

# 2006 Soybean Variety Performance



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#### **Information on Soybean Variety Trials**

Numerous soybean lines and varieties were evaluated in performance tests during 2006. 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 VI. Full-season test were planted during June and included varieties in MG IV, V, and VI. Glyphosate resistant tests were also conducted with one test each in the early-season and full-season plantings.

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.

#### 2006 Soybean Crop Overview

The 2006 soybean production season in Oklahoma was characterized as extremely hot and dry. For many areas in Oklahoma this past soybean growing season will go down among the driest in recorded history. Planted acreage of this year's soybean crop was measured at 310,000 acres and an estimated 260, 000 acres were harvested. Average yield at the time of this report was estimated at 19 bushels per acre. Although poor growing conditions were encountered across much of Oklahoma a few locations received timely rains to save their soybean crop. Even though 2006 was a difficult production year for soybean producers, soybean remains a good cropping choice for most areas of Oklahoma.

#### **Pest problems**

For the most part no major widespread pest problems were observed during the 2006 growing season. Threecornered alfalfa hoppers were observed in a few fields during the early part of the growing season. Plant disease was also very low during the 2006 growing season, mainly due to the dry growing conditions. Soybean rust was not detected in any of the Sentinel Plots OSU had throughout the state.

#### Methods

Test locations were near Chickasha, Haskell, Bixby, Lahoma, and Goodwell. 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 2006 Soybean Performance Tests

| Dyna-Gro Seeds<br>PO Box 577<br>Webber Falls, OK 74470                             | Telephone: 918-464-2012 |
|--|-------------------------|
| Hornbeck Seed Co., Inc.<br>PO Box 472<br>Dewitt, AR 72042                          | Telephone: 870-946-2087 |
| Delta & Pine Land Company<br>1301 E. 50th St.<br>Lubbock, TX 79404                 | Telephone: 806-740-1642 |
| Monsanto<br>102 W. Carol Ave.<br>Cortland, IL 60112                                | Telephone: 815-754-4809 |
| NK Brand Seeds<br>6711 Hare Hill Dr.<br>Arlington, IN 38002                        | Telephone: 901-382-5265 |
| Pioneer Hi-Bred Intl., Inc.<br>1616 S. Kentucky, Suite C-350<br>Amarillo, TX 79102 | Telephone: 806-356-9221 |
| University of Arkansas   |                         |
| University of Missouri   |                         |

University of Missouri

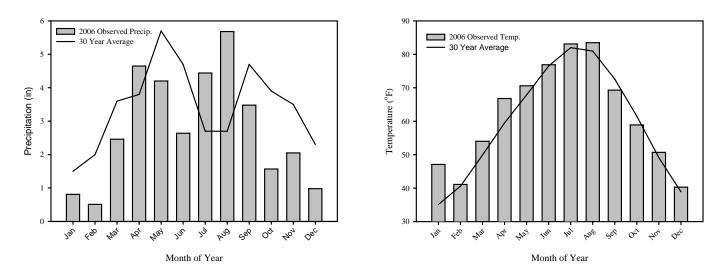


Table 1. Information on soil chemical properties and management practices for the Soybean Production Test at Bixby, OK in 2006.

| Soil Properties   | Result | Cultural Practice                | Information               |
|-------------------|--------|----------------------------------|---------------------------|
| pН                | 6.1    | Planting Date                    | 4/20 and 6/8 <sup>1</sup> |
| Soil Test P Index | 95     | Seeding Rate (seeds/foot of row) | 8                         |
| Soil Test K Index | 257    | Seeding Depth (in)               | 1.5                       |
|                   |        | Irrigation                       | none                      |
|                   |        | Soil Moisture at Planting        | Good                      |

<sup>1</sup>First planting date is for early season tests and second date is the date that the full season tests were planted.

|           |                           | Maturity | Harvest |   | Shattering     | Lodging      |               |             |  |
|-----------|---------------------------|----------|---------|---|----------------|--------------|---------------|-------------|--|
| Variety   | Company                   | Group    | Date    | Height  | Score          | Score        | Seed/Lb       | Yield       |  |
|           |                           |          |         | - in -  |                |              |               | - bu/acre - |  |
| HBK R3824 | Hornbeck Seed Co. Inc.    | 3.9      |         |   |                |              |               |             |  |
| HBK R4623 | Hornbeck Seed Co. Inc.    | 4.5      |         |   |                |              |               |             |  |
| HBK R4724 | Hornbeck Seed Co. Inc.    | 4.7      |         |   |                |              |               |             |  |
| HBK R4924 | Hornbeck Seed Co. Inc.    | 4.9      |         |   |                |              |               |             |  |
| HBK R5123 | Hornbeck Seed Co. Inc.    | 5.1      |         |   |                |              |               |             |  |
| HBK R5226 | Hornbeck Seed Co. Inc.    | 5.2      |         |   |                |              |               |             |  |
| HBK R5425 | Hornbeck Seed Co. Inc.    | 5.4      |         |   |                |              |               |             |  |
| HBK R5525 | Hornbeck Seed Co. Inc.    | 5.5      |         |   |                |              |               |             |  |
| 93M92     | Pioneer Hi-Bred Intl.Inc. | 3        |         |   |                |              |               |             |  |
| 93M95     | Pioneer Hi-Bred Intl.Inc. | 3        |         | Test was not harvested due to drought conditions. |                |              |               |             |  |
| SXO6438   | Dynagro Seed UAP          | 3.8      |         |   |                |              |               |             |  |
| SXO6842   | Dynagro Seed UAP          | 4.2      |         | Test was no                                       | i nai vesteu u | ue to urougi | in conditions |             |  |
| 37A44     | Dynagro Seed UAP          | 4.5      |         |   |                |              |               |             |  |
| DG3463NRR | Dynagro Seed UAP          | 4.6      |         |   |                |              |               |             |  |
| SXO6646   | Dynagro Seed UAP          | 4.6      |         |   |                |              |               |             |  |
| 31A48     | Dynagro Seed UAP          | 4.8      |         |   |                |              |               |             |  |
| 36Y48     | Dynagro Seed UAP          | 4.8      |         |   |                |              |               |             |  |
| 35Z49     | Dynagro Seed UAP          | 4.9      |         |   |                |              |               |             |  |
| DKB40-51  | Monsanto                  | 4        |         |   |                |              |               |             |  |
| AG4103    | Monsanto                  | 4        |         |   |                |              |               |             |  |
| AG4403    | Monsanto                  | 4        |         |   |                |              |               |             |  |
| AG4404    | Monsanto                  | 4        |         |   |                |              |               |             |  |

