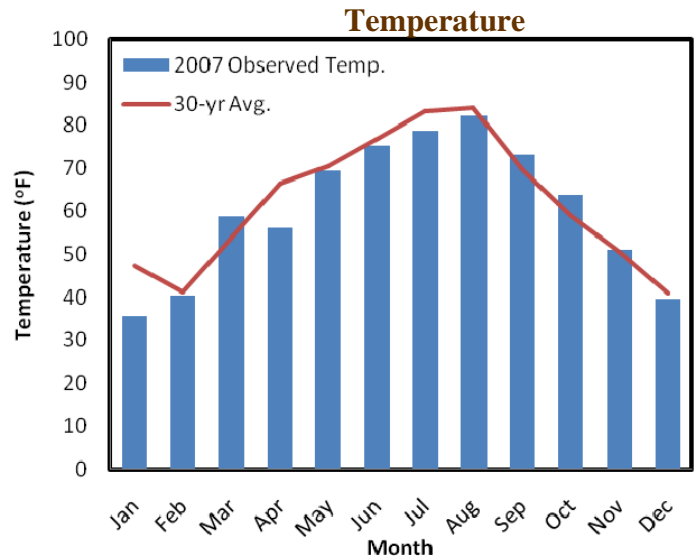
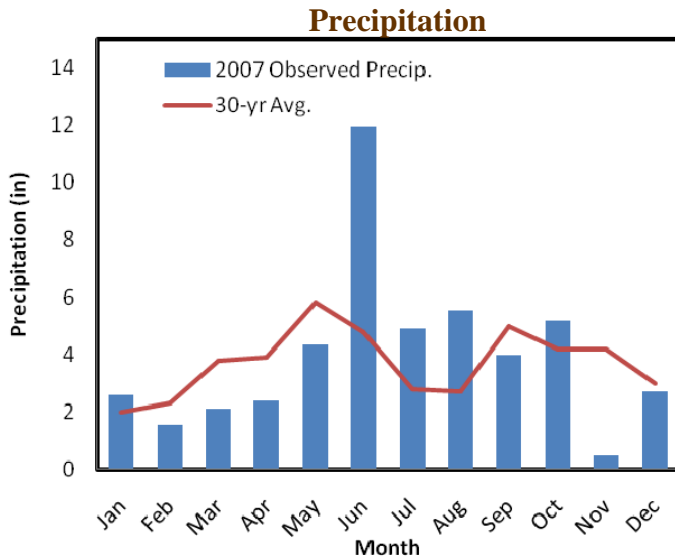
Table 3. Full-season glyphosate resistant soybean production variety trail Bixby, OK 2007.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield ²
		Group		Score	Score		
			- in -				- bu/acre -
HBK R4924	Hornbeck Seed Co. Inc.	4.9	21	0	0	2900	37.7
DG 36T60	Dynagro Seed UAP	6	19	0	0	2900	37.3
DG 36N57	Dynagro Seed UAP	5.7	14	0	0	2800	37.1
HBK R5226	Hornbeck Seed Co. Inc.	5.2	20	0	0	2800	36.6
HBK R5425	Hornbeck Seed Co. Inc.	5.4	25	0	0	2750	34.6
DG 33C59	Dynagro Seed UAP	5.9	20	0	0	2700	34.6
DG 37C62	Dynagro Seed UAP	6.2	25	0	0	2850	33.6
XP 541-7	NC ⁺	5.4	17	0	0	3050	33.3
HBK R5123	Hornbeck Seed Co. Inc.	5.1	24	0	0	2850	32.5
DG 31R54	Dynagro Seed UAP	5.4	25	0	0	2750	31.8
AG 4903	Monsanto	4	20	0	0	2550	31.4
DG 35Z49	Dynagro Seed UAP	4.9	24	0	0	2650	30.6
HBK R5525	Hornbeck Seed Co. Inc.	5.5	21	0	0	2700	29.3
DG 36Y48	Dynagro Seed UAP	4.8	20	0	0	2950	27.8
AG 5301	Monsanto	5	23	0	0	2900	27.5
XP 531-7	NC ⁺	5.3	20	0	0	2700	26.8
DG 32B57	Dynagro Seed UAP	5.7	17	0	0	2900	26.6
DG 32A53	Dynagro Seed UAP	5.3	20	0	0	2700	26.0
DG 32R46	Dynagro Seed UAP	4.6	21	0	0	2750	24.9

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

²Mean yield = 31.6 Bu/Acre. LSD @ .05 = 3.2 Bu/Acre. C.V. = 9.8%.

