

# 2011-2012 Winter Canola Performance Trials

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### Production season

The 2011-2012 canola production season in Oklahoma was good to excellent. Most parts of the state received adequate rainfall to produce an average to above average yields. In the spring we experienced several storms that did cause some lodging but most fields were harvested with little yield loss as a result from the lodging. The lodging was more a result from excessive winter and early spring growth due to ideal growing conditions.

The 2011-2012 winter we experienced was mild and very little winter kill was observed as long as the planting date was within the recommended timeframe. As long as the planting date recommendations are followed winter kill appears to not be a problem for most areas in Oklahoma when using recommended varieties/hybrids for Oklahoma.

### Pest problems

Overall, pest problems were average in 2011-2012. Aphid pressure varied from region to region as usual. In the drier areas pest pressure tended to be greater. Some disease pressure was observed throughout the spring but did not appear to result in any yield loss.

### 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 500 lb/acre higher in yield than variety Y, then this difference is statistically significant if the LSD is 500 or less. If the LSD is 501 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. Generally, a CV less than 15 for canola trials is considered good. This is an indication that less error was observed in the plots.

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 forage legume varieties are affected by crop management and by environmental factors including soil type, winter conditions, soil moisture conditions, diseases, and insects.

### Methods

Test locations were near Burlington, El Reno, Ft. Cobb, Lahoma, Lamont, Kingfisher, Goodwell, and Stillwater. The location at Kingfisher was lost due to environmental conditions. Data from Goodwell is not reported due to a CV above 30%.

Plots were 4 ft wide by 25 feet long and seeded at a rate of 5 lb/ac. Soil characteristics and fertilizer applied is indicated for each location on later pages. Plots were kept pest free for the duration of the growing season. Entire plots were desiccated and harvested with a small plot combine.

#### Additional information on the Web

A copy of this publication as well as additional variety information and more information on canola management can be found at: <u>www.canola.okstate.edu/</u>

### Table 1. Sources of seed for the 2011-2012 Winter Canola Performance Tests.

| Name/Address   | Entry   | Roundup Ready                             |
|--|---|---|
| Kansas State Univ.<br>http://www.agronomy.ksu.edu/research/p.aspx?tabid=81 | KS4083<br>KS4428<br>KS4564<br>Riley<br>Sumner<br>Wichita<br>KSR07352S<br>KSR07361<br>KSR07363 | No<br>No<br>No<br>No<br>Yes<br>Yes<br>Yes |
| Croplan Genetics<br>http://www.croplangenetics.com/                        | HyClass 115W<br>HyClass 125W<br>HyClass 154W  | Yes<br>Yes<br>Yes                         |
| DL Seeds<br>http://www.rubiscoseeds.com/                                   | Baldur<br>Sitro   | No<br>No                                  |
| Johnston Seed Co.<br>http://www.jeinc.com/seed                             | Claremore CL  | No  |
| Dekalb<br>http://www.asgrowanddekalb.com                                   | DKW41-10<br>DKW44-10<br>DKW46-15<br>DKW47-15  | Yes<br>Yes<br>Yes<br>Yes                  |
| Pioneer Hi-Bred Int.<br>https://www.pioneer.com                            | 46W94<br>46W99  | Yes<br>Yes                                |

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#### **Cooperating Producer**

Doug Hauser-Kingfisher, OK Jerry Lingo-El Reno, OK Rusty Schurter-Burlington, OK Jeff Scott-Lamont, OK

### **Cooperating County Educators**

Jeff Bedwell Keith Boevers Tommy Puffinbarger Brad Tipton

#### **Cooperating Station Superintendents**

Erich Wehrenberg, Agronomy Research Station, Stillwater Bobby Weidenmaier, Caddo Research Station, Fort Cobb Ray Sidwell, North Central Research Station, Lahoma

### Burlington, OK Winter Canola Performance Trials

### **Observations:**

An excellent stand was achieved in the fall and no winter kill was observed. Plants were 3-4 leaves going into winter dormancy. Only a glyphosate resistant trial was harvest at this location. Overall, seed yields at Burlington averaged 2183 lb/ac in the Glyphosate resistant trial. Plots were lodged by wind 1 to 2 weeks prior to swathing.