Table 2. Early Season Roundup Ready Soybean Production Bixby, OK 2006.

Table 3. Full Season Group IV Soybean Production Bixby, OK 2006.

|         |                        | Harvest |        | Shattering <sup>1</sup> | Lodging <sup>1</sup> |         |                    |
|---------|------------------------|---------|--------|-------------------------|----------------------|---------|--------------------|
| Variety | Company                | Date    | Height | Score                   | Score                | Seed/Lb | Yield <sup>2</sup> |
|         |                        |         | - in - |                         |                      |         | - bu/acre -        |
| UA 4805 | University of Arkansas | 30-Oct  | 14     | 0                       | 0                    | 3050    | 24.1               |
| S49-Q9  | NK Brand Seeds         | 30-Oct  | 20     | 1                       | 0                    | 2850    | 22.4               |
| S43-B1  | NK Brand Seeds         | 30-Oct  | 18     | 0                       | 0                    | 2750    | 20.3               |
| S41-M5  | NK Brand Seeds         | 30-Oct  | 15     | 0                       | 0                    | 2800    | 14.9               |

 $^{1}0$  = no shattering or lodging, 5 = very severe shattering or lodging.

<sup>2</sup>Mean yield =21.8 Bu/acre. LSD @ .05 =2.3 Bu/acre. C.V. =5.9 %.

Table 4. Full Season Group V Soybean Production Bixby, OK 2006.

|          |                        | Harvest |        | Shattering <sup>1</sup> | Lodging <sup>1</sup> |         |                    |
|----------|------------------------|---------|--------|-------------------------|----------------------|---------|--------------------|
| Variety  | Company                | Date    | Height | Score                   | Score                | Seed/Lb | Yield <sup>2</sup> |
|          |                        |         | - in - |                         |                      |         | - bu/acre -        |
| Ozark    | University of Arkansas | 9-Nov   | 23     | 0                       | 0                    | 2600    | 30.7               |
| S53-A1   | NK Brand Seeds         | 9-Nov   | 26     | 0                       | 0                    | 2450    | 26.2               |
| S57-P1   | NK Brand Seeds         | 9-Nov   | 24     | 0                       | 0                    | 2550    | 26.2               |
| Stoddard | University of Missouri | 9-Nov   | 18     | 0                       | 0                    | 2500    | 19.3               |
| Jake     | University of Missouri | 9-Nov   | 18     | 0                       | 0                    | 2400    | 18.4               |

 $^{1}0$  = no shattering or lodging, 5 = very severe shattering or lodging.

<sup>2</sup>Mean yield =23.2 Bu/acre. LSD @ .05 =3.4 Bu/acre. C.V. =8.5 %.