2007 Haskell Trial Data



Growing conditions throughout the year at Haskell varied. In June, plots were saturated by the above normal rainfall which may have decreased plant growth and had a negative effect on yield. Plants were seldom stressed for moisture during the growing season. The early-season test could not be harvested in a timely manner due to the above normal precipitation in August. Plots were shattered excessively and reliable yield data was not determined. Average grain yield from the full-season test was 46.7 bu/ac. This is above the normal average and an indication of the excellent growing conditions for the full-season soybean. Fungicide was applied at the R3 growth stage. Presence of Asian soybean rust was observed but did not impact trial results.

Table 4. Information on soil chemical properties and management practices for the Soybean Production Test at Haskell, OK in 2007.

Soil Properties	Result	Cultural Practice	Information
pH	5.7	Planting Date	4/20 and 6/8 ¹
Soil Test P Index	91	Seeding Rate (seeds/foot of row)	8
Soil Test K Index	271	Seeding Depth (in)	1.5
		Irrigation	none
		Harvest Dates	10/29
		Soil Moisture at Planting	Good

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

²Harvest dates for full season test.

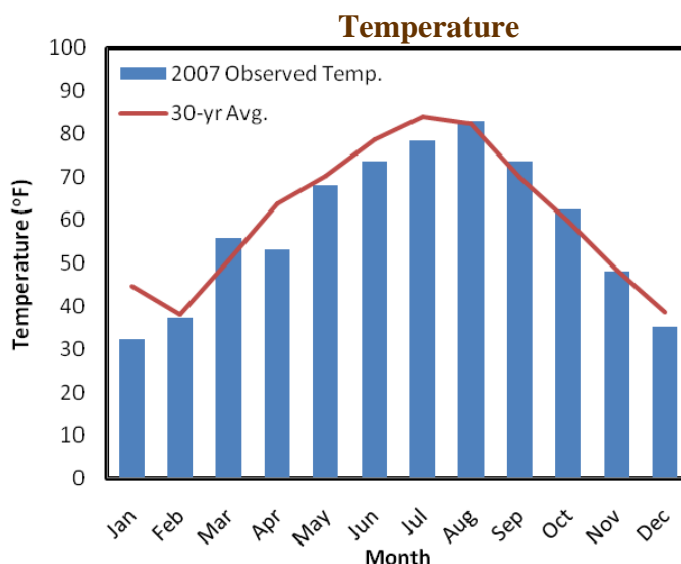
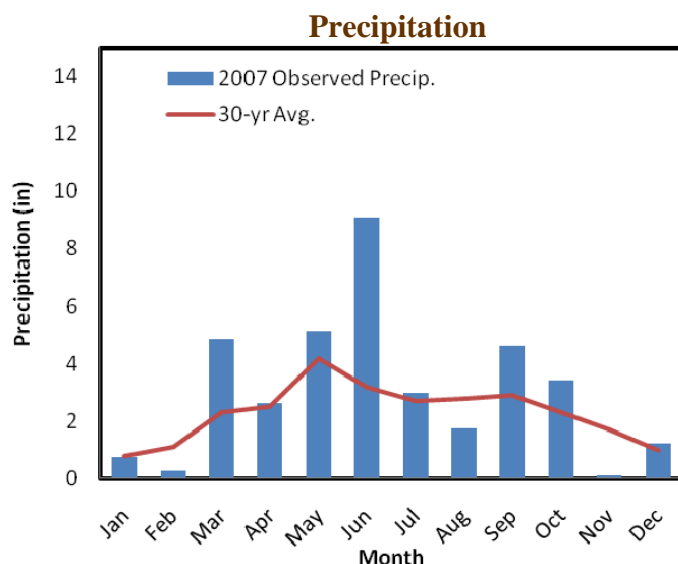
Table 5. Full-season glyphosate resistant soybean production variety trial Haskell, OK 2007.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield ²
		Group		Score	Score		
			- in -				- bu/acre -
DG 36T60	Dynagro Seed UAP	6	24	0	0	2700	60.3
DG 33C59	Dynagro Seed UAP	5.9	23	0	0	2450	56.8
HBK R5226	Hornbeck Seed Co. Inc.	5.2	24	0	0	2650	53.4
HBK R5525	Hornbeck Seed Co. Inc.	5.5	25	1	0	2350	53.2
HBK R5425	Hornbeck Seed Co. Inc.	5.4	24	0	0	2750	49.9
DG 37C62	Dynagro Seed UAP	6.2	20	0	0	2750	49.8
DG 32B57	Dynagro Seed UAP	5.7	22	0	0	2650	49.6
DG 31R54	Dynagro Seed UAP	5.4	22	0	0	2700	49.4
AG 4903	Monsanto	4	23	0	0	2350	48.8
DG 36Y48	Dynagro Seed UAP	4.8	32	0	0	3000	47.3
DG 32R46	Dynagro Seed UAP	4.6	25	0	0	2650	46.8
XP 541-7	NC ⁺	5.4	24	0	0	2800	46.8
AG 5301	Monsanto	5	29	0	0	2550	43.9
DG 35Z49	Dynagro Seed UAP	4.9	26	0	0	2650	42.2
HBK R4924	Hornbeck Seed Co. Inc.	4.9	24	0	0	2700	42.1
XP 531-7	NC ⁺	5.3	26	1	0	2600	39.6
DG 36N57	Dynagro Seed UAP	5.7	19	0	0	2800	36.7
DG 32A53	Dynagro Seed UAP	5.3	25	0	0	2550	35.7
HBK R5123	Hornbeck Seed Co. Inc.	5.1	24	0	1	2650	34.0