### Table 1. Information on soil properties and management practices for Burlington, OK in 2011-2012.

| Date Planted<br>Soil Moisture at Planting | 29-Sep<br>Dry | Fertilizer Applied (Ibs/ac) |  |  |
|---|---------------|-----------------------------|--|--|
| Soil Characteristics/Mgt                  |               | Fall Nitrogen 30            |  |  |
| Conventional-till Seedbed                 |               | Spring Nitrogen 100         |  |  |
| Grant Silt Loam                           |               | Total Nitrogen 130          |  |  |
| Tabler Silty Clay Loam                    |               | $P_2O_5 = 0$                |  |  |
|   |               | K,O 0                       |  |  |
|   |               | Sulfur 10                   |  |  |
| Swathed                                   | 9-May         |                             |  |  |
| Harvested                                 | 21-May        |                             |  |  |

## Table 2. Selected cultivar characteristics and seed yields for the glyphosate resistant winter canola performance trial at Burlington, OK in 2011-2012 and 2-year averages.

| Cultivar     | Company             | Fall Stand Rating | Winter Survival | Seed Yield<br>2011-2012 | 2-year Average<br>Seed Yield |
|--------------|---------------------|-------------------|-----------------|-------------------------|------------------------------|
|              |                     | %                 |                 | Ib.                     | s/ac                         |
| 46W94        | Pioneer Hi-Bred Int | 100               | 100             | 2,821                   | -                            |
| HYC125W      | Croplan Genetics    | 100               | 100             | 2,425                   | 2,266                        |
| KSR07363     | Kansas State Univ.  | 100               | 100             | 2,375                   | -                            |
| DKW 44-10    | Dekalb              | 100               | 100             | 2,252                   | 3,055                        |
| DKW 46-15    | Dekalb              | 100               | 100             | 2,183                   | 2,235                        |
| KSR07352S    | Kansas State Univ.  | 100               | 100             | 2,121                   | -                            |
| HYC115W      | Croplan Genetics    | 100               | 100             | 2,079                   | 2,169                        |
| DKW 47-15    | Dekalb              | 100               | 100             | 2,070                   | 2,170                        |
| HYC154W      | Croplan Genetics    | 100               | 100             | 2,045                   | 2,148                        |
| DKW 41-10    | Dekalb              | 100               | 100             | 2,019                   | 2,251                        |
| KSR07361     | Kansas State Univ.  | 100               | 100             | 1,962                   | -                            |
| 46W99        | Pioneer Hi-Bred Int | 100               | 100             | 1,839                   | -                            |
| Mean         |                     |                   |                 | 2,183                   | 2,328                        |
| LSD (P=0.05) |                     |                   |                 | NS                      |                              |
| CV           |                     |                   |                 | 19                      |                              |

† Fall stand rating was based on ratings taken in November.

### El Reno, OK Winter Canola Performance Trials

### **Observations:**

An excellent stand was achieved in the fall and no winter kill was observed. Plants were 4-5 leaves going into winter dormancy. Yields were excellent given the dry start to the growing season. Overall, seed yields at El Reno averaged 3111 lb/ac in the Glyphosate resistant trial and 2803 lb/ac in the conventional test. Some lodging and shattering were observed prior to swathing and harvest. High winds hit the plot area 1 week prior to swathing that caused most of the lodging and shattering. Lodging was most likely a result of the excellent growth potential (thick stand, warm temperatures, and abundant moisture) we experienced in late winter and early spring. In most years we would not have to consider lodging to be a problem.