|           |                           | Maturity | Harvest |        | Shattering <sup>1</sup> | Lodging <sup>1</sup> |         |                    |
|-----------|---------------------------|----------|---------|--------|-------------------------|----------------------|---------|--------------------|
| Variety   | Company                   | Group    | Date    | Height | Score                   | Score                | Seed/Lb | Yield <sup>2</sup> |
|           |                           |          |         | - in - |                         |                      |         | - bu/acre -        |
| DG3583RR  | Dynagro Seed UAP          | 5.8      | 9-Nov   | 24     | 0                       | 0                    | 2500    | 37.0               |
| DG3535NRR | Dynagro Seed UAP          | 5.3      | 9-Nov   | 28     | 0                       | 0                    | 2800    | 34.0               |
| DP5915    | Delta&Pine Land Co.       | 5.9      | 9-Nov   | 25     | 0                       | 0                    | 2750    | 32.4               |
| 36N57     | Dynagro Seed UAP          | 5.7      | 9-Nov   | 25     | 0                       | 0                    | 2550    | 31.3               |
| 38K57     | Dynagro Seed UAP          | 5.7      | 9-Nov   | 25     | 0                       | 0                    | 2650    | 31.1               |
| 33B52     | Dynagro Seed UAP          | 5.2      | 9-Nov   | 24     | 0                       | 0                    | 2550    | 29.6               |
| AG5605    | Monsanto                  | 5        | 9-Nov   | 19     | 0                       | 0                    | 3050    | 29.3               |
| AG4903    | Monsanto                  | 4        | 9-Nov   | 25     | 0                       | 0                    | 2250    | 29.1               |
| 37C62     | Dynagro Seed UAP          | 6.1      | 9-Nov   | 22     | 0                       | 0                    | 2800    | 28.4               |
| 33X55     | Dynagro Seed UAP          | 5.5      | 9-Nov   | 27     | 0                       | 0                    | 2650    | 28.0               |
| DP5808RR  | Delta&Pine Land Co.       | 5.8      | 9-Nov   | 24     | 0                       | 0                    | 3100    | 27.1               |
| AG5301    | Monsanto                  | 5        | 9-Nov   | 23     | 0                       | 0                    | 2250    | 27.0               |
| 95M80     | Pioneer Hi-Bred Intl. Inc | 5        | 9-Nov   | 27     | 0                       | 0                    | 2400    | 25.5               |
| DG3600NRR | Dynagro Seed UAP          | 6        | 9-Nov   | 24     | 0                       | 0                    | 2500    | 23.6               |
| DP5634RR  | Delta&Pine Land Co.       | 5.6      | 9-Nov   | 26     | 0                       | 0                    | 2700    | 23.2               |
| DKB46-51  | Monsanto                  | 4        | 9-Nov   | 23     | 0                       | 0                    | 2100    | 22.6               |
| AG4703    | Monsanto                  | 4        | 9-Nov   | 16     | 0                       | 0                    | 2600    | 22.6               |
| 95M82     | Pioneer Hi-Bred Intl. Inc | 5        | 9-Nov   | 27     | 0                       | 0                    | 2600    | 22.4               |
| AG5501    | Monsanto                  | 5        | 9-Nov   | 22     | 0                       | 0                    | 2600    | 20.0               |
| SXO5352   | Dynagro Seed UAP          | 5.2      | 9-Nov   | 23     | 0                       | 0                    | 2350    | 18.3               |

Table 5. Full Season Roundup Ready Soybean Production Bixby, OK 2006.

 $^{1}0 =$  no shattering or lodging, 5 = very severe shattering or lodging.

<sup>2</sup>Mean yield =27.1 Bu/acre. LSD @ .05 =4.7 Bu/acre. C.V. =10.4 %.

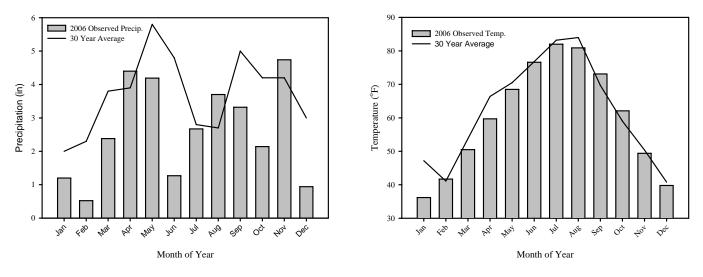


Table 6. Information on soil chemical properties and management practices for the Soybean Production Test at Haskell, OK in 2006.

| Soil Properties   | Result | Cultural Practice                | Information        |
|-------------------|--------|----------------------------------|--------------------|
| pН                | 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               |
|                   |        | Soil Moisture at Planting        | Good               |

<sup>1</sup>First planting date is for early season tests and second date is the date that the full season tests were planted.

| Table 7. Early Season Roundup Ready Soybean Production Haskell, OK | 2006. |
|--|-------|
|--|-------|