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

²Mean yield = 46.7 Bu/Acre. LSD @ .05 = 5.4 Bu/Acre. C.V. =12.1 %.

2007 Lahoma Trial Data



Growing conditions throughout the year at Lahoma were good. In June, plots were saturated by the above normal rainfall which may have decreased plant growth and had a negative effect on yield. Plants were seldom stressed for moisture during the growing season. Yields for both the early- and full-season tests were average to above average. Average grain yield for the early-season test was 32.1 bu/ac and the full-season test had an average yield of 31.5 bu/ac when combining all varieties. Asian soybean rust was not observed at this location.

Table 6. Information on soil chemical properties and management practices for the Soybean Production Test at Lahoma, OK in 2007.

Soil Properties	Result	Cultural Practice	Information
pH	na ¹	Planting Date	4/26 and 6/25 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
		Harvest Dates	10/4 and 11/7 ³
		Soil Moisture at Planting	Good

¹Not available.

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

³Harvest dates for the early and full season tests, respectively.

Table 7. Early-season glyphosate resistant soybean production variety trail Lahoma, OK 2007.

Variety	Company	Maturity Group	Height - in -	Shattering ¹ Score	Lodging ¹ Score	Seed/Lb	Yield ² - bu/acre -
HBK HX4843	Hornbeck Seed Co. Inc.	4.8	35	0	0	4300	37.1
HBK R4924	Hornbeck Seed Co. Inc.	4.9	34	0	0	3700	35.8
SXO 6545	Dynagro Seed UAP	4.5	31	0	0	4650	35.4
HBK R5123	Hornbeck Seed Co. Inc.	5.1	38	0	0	3100	34.1
AG 3905	Monsanto	3	29	0	0	4100	34
HBK R4527	Hornbeck Seed Co. Inc.	4.5	33	0	0	4300	33.8
HBK R4727	Hornbeck Seed Co. Inc.	4.7	31	0	0	4300	32.5
AG 3803	Monsanto	3	29	1	0	4750	31.5
DG 35D44	Dynagro Seed UAP	4.4	37	0	0	4550	29.5
DG 33Y45	Dynagro Seed UAP	4.5	30	0	0	4450	29.3
HBK R3824	Pioneer Hi-Bred Intl.Inc.	3.9	30	1	0	5000	28.8
AG 4103	Monsanto	4	27	0	0	5000	23.4