| Date Planted              | 27-Sep |                                 |             |
|---------------------------|--------|---------------------------------|-------------|
| Soil Moisture at Planting | Dry    | Fertilizer Applie               | ed (Ibs/ac) |
| Soil Characteristics      |        | Fall Nitrogen                   | 30          |
| Pond Creek Silt Loam      |        | Spring Nitrogen                 | 100         |
|                           |        | Total Nitrogen                  | 130         |
|                           |        | P <sub>2</sub> O <sub>5</sub> 0 |             |
|                           |        | К,O 0                           |             |
|                           |        | Sulfur 10                       |             |
| Swathed                   | 7-May  |                                 |             |
| Harvested                 | 16-May |                                 |             |

#### Table 3. Information on soil properties and management practices for El Reno, OK in 2011-2012.

## Table 4. Selected cultivar characteristics and seed yields for the glyphosate tolerant winter canola performance trial at El Reno, OK in 2011-2012, and 2-year averages.

| Cultivar     | Company             | Fall Stand<br>Rating† | Winter<br>Survival‡ | Lodging<br>Rating# | Estimated<br>Shatter Loss | Seed Yield<br>2011-2012 | 2-year Average<br>Seed Yield |
|--------------|---------------------|-----------------------|---------------------|--------------------|---------------------------|-------------------------|------------------------------|
|              |                     | %                     | 6                   |                    | %                         | Ibs                     | /ac                          |
| 46W94        | Pioneer Hi-Bred Int | 100                   | 100                 | 1.7                | 10                        | 3,860                   | -                            |
| HYC115W      | Croplan Genetics    | 100                   | 100                 | 1.3                | 13                        | 3,403                   | 2,681                        |
| HYC125W      | Croplan Genetics    | 100                   | 100                 | 1.0                | 13                        | 3,322                   | 2,539                        |
| HYC154W      | Croplan Genetics    | 100                   | 100                 | 1.0                | 10                        | 3,141                   | 2,753                        |
| DKW 44-10    | Dekalb              | 100                   | 100                 | 2.3                | 13                        | 3,141                   | 2,447                        |
| KSR07352S    | Kansas State Univ.  | 100                   | 100                 | 2.3                | 10                        | 3,115                   | -                            |
| KSR07363     | Kansas State Univ.  | 100                   | 100                 | 2.0                | 10                        | 3,092                   | -                            |
| DKW 47-15    | Dekalb              | 100                   | 100                 | 1.0                | 10                        | 3,078                   | 2,496                        |
| DKW 46-15    | Dekalb              | 100                   | 100                 | 1.0                | 10                        | 3,000                   | 2,342                        |
| 46W99        | Pioneer Hi-Bred Int | 100                   | 100                 | 2.3                | 13                        | 2,902                   | -                            |
| KSR07361     | Kansas State Univ.  | 100                   | 100                 | 2.3                | 10                        | 2,702                   | -                            |
| DKW 41-10    | Dekalb              | 100                   | 100                 | 1.0                | 17                        | 2,577                   | 2,016                        |
| Mean         |                     |                       |                     |                    |                           | 3,111                   | 2,468                        |
| LSD (P=0.05) |                     |                       |                     |                    |                           | NS                      |                              |
| CV           |                     |                       |                     |                    |                           | 19                      |                              |

† Fall stand rating was based on a 0 to 10 scale with 10 being a full stand.

‡ Winter survival ratings were taken in the spring after winter dormancy was broken (rated as percent of the plot that survived).