|           |                        | Maturity | Harvest |        | Shattering <sup>1</sup> | Lodging <sup>1</sup> |         |                    |
|-----------|------------------------|----------|---------|--------|-------------------------|----------------------|---------|--------------------|
| Variety   | Company                | Group    | Date    | Height | Score                   | Score                | Seed/Lb | Yield <sup>2</sup> |
|           |                        |          |         | - in - |                         |                      |         | - bu/acre -        |
| HBK R5123 | Hornbeck Seed Co. Inc. | 5.1      | 20-Oct  | 27     | 0                       | 0                    | 2900    | 26.2               |
| HBK R5226 | Hornbeck Seed Co. Inc. | 5.2      | 20-Oct  | 17     | 1                       | 0                    | 2800    | 22.5               |
| HBK R5525 | Hornbeck Seed Co. Inc. | 5.5      | 20-Oct  | 14     | 1                       | 0                    | 2750    | 21.8               |
| 35Z49     | Dynagro Seed UAP       | 4.9      | 20-Oct  | 28     | 0                       | 0                    | 2750    | 20.4               |
| HBK R4924 | Hornbeck Seed Co. Inc. | 4.9      | 20-Oct  | 27     | 0                       | 0                    | 2850    | 17.5               |
| HBK R5425 | Hornbeck Seed Co. Inc. | 5.4      | 20-Oct  | 21     | 0                       | 0                    | 2650    | 17.5               |
| SXO6842   | Dynagro Seed UAP       | 4.2      | 20-Oct  | 13     | 1                       | 0                    | 2950    | 17.5               |
| 31A48     | Dynagro Seed UAP       | 4.8      | 15-Sep  | 20     | 0                       | 0                    | 2950    | 15.1               |
| SXO6438   | Dynagro Seed UAP       | 3.8      | 20-Oct  | 16     | 2                       | 0                    | 2900    | 14                 |
| 36Y48     | Dynagro Seed UAP       | 4.8      | 15-Sep  | 25     | 0                       | 0                    | 3200    | 12.8               |
| HBK R4623 | Hornbeck Seed Co. Inc. | 4.5      | 15-Sep  | 22     | 1                       | 0                    | 3100    | 12.4               |
| HBK R4724 | Hornbeck Seed Co. Inc. | 4.7      | 20-Oct  | 26     | 2                       | 0                    | 2950    | 11.5               |
| HBK R3824 | Hornbeck Seed Co. Inc. | 3.9      | 20-Oct  | 25     | 2                       | 0                    | 3250    | 10.2               |
| DG3463NRR | Dynagro Seed UAP       | 4.6      | 15-Sep  | 23     | 1                       | 0                    | 3700    | 9.2                |
| 93M92     | Pioneer Hi-Bred        | 3        | 15-Sep  | 18     | 2                       | 0                    | 3050    | 8.9                |
| AG4103    | Monsanto               | 4        | 15-Sep  | 19     | 2                       | 0                    | 3500    | 8.3                |
| 93M95     | Pioneer Hi-Bred        | 3        | 15-Sep  | 17     | 2                       | 0                    | 3600    | 7.7                |
| 37A44     | Dynagro Seed UAP       | 4.5      | 15-Sep  | 21     | 1                       | 0                    | 3400    | 7.7                |
| DKB40-51  | Monsanto               | 4        | 15-Sep  | 21     | 1                       | 0                    | 3500    | 7.7                |
| AG4404    | Monsanto               | 4        | 15-Sep  | 23     | 2                       | 0                    | 3600    | 7.6                |
| AG4403    | Monsanto               | 4        | 15-Sep  | 19     | 1                       | 0                    | 3450    | 7.1                |
| SXO6646   | Dynagro Seed UAP       | 4.6      | 15-Sep  | 18     | 0                       | 0                    | 2850    | 6.3                |

 $^{1}0$  = no shattering or lodging, 5 = very severe shattering or lodging.

<sup>2</sup>Mean yield =13.2 Bu/acre. LSD @ .05 =2.2 Bu/acre. C.V. =10.0 %.

|         |                        | Harvest |        | Shattering <sup>1</sup> | Lodging <sup>1</sup> |         |                    |
|---------|------------------------|---------|--------|-------------------------|----------------------|---------|--------------------|
| Variety | Company                | Date    | Height | Score                   | Score                | Seed/Lb | Yield <sup>2</sup> |
|         |                        |         | - in - |                         |                      |         | - bu/acre -        |
| UA 4805 | University of Arkansas | 20-Oct  | 17     | 0                       | 0                    | 2950    | 20.8               |
| S49-Q9  | NK Brand Seeds         | 20-Oct  | 25     | 0                       | 0                    | 3200    | 19.7               |
| S41-M5  | NK Brand Seeds         | 20-Oct  | 16     | 0                       | 0                    | 3600    | 16.7               |
| S43-B1  | NK Brand Seeds         | 20-Oct  | 19     | 0                       | 0                    | 3150    | 13.8               |

Table 8. Full Season Group IV Soybean Production Haskell, OK 2006.

 $^{1}0$  = no shattering or lodging, 5 = very severe shattering or lodging.

<sup>2</sup>Mean yield =19.4 Bu/acre. LSD @ .05 =3.3 Bu/acre. C.V. =9.6 %.

Table 9. Full Season Group V Soybean Production Haskell, OK 2006.

|          |                        | Harvest |        | Shattering <sup>1</sup> | Lodging <sup>1</sup> |         |                    |
|----------|------------------------|---------|--------|-------------------------|----------------------|---------|--------------------|
| Variety  | Company                | Date    | Height | Score                   | Score                | Seed/Lb | Yield <sup>2</sup> |
|          |                        |         | - in - |                         |                      |         | - bu/acre -        |
| Ozark    | University of Arkansas | 14-Nov  | 22     | 1                       | 0                    | 2600    | 23.6               |
| S53-A1   | NK Brand Seeds         | 14-Nov  | 24     | 1                       | 0                    | 2250    | 20.7               |
| Jake     | University of Missouri | 14-Nov  | 21     | 1                       | 0                    | 2600    | 18.3               |
| Stoddard | University of Missouri | 14-Nov  | 20     | 1                       | 0                    | 2500    | 18.2               |
| S57-P1   | NK Brand Seeds         | 14-Nov  | 22     | 0                       | 0                    | 2400    | 14.4               |

 $^{1}0$  = no shattering or lodging, 5 = very severe shattering or lodging.