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

²Mean yield = 32.1 Bu/Acre. LSD @.05 = 7.9 Bu/acre. C.V. = 14.1

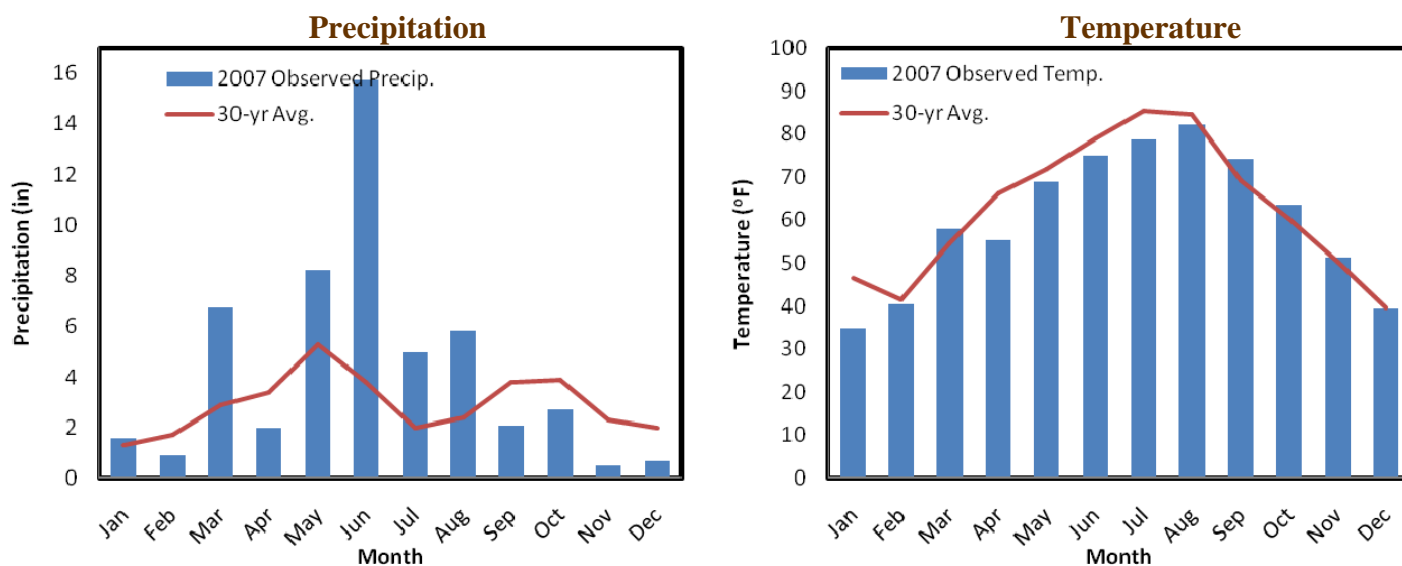
Table 8. Full-season glyphosate resistant soybean production variety trail Lahoma, OK 2007.

Variety	Company	Maturity Group	Height - in -	Shattering ¹ Score	Lodging ¹ Score	Seed/Lb	Yield ² - bu/acre -
DG 36N57	Dynagro Seed UAP	5.7	22	0	0	2700	40.7
DG 31R54	Dynagro Seed UAP	5.4	22	0	0	2600	36.7
DG 33C59	Dynagro Seed UAP	5.9	25	0	0	2650	36.5
HBK R5123	Hornbeck Seed Co. Inc.	5.1	23	0	0	2800	36.3
HBK R5226	Hornbeck Seed Co. Inc.	5.2	25	1	0	2800	35.6
XP 541-7	NC ⁺	5.4	22	1	0	3000	35.5
AG 4903	Monsanto	4	21	1	0	2550	33.9
DG 36T60	Dynagro Seed UAP	6	24	0	0	2900	32.1
DG 32A53	Dynagro Seed UAP	5.3	23	0	0	2550	32.0
XP 531-7	NC ⁺	5.3	24	1	0	2700	31.3
HBK R5425	Hornbeck Seed Co. Inc.	5.4	23	0	0	2700	31.2
AG 5301	Monsanto	5	26	1	0	2950	31.0
DG 32B57	Dynagro Seed UAP	5.7	24	0	0	2900	30.1
HBK R4924	Hornbeck Seed Co. Inc.	4.9	21	1	0	2850	28.7
DG 37C62	Dynagro Seed UAP	6.2	21	0	0	2900	27.0
DG 35Z49	Dynagro Seed UAP	4.9	19	1	0	2650	26.8
HBK R5525	Hornbeck Seed Co. Inc.	5.5	26	1	0	2650	26.2
DG 32R46	Dynagro Seed UAP	4.6	18	2	0	2750	25.3
DG 36Y48	Dynagro Seed UAP	4.8	20	2	0	2950	20.6

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

²Mean yield = 31.5 Bu/Acre. LSD @ .05 = 5.6 Bu/Acre. C.V. = 12.5%.

2007 Chickasha Trial Data



Growing conditions for the early-season test at Chickasha were good. In June, plots were saturated by the above normal rainfall which may have decreased plant growth and had a negative effect on yield. Average grain yield across all varieties was 23.1 bu/ac, which is lower than average and may have been an indication plants were stressed when water logged. Presence of Asian soybean rust was observed but did not impact trial results.

Table 9. Information on soil chemical properties and management practices for the Soybean Production Test at Chickasha, OK in 2007.