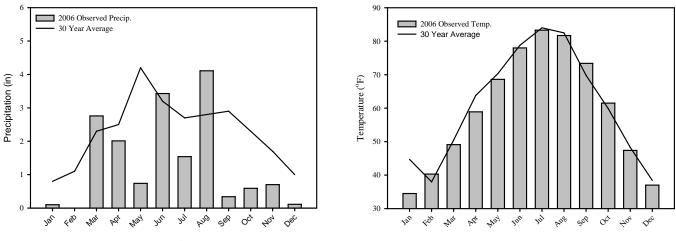
<sup>2</sup>Mean yield =19.6 Bu/acre. LSD @ .05 =3.1 Bu/acre. C.V. =9.2 %.

|           |                       | Maturity | Harvest |        | Shattering <sup>1</sup> | Lodging <sup>1</sup> |         |                    |
|-----------|-----------------------|----------|---------|--------|-------------------------|----------------------|---------|--------------------|
| Variety   | Company               | Group    | Date    | Height | Score                   | Score                | Seed/Lb | Yield <sup>2</sup> |
|           |                       |          |         | - in - |                         |                      |         | - bu/acre -        |
| AG5605    | Monsanto              | 5        | 14-Nov  | 23     | 1                       | 0                    | 2900    | 26.4               |
| 36N57     | Dynagro Seed UAP      | 5.7      | 14-Nov  | 27     | 0                       | 0                    | 2350    | 22.9               |
| DG3583RR  | Dynagro Seed UAP      | 5.8      | 14-Nov  | 28     | 0                       | 0                    | 2650    | 22.8               |
| DP5808RR  | Delta&Pine Land Co.   | 5.8      | 14-Nov  | 30     | 0                       | 0                    | 2950    | 22.7               |
| DP5915    | Delta&Pine Land Co.   | 5.9      | 14-Nov  | 26     | 0                       | 0                    | 2800    | 22.2               |
| 95M82     | Pioneer Hi-Bred Intl. | 5        | 14-Nov  | 28     | 1                       | 0                    | 2700    | 22                 |
| AG5301    | Monsanto              | 5        | 14-Nov  | 26     | 0                       | 0                    | 2650    | 21.9               |
| AG4903    | Monsanto              | 4        | 14-Nov  | 23     | 0                       | 0                    | 2650    | 21.7               |
| AG4703    | Monsanto              | 4        | 14-Nov  | 20     | 0                       | 0                    | 3050    | 21.6               |
| DKB46-51  | Monsanto              | 4        | 14-Nov  | 26     | 0                       | 0                    | 2600    | 21.5               |
| 33B52     | Dynagro Seed UAP      | 5.2      | 14-Nov  | 25     | 0                       | 0                    | 2450    | 19.9               |
| 38K57     | Dynagro Seed UAP      | 5.7      | 14-Nov  | 29     | 0                       | 0                    | 2750    | 19.3               |
| 95M80     | Pioneer Hi-Bred Intl. | 5        | 14-Nov  | 25     | 0                       | 0                    | 2650    | 17.8               |
| AG5501    | Monsanto              | 5        | 14-Nov  | 26     | 1                       | 0                    | 2600    | 17.4               |
| SXO5352   | Dynagro Seed UAP      | 5.2      | 14-Nov  | 24     | 0                       | 0                    | 2350    | 16.7               |
| DG3535NRR | Dynagro Seed UAP      | 5.3      | 14-Nov  | 28     | 0                       | 0                    | 2600    | 16.4               |
| 33X55     | Dynagro Seed UAP      | 5.5      | 14-Nov  | 27     | 0                       | 0                    | 2500    | 16.3               |
| 37C62     | Dynagro Seed UAP      | 6.1      | 14-Nov  | 25     | 0                       | 0                    | 2700    | 16.1               |
| DP5634RR  | Delta&Pine Land Co.   | 5.6      | 14-Nov  | 26     | 0                       | 0                    | 2550    | 15.2               |
| DG3600NRR | Dynagro Seed UAP      | 6        | 14-Nov  | 29     | 0                       | 0                    | 2650    | 10.9               |

Table 10. Full Season Roundup Ready Soybean Production Haskell, OK 2006.

 $^{1}$  0 = no shattering or lodging, 5 = very severe shattering or lodging.

<sup>2</sup> Mean yield =19.6 Bu/acre. LSD @ .05 =3.7 Bu/acre. C.V. =11.5 %.



Month of Year

Month of Year

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Table 11. Information on soil chemical properties and management practices for the Soybean Production Test at Lahoma, OK in 2006.

| Soil Properties   | Result          | Cultural Practice                | Information        |
|-------------------|-----------------|----------------------------------|--------------------|
| pН                | na <sup>1</sup> | Planting Date                    | $4/21$ and $6/5^2$ |
| Soil Test P Index | na              | Seeding Rate (seeds/foot of row) | 8                  |
| Soil Test K Index | na              | Seeding Depth (in)               | 1.5                |
|                   |                 | Irrigation                       | none               |
|                   |                 | Soil Moisture at Planting        | Very Dry           |

<sup>1</sup>Not available.

 $^{2}$ First planting date is for early season tests and second date is the date that the full season tests were planted.

|           |                          | Maturity | Harvest |        | Shattering <sup>1</sup> | Lodging <sup>1</sup> |         |                    |
|-----------|--------------------------|----------|---------|--------|-------------------------|----------------------|---------|--------------------|
| Variety   | Company                  | Group    | Date    | Height | Score                   | Score                | Seed/Lb | Yield <sup>2</sup> |
|           |                          |          |         | - in - |                         |                      |         | - bu/acre -        |
| DKB40-51  | Monsanto                 | 4        | 2-Oct   | 23     | 0                       | 0                    | 2750    | 16.6               |
| SXO6842   | Dynagro Seed UAP         | 4.2      | 2-Oct   | 28     | 0                       | 0                    | 2950    | 14.8               |
| HBK R5525 | Hornbeck Seed Co. Inc.   | 5.5      | 2-Oct   | 22     | 0                       | 0                    | 2850    | 14.4               |
| AG4403    | Monsanto                 | 4        | 2-Oct   | 24     | 0                       | 0                    | 3150    | 13.5               |
| 37A44     | Dynagro Seed UAP         | 4.5      | 2-Oct   | 23     | 0                       | 0                    | 3100    | 13                 |
| AG4103    | Monsanto                 | 4        | 2-Oct   | 22     | 0                       | 0                    | 2750    | 12.6               |
| HBK R4924 | Hornbeck Seed Co. Inc.   | 4.9      | 2-Oct   | 26     | 1                       | 0                    | 2700    | 12.4               |
| HBK R5123 | Hornbeck Seed Co. Inc.   | 5.1      | 2-Oct   | 29     | 0                       | 0                    | 3050    | 12.2               |
| HBK R5226 | Hornbeck Seed Co. Inc.   | 5.2      | 2-Oct   | 21     | 0                       | 0                    | 2900    | 12.2               |
| HBK R5425 | Hornbeck Seed Co. Inc.   | 5.4      | 2-Oct   | 29     | 0                       | 0                    | 2750    | 11.8               |
| 31A48     | Dynagro Seed UAP         | 4.8      | 2-Oct   | 21     | 0                       | 0                    | 2800    | 11.7               |
| HBK R3824 | Hornbeck Seed Co. Inc.   | 3.9      | 2-Oct   | 21     | 0                       | 0                    | 2550    | 11.5               |
| DG3463NRR | Dynagro Seed UAP         | 4.6      | 2-Oct   | 28     | 0                       | 0                    | 3150    | 11.2               |
| 36Y48     | Dynagro Seed UAP         | 4.8      | 2-Oct   | 23     | 0                       | 0                    | 3200    | 10.9               |
| SXO6438   | Dynagro Seed UAP         | 3.8      | 2-Oct   | 23     | 0                       | 0                    | 2700    | 10.4               |
| 35Z49     | Dynagro Seed UAP         | 4.9      | 2-Oct   | 29     | 0                       | 0                    | 2600    | 10.1               |
| SXO6646   | Dynagro Seed UAP         | 4.6      | 2-Oct   | 21     | 0                       | 0                    | 3150    | 10                 |
| HBK R4623 | Hornbeck Seed Co. Inc.   | 4.5      | 2-Oct   | 21     | 0                       | 0                    | 2900    | 9.9                |
| 93M92     | Pioneer Hi-Bred Intl.Inc | 3        | 2-Oct   | 18     | 0                       | 0                    | 2700    | 8.3                |
| AG4404    | Monsanto                 | 4        | 2-Oct   | 24     | 0                       | 0                    | 2550    | 8                  |
| 93M95     | Pioneer Hi-Bred Intl.Inc | 3        | 2-Oct   | 23     | 2                       | 0                    | 3250    | 6.7                |
| HBK R4724 | Hornbeck Seed Co. Inc.   | 4.7      | 24-Oct  | 24     | 0                       | 0                    | 2650    | 6.5                |

 $^{2}$ Mean yield =11.3 Bu/acre. LSD @ .05 =2.7 Bu/acre. C.V. =14.4 %.

Table 13. Full Season Group IV Soybean Production Lahoma, OK 2006.

|         |                        | Harvest |        | Shattering <sup>1</sup> | Lodging <sup>1</sup> |         |                    |
|---------|------------------------|---------|--------|-------------------------|----------------------|---------|--------------------|
| Variety | Company                | Date    | Height | Score                   | Score                | Seed/Lb | Yield <sup>2</sup> |
|         |                        |         | - in - |                         |                      |         | - bu/acre -        |
| UA 4805 | University of Arkansas | 27-Oct  | 17     | 1                       | 0                    | 4150    | 24.8               |
| S43-B1  | NK Brand Seeds         | 27-Oct  | 18     | 2                       | 0                    | 3700    | 18.9               |
| S41-M5  | NK Brand Seeds         | 27-Oct  | 12     | 2                       | 0                    | 3600    | 16.1               |
| S49-Q9  | NK Brand Seeds         | 27-Oct  | 22     | 0                       | 0                    | 4150    | 13.5               |

 $^{1}0$  = no shattering or lodging, 5 = very severe shattering or lodging.

<sup>2</sup>Mean yield =21.2 Bu/acre. LSD @ .05 =4.6 Bu/acre. C.V. =12.4 %.