Soil Properties	Result	Cultural Practice	Information
pH	6.1	Planting Date	April 30, 2007
Soil Test P Index	95	Seeding Rate (seeds/foot of row)	8
Soil Test K Index	257	Seeding Depth (in)	1.5
		Irrigation	none
		Harvest Date	9/20
		Soil Moisture at Planting	Good

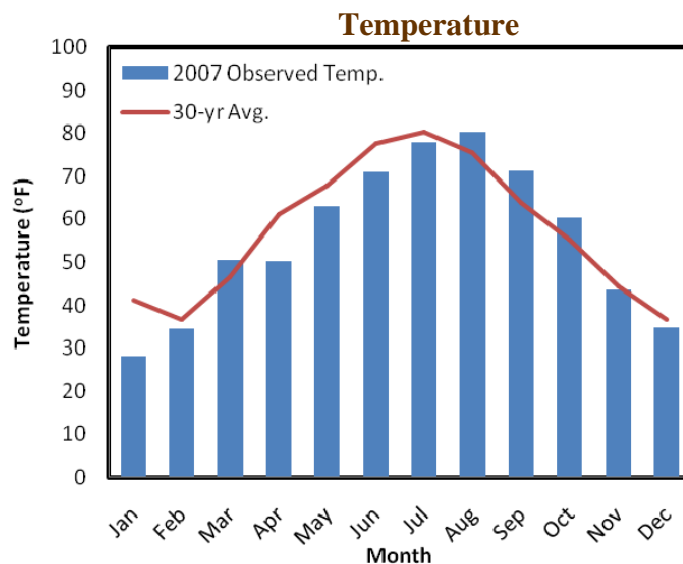
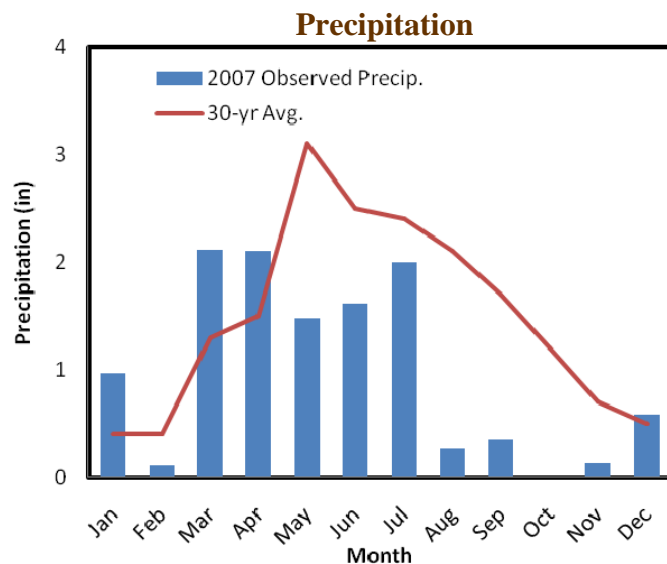
Table 10. Early-season glyphosate resistant soybean production variety trail Chickasha, OK 2007.

Variety	Company	Maturity Group	Height - in -	Shattering ¹ Score	Lodging ¹ Score	Seed/Lb	Yield ² - bu/acre -
HBK HX4843	Hornbeck Seed Co. Inc.	4.8	35	0	0	4300	37.1
HBK R4924	Hornbeck Seed Co. Inc.	4.9	34	0	0	3700	35.8
SXO 6545	Dynagro Seed UAP	4.5	31	0	0	4650	35.4
HBK R5123	Hornbeck Seed Co. Inc.	5.1	38	0	0	3100	34.1
AG 3905	Monsanto	3	29	0	0	4100	34
HBK R4527	Hornbeck Seed Co. Inc.	4.5	33	0	0	4300	33.8
HBK R4727	Hornbeck Seed Co. Inc.	4.7	31	0	0	4300	32.5
AG 3803	Monsanto	3	29	1	0	4750	31.5
DG 35D44	Dynagro Seed UAP	4.4	37	0	0	4550	29.5
DG 33Y45	Dynagro Seed UAP	4.5	30	0	0	4450	29.3
HBK R3824	Pioneer Hi-Bred Intl.Inc.	3.9	30	1	0	5000	28.8
AG 4103	Monsanto	4	27	0	0	5000	23.4

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

²Mean yield = 23.1 Bu/Acre. LSD @.05 = 7.9 Bu/acre. C.V. = 14.1 %.

2007 Goodwell Trial Data



Growing conditions throughout the year at Goodwell were good. Grain yields for the early-season tests were excellent. Average grain yield for the early-season test was 46.7 bu/ac. Grain yields for the full-season test were low at 17.6 bu/ac when combining all varieties. Plots did experience some shattering and may have contributed to the lower yields in the full-season test.

Table 11. Information on soil chemical properties and management practices for the Soybean Production Test at Goodwell, OK in 2007.

Soil Properties	Result	Cultural Practice	Information
pH	na ¹	Planting Date	5/10 and 6/6 ²
Soil Test P Index	na	Seeding Rate (seeds/ foot of row)	8
Soil Test K Index	na	Seeding Depth (in)	1.5
		Harvest Dates	10/1 and 11/15 ³
		Irrigation	As needed

¹Not available.

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

³Harvest dates for the early and full season tests, respectively.

Table 11. Early-season glyphosate resistant soybean production variety trail Goodwell, OK

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield ²
		Group		Score	Score		
			- in -				- bu/acre -
SXO 6545	Dynagro Seed UAP	4.5	32	0	1	3500	54.6
AG 4103	Monsanto	4	32	0	0	3050	53.5
AG 3905	Monsanto	3	32	0	1	3050	52.9
AG 3803	Monsanto	3	29	0	0	2950	51.7
DG 33Y45	Dynagro Seed UAP	4.5	27	0	0	3000	49.3
HBK R4727	Hornbeck Seed Co. Inc.	4.7	35	0	2	3600	48.5
DG 35D44	Dynagro Seed UAP	4.4	30	0	1	3000	45.2
HBK R4527	Hornbeck Seed Co. Inc.	4.5	38	0	2	3800	44.9
HBK R3824	Pioneer Hi-Bred Intl.Inc.	3.9	28	0	3	3550	44.2
HBK HX4843	Hornbeck Seed Co. Inc.	4.8	37	0	1	3600	42.4
HBK R4924	Hornbeck Seed Co. Inc.	4.9	37	0	1	4000	41.8
HBK R5123	Hornbeck Seed Co. Inc.	5.1	38	0	2	4750	31.8

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

²Mean yield = 46.7 Bu/Acre. LSD @.05 = 9.3 Bu/acre. C.V. =

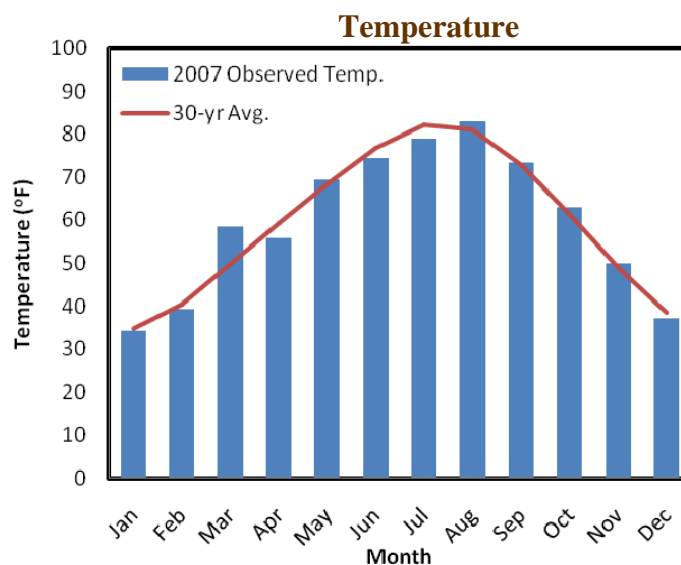
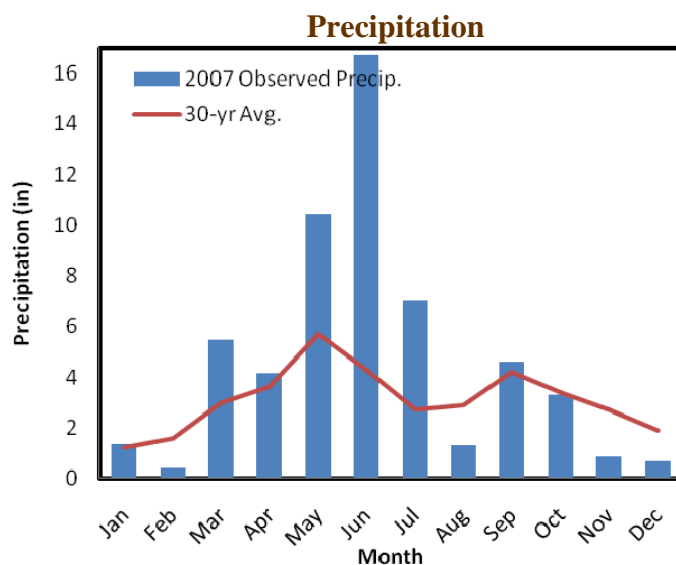
Table 12. Full-season glyphosate resistant soybean production variety trail Goodwell, OK 2007.