Table 14. Full Season Group V Soybean Production Lahoma, OK 2006.

|          |                        | Harvest |        | Shattering <sup>1</sup> | Lodging <sup>1</sup> |         |                    |
|----------|------------------------|---------|--------|-------------------------|----------------------|---------|--------------------|
| Variety  | Company                | Date    | Height | Score                   | Score                | Seed/Lb | Yield <sup>2</sup> |
|          |                        |         | - in - |                         |                      |         | - bu/acre -        |
| S57-P1   | NK Brand Seeds         | 27-Oct  | 20     | 0                       | 0                    | 3300    | 18.2               |
| S53-A1   | NK Brand Seeds         | 27-Oct  | 16     | 1                       | 0                    | 3250    | 17.4               |
| Jake     | University of Missouri | 27-Oct  | 14     | 0                       | 0                    | 3150    | 15.7               |
| Ozark    | University of Arkansas | 27-Oct  | 15     | 1                       | 0                    | 3150    | 14.9               |
| Stoddard | University of Missouri | 27-Oct  | 16     | 1                       | 0                    | 3400    | 14.5               |

 $^{1}0$  = no shattering or lodging, 5 = very severe shattering or lodging.

<sup>2</sup>Mean yield =15.5 Bu/acre. LSD @ .05 =3.5 Bu/acre. C.V. =13.3 %.

|           |                           | Maturity | Harvest |        | Shattering <sup>1</sup> | Lodging <sup>1</sup> |         |                    |
|-----------|---------------------------|----------|---------|--------|-------------------------|----------------------|---------|--------------------|
| Variety   | Company                   | Group    | Date    | Height | Score                   | Score                | Seed/Lb | Yield <sup>2</sup> |
|           |                           |          |         | - in - |                         |                      |         | - bu/acre -        |
| AG5605    | Monsanto                  | 5        | 27-Oct  | 27     | 0                       | 0                    | 4100    | 34.2               |
| 36N57     | Dynagro Seed UAP          | 5.7      | 27-Oct  | 22     | 0                       | 0                    | 3500    | 29.8               |
| 95M80     | Pioneer Hi-Bred Intl. Inc | 5        | 27-Oct  | 25     | 0                       | 0                    | 3600    | 29.3               |
| AG4903    | Monsanto                  | 4        | 27-Oct  | 18     | 0                       | 0                    | 3050    | 29.1               |
| DP5808RR  | Delta&Pine Land Co.       | 5.8      | 27-Oct  | 29     | 0                       | 0                    | 4000    | 29                 |
| DG3583RR  | Dynagro Seed UAP          | 5.8      | 27-Oct  | 28     | 0                       | 0                    | 3700    | 28.6               |
| AG5501    | Monsanto                  | 5        | 27-Oct  | 26     | 0                       | 0                    | 3800    | 27.8               |
| AG4703    | Monsanto                  | 4        | 27-Oct  | 24     | 1                       | 0                    | 3200    | 26.9               |
| DG3600NRR | Dynagro Seed UAP          | 6        | 27-Oct  | 26     | 0                       | 0                    | 3650    | 26.4               |
| DP5915    | Delta&Pine Land Co.       | 5.9      | 27-Oct  | 29     | 0                       | 0                    | 3800    | 26.4               |
| 33B52     | Dynagro Seed UAP          | 5.2      | 27-Oct  | 17     | 0                       | 0                    | 3200    | 25.3               |
| DKB46-51  | Monsanto                  | 4        | 27-Oct  | 28     | 0                       | 0                    | 2850    | 24.8               |
| 95M82     | Pioneer Hi-Bred Intl. Inc | 5        | 27-Oct  | 20     | 0                       | 0                    | 3400    | 24.4               |
| SXO5352   | Dynagro Seed UAP          | 5.2      | 27-Oct  | 21     | 0                       | 0                    | 2900    | 23.8               |
| 37C62     | Dynagro Seed UAP          | 6.1      | 27-Oct  | 26     | 0                       | 0                    | 3600    | 22.7               |
| DP5634RR  | Delta&Pine Land Co.       | 5.6      | 27-Oct  | 25     | 0                       | 0                    | 3200    | 21.8               |
| 33X55     | Dynagro Seed UAP          | 5.5      | 27-Oct  | 18     | 0                       | 0                    | 3100    | 20.6               |
| DG3535NRR | Dynagro Seed UAP          | 5.3      | 27-Oct  | 20     | 0                       | 0                    | 3600    | 20.4               |
| AG5301    | Monsanto                  | 5        | 27-Oct  | 27     | 0                       | 0                    | 3700    | 19.7               |
| 38K57     | Dynagro Seed UAP          | 5.7      | 27-Oct  | 29     | 0                       | 0                    | 3600    | 18.2               |

Table 15. Full Season Roundup Ready Soybean Production Lahoma, OK 2006.

 $^{1}0$  = no shattering or lodging, 5 = very severe shattering or lodging.

<sup>2</sup>Mean yield =25.5 Bu/acre. LSD @ .05 =4.7 Bu/acre. C.V. =11.2 %.

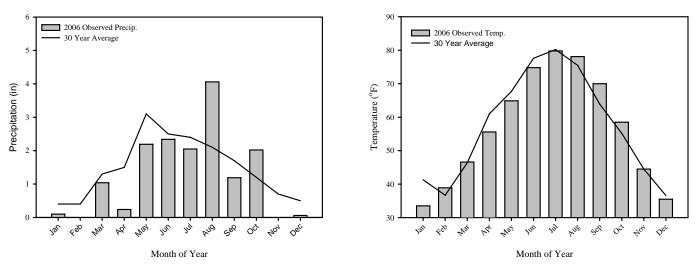


Table 16. Information on soil chemical properties and management practices for the Soybean Production Test at Goodwell, OK in 2006.

| Soil Properties   | Result          | Cultural Practice                | Information  |
|-------------------|-----------------|----------------------------------|--------------|
| pН                | na <sup>1</sup> | Planting Date                    | June 7, 2006 |
| Soil Test P Index | na              | Seeding Rate (seeds/foot of row) | 8            |
| Soil Test K Index | na              | Seeding Depth (in)               | 1.5          |
|                   |                 | Irrigation                       | As needed    |

<sup>1</sup>Not available.