Variety	Company	Maturity	Height	Shattering ¹	Lodging ¹	Seed/Lb	Yield ²
		Group		Score	Score		
			- in -				- bu/acre -
DG 32R46	Dynagro Seed UAP	4.6	31	2	0		28.8
DG 36Y48	Dynagro Seed UAP	4.8	40	1	2		26.6
DG 35Z49	Dynagro Seed UAP	4.9	44	1	2		23.7
AG 4903	Monsanto	4	38	1	1		23.4
HBK R4924	Hornbeck Seed Co. Inc.	4.9	41	1	1		20.1
DG 32B57	Dynagro Seed UAP	5.7	40	1	2		19.2
DG 33C59	Dynagro Seed UAP	5.9	44	1	1		18.8
XP 531-7	NC ⁺	5.3	40	0	0		18.0
DG 36N57	Dynagro Seed UAP	5.7	40	1	1		16.6
DG 32A53	Dynagro Seed UAP	5.3	39	1	2		16.2
DG 31R54	Dynagro Seed UAP	5.4	40	1	2		15.1
HBK R5123	Hornbeck Seed Co. Inc.	5.1	43	1	2		14.3
AG 5301	Monsanto	5	41	1	1		14.2
DG 36T60	Dynagro Seed UAP	6	41	1	1		14.2
DG 37C62	Dynagro Seed UAP	6.2	42	1	1		14.1
XP 541-7	NC ⁺	5.4	38	1	1		14.0
HBK R5226	Hornbeck Seed Co. Inc.	5.2	41	1	2		13.6
HBK R5525	Hornbeck Seed Co. Inc.	5.5	43	1	2		11.9
HBK R5425	Hornbeck Seed Co. Inc.	5.4	42	1	1		10.8

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

²Mean yield = 17.6 Bu/Acre. LSD @ .05 = 8.6 Bu/Acre. C.V. = 15.7%.

2007 Stillwater Trial Data



Growing conditions for the early-season test at Stillwater were excellent. Average grain yield across all varieties was 49.0 bu/ac, which is excellent. Presence of Asian soybean rust was observed but did not impact trial results.

Table 13. Information on soil chemical properties and management practices for the Soybean Production Test at Stillwater, OK in 2007.

Soil Properties	Result	Cultural Practice	Information
pH	na	Planting Date	4/23
Soil Test P Index	na	Seeding Rate (seeds/foot of row)	8
Soil Test K Index	na	Seeding Depth (in)	1.5
		Irrigation	none
		Harvest Date	9/19
		Soil Moisture at Planting	Good

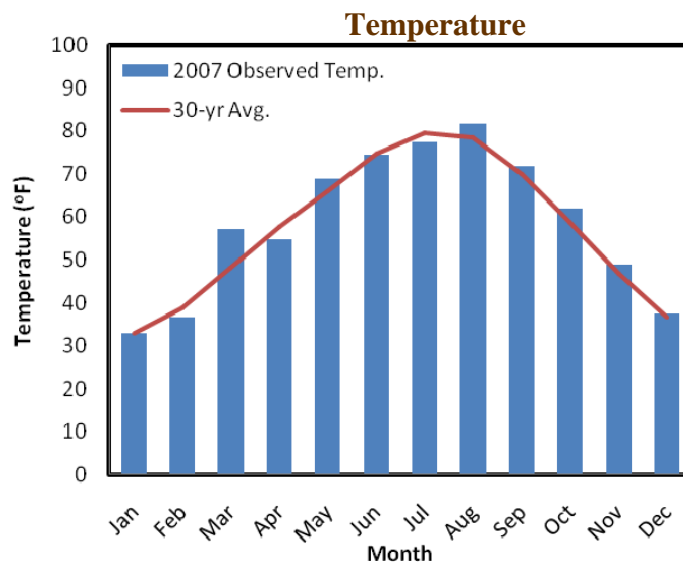
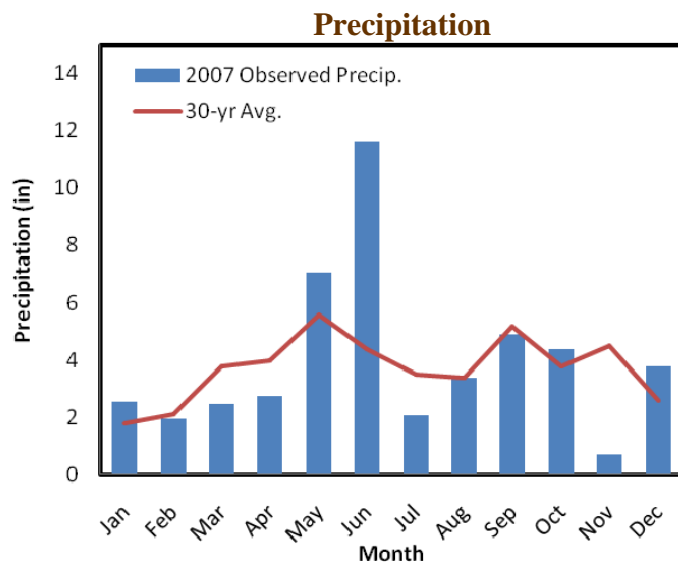
Table 14. Early-season glyphosate resistant soybean production variety trial Stillwater, OK 2007.

Variety	Company	Maturity Group	Height - in -	Shattering ¹ Score	Lodging ¹ Score	Seed/Lb	Yield ² - bu/acre -
HBK R4924	Hornbeck Seed Co. Inc.	4.9	38	0	3	2750	68.8
HBK R5123	Hornbeck Seed Co. Inc.	5.1	38	0	3	2600	68.6
HBK HX4843	Hornbeck Seed Co. Inc.	4.8	35	0	1	2700	67.1
HBK R4527	Hornbeck Seed Co. Inc.	4.5	35	0	2	3000	65.8
HBK R3824	Pioneer Hi-Bred Intl. Inc.	3.9	32	0	1	2800	55.2
HBK R4727	Hornbeck Seed Co. Inc.	4.7	36	0	2	2650	46.7
DG 35D44	Dynagro Seed UAP	4.4	27	0	0	2250	44.1
DG 33Y45	Dynagro Seed UAP	4.5	30	0	0	2750	40.2
AG 3905	Monsanto	3	30	1	0	2850	37.6
SXO 6545	Dynagro Seed UAP	4.5	33	0	0	3450	33.5
AG 4103	Monsanto	4	29	1	0	3350	30.7
AG 3803	Monsanto	3	26	1	0	2700	29.0

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

²Mean yield = 49.0 Bu/Acre. LSD @.05 = 5.8 Bu/acre. C.V. = 11 %.

2007 Miami Trial Data



Growing conditions for the full-season test at Miami were excellent considering the planting date. The test was not planted until July 9th which is a month later than recommended. This was a double-crop test planted after wheat. Average grain yield across all varieties was 26.7 bu/ac. Fungicide was applied at the R3 growth stage. Glyphosate was applied twice during the growing season and fungicide once around the R3 growth stage.

Table 15. Information on soil chemical properties and management practices for the Soybean Production Test at Miami, OK in 2007.

Soil Properties	Result	Cultural Practice	Information
pH	7.1	Planting Date	7/9
Soil Test P Index	23	Seeding Rate (seeds/foot of row)	8
Soil Test K Index	140	Seeding Depth (in)	1.5
<i>Soil test data is from 2005</i>		Irrigation	none
		Harvest Date	11/6
		Soil Moisture at Planting	Good

Table 16. Full-season glyphosate resistant soybean production variety trail Miami, OK 2007.

Variety	Company	Maturity Group	Height - in -	Shattering ¹ Score	Lodging ¹ Score	Seed/Lb	Yield ² - bu/acre -
HBK R4924	Hornbeck Seed Co. Inc.	4.9	27	0	0	3050	29.7
HBK R5425	Hornbeck Seed Co. Inc.	5.4	19	0	0	2850	29.2
DG 37C62	Dynagro Seed UAP	6.2	20	0	0	3100	28.2
DG 36T60	Dynagro Seed UAP	6	19	0	0	2900	27.7
DG 32A53	Dynagro Seed UAP	5.3	16	0	0	2800	26.8
DG 31R54	Dynagro Seed UAP	5.4	23	0	0	3400	24.2
HBK R5226	Hornbeck Seed Co. Inc.	5.2	25	0	0	2650	23.8
XP 531-7	NC ⁺	5.3	24	0	0	2700	23.8
HBK R5525	Hornbeck Seed Co. Inc.	5.5	23	0	0	2950	23.3
DG 35Z49	Dynagro Seed UAP	4.9	25	0	0	2650	23.1
AG 5301	Monsanto	5	22	0	0	3000	23.0
HBK R5123	Hornbeck Seed Co. Inc.	5.1	26	0	0	3000	22.6
DG 33C59	Dynagro Seed UAP	5.9	21	0	0	3300	19.5
DG 32B57	Dynagro Seed UAP	5.7	19	0	0	3450	19.2
DG 32R46	Dynagro Seed UAP	4.6	18	0	0	2900	19.0
XP 541-7	NC ⁺	5.4	21	0	0	3050	18.1
AG 4903	Monsanto	4	21	0	0	2900	17.3
DG 36N57	Dynagro Seed UAP	5.7	20	0	0	3100	17.1
DG 36Y48	Dynagro Seed UAP	4.8	22	0	0	2850	14.9

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

²Mean yield = 26.7 Bu/Acre. LSD @ .05 = 6.5 Bu/Acre. C.V. = 13.2 %.

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