#### Notes:

• Early season roundup ready test was not harvested due to hail storm received in early June.

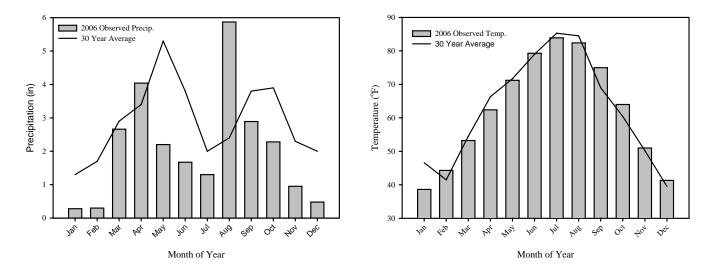
|           |                       | Maturity | Harvest |        | Shattering <sup>1</sup> | Lodging <sup>1</sup> |         | _                  |
|-----------|-----------------------|----------|---------|--------|-------------------------|----------------------|---------|--------------------|
| Variety   | Company               | Group    | Date    | Height | Score                   | Score                | Seed/Lb | Yield <sup>2</sup> |
|           |                       |          |         | - in - |                         |                      |         | - bu/acre -        |
| AG4703    | Monsanto              | 4        | 6-Oct   | 31     | 0                       | 0                    | 3100    | 51.7               |
| AG4903    | Monsanto              | 4        | 6-Oct   | 27     | 0                       | 0                    | 2950    | 48.5               |
| DKB46-51  | Monsanto              | 4        | 6-Oct   | 36     | 0                       | 0                    | 2950    | 45.9               |
| 33B52     | Dynagro Seed UAP      | 5.2      | 6-Oct   | 36     | 0                       | 0                    | 3650    | 42.6               |
| AG5301    | Monsanto              | 5        | 6-Oct   | 31     | 0                       | 0                    | 3900    | 42.6               |
| AG5605    | Monsanto              | 5        | 6-Oct   | 37     | 0                       | 1                    | 3750    | 41.1               |
| DP5808RR  | Delta&Pine Land Co.   | 5.8      | 6-Oct   | 44     | 0                       | 3                    | 4050    | 40.8               |
| DG3583RR  | Dynagro Seed UAP      | 5.8      | 6-Oct   | 34     | 0                       | 0                    | 3850    | 39.4               |
| DG3535NRR | Dynagro Seed UAP      | 5.3      | 6-Oct   | 35     | 0                       | 1                    | 3950    | 39.3               |
| 95M80     | Pioneer Hi-Bred Intl. | 5        | 6-Oct   | 35     | 0                       | 0                    | 3450    | 38.4               |
| AG5501    | Monsanto              | 5        | 6-Oct   | 36     | 0                       | 0                    | 3700    | 38                 |
| 95M82     | Pioneer Hi-Bred Intl. | 5        | 6-Oct   | 35     | 0                       | 0                    | 4050    | 36.6               |
| 38K57     | Dynagro Seed UAP      | 5.7      | 6-Oct   | 35     | 0                       | 2                    | 4100    | 35.8               |
| DP5634RR  | Delta&Pine Land Co.   | 5.6      | 6-Oct   | 33     | 0                       | 0                    | 3500    | 35                 |
| DP5915    | Delta&Pine Land Co.   | 5.9      | 6-Oct   | 37     | 0                       | 1                    | 3700    | 32.6               |
| 37C62     | Dynagro Seed UAP      | 6.1      | 6-Oct   | 39     | 0                       | 0                    | 4250    | 30.9               |
| 36N57     | Dynagro Seed UAP      | 5.7      | 6-Oct   | 33     | 0                       | 0                    | 4150    | 29.5               |
| 33X55     | Dynagro Seed UAP      | 5.5      | 6-Oct   | 38     | 0                       | 0                    | 3600    | 28.7               |
| SXO5352   | Dynagro Seed UAP      | 5.2      | 6-Oct   | 43     | 0                       | 1                    | 3350    | 28.3               |
| DG3600NRR | Dynagro Seed UAP      | 6        | 6-Oct   | 39     | 0                       | 1                    | 3550    | 27                 |

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

<sup>2</sup>Mean yield =37.6 Bu/acre. LSD @ .05 =5.7 Bu/acre. C.V. =9.2 %.

Chickasha Precipitation

Chickasha Temperature



Notes:

Soybean tests were not harvest at Chickasha in 2006 due to drought conditions and very dry soil
moisture conditions at planting time for the full season tests. Early season test germinated and a
good stand was obtained but below normal precipitation in May, June, and July put plants under severe moisture stress. For full season tests lack of soil moisture at seeding in the seeding zone prevented germination.

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