# Lodging rating was based on a 0 to 5 scale with 5 being the complete lodging of plot.

| Cultivar     | Company            | Fall Stand<br>Rating† | Winter<br>Survival‡ | Lodging<br>Rating# | Estimated<br>Shatter Loss | Seed Yield<br>2011-2012 | 2-year Average<br>Seed Yield |
|--------------|--------------------|-----------------------|---------------------|--------------------|---------------------------|-------------------------|------------------------------|
|              |                    |                       | %                   |                    | %                         | Ik                      | b/ac                         |
| Sitro        | DL Seeds           | 100                   | 100                 | 1                  | 10                        | 3,425                   | -                            |
| KS4083       | Kansas State Univ. | 100                   | 100                 | 1                  | 10                        | 2,868                   | 2,550                        |
| KS4428       | Kansas State Univ. | 100                   | 100                 | 1                  | 10                        | 2,859                   | 2,495                        |
| Wichita      | Kansas State Univ. | 100                   | 100                 | 1                  | 10                        | 2,836                   | 2,466                        |
| Baldur       | DL Seeds           | 100                   | 100                 | 1                  | 10                        | 2,795                   | 2,481                        |
| Sumner       | Kansas State Univ. | 100                   | 100                 | 1                  | 10                        | 2,735                   | 2,415                        |
| Riley        | Kansas State Univ. | 100                   | 100                 | 1                  | 10                        | 2,603                   | 2,325                        |
| KS4564       | Kansas State Univ. | 100                   | 100                 | 2                  | 10                        | 2,586                   | -                            |
| ClaremoreCL  | Johnston Seed Co.  | 100                   | 100                 | 1                  | 10                        | 2,521                   | -                            |
| Mean         |                    |                       |                     |                    |                           | 2,803                   | 2,455                        |
| LSD (P=0.05) |                    |                       |                     |                    |                           | NS                      |                              |
| CV           |                    |                       |                     |                    |                           | 17                      |                              |

Table 5. Selected cultivar characteristics and seed yields for the conventional winter canola performance trial at El Reno, OK in 2011-2012, and 2-year averages.

† Fall stand rating was based on a 0 to 10 scale with 10 being a full stand.

‡ Winter survival ratings were taken in the spring after winter dormancy was broken (rated as percent of the plot that survived).

# Lodging rating was based on a 0 to 5 scale with 5 being the complete lodging of plot

### Fort Cobb, OK Winter Canola Performance Trials

### **Observations:**

An excellent stand was achieved in the fall and no winter kill was observed. Plants were 4-5 leaves going into winter dormancy. Yields were excellent given the dry start to the growing season. Overall, seed yields at Fort Cobb averaged 2685 lb/ac in the Glyphosate resistant trial and 2727 lb/ac in the conventional test. No shatter was observed prior to harvesting. Lodging was observed in some plots but was more a result of environmental conditions and not specifically related to cultivars.

| Table 6. Information on soil | properties and manage | ment practices for Fort Cobb | OK in 2011-2012      |
|------------------------------|-----------------------|------------------------------|----------------------|
|                              | properties and manage |                              | , OK III ZUIII ZUIZ. |

| Date Planted              | 3-Oct  |                                 |
|---------------------------|--------|---------------------------------|
| Soil Moisture at Planting | Good   | Fertilizer Applied (lbs/ac)     |
| Soil Chemical Character   | istics | Fall Nitrogen 30                |
| Binger fine sandy loam    |        | Spring Nitrogen 100             |
| Pond Creek fine sandy loa | ım     | Total Nitrogen 130              |
|                           |        | P <sub>2</sub> O <sub>5</sub> 0 |
|                           |        | K,O 0                           |
|                           |        | Sulfur 10                       |
| Swathed                   | 4-May  |                                 |
| Harvested                 | 11-May |                                 |

## Table 7. Selected cultivar characteristics and seed yields for the glyphosate tolerant winter canola performance trial at Fort Cobb, OK in 2011-2012.

| Cultivar     | Company             | Fall Stand<br>Rating† | Winter<br>Survival‡ | Estimated<br>Shatter Loss | Seed Yield<br>2011-2012 |
|--------------|---------------------|-----------------------|---------------------|---------------------------|-------------------------|
|              |                     | %                     | <u></u>             | %                         | Ibs/ac                  |
| 46W94        | Pioneer Hi-Bred Int | 100                   | 100                 | 0                         | 3,275                   |
| 46W99        | Pioneer Hi-Bred Int | 100                   | 100                 | 0                         | 3,136                   |
| KSR07363     | Kansas State Univ.  | 100                   | 100                 | 0                         | 2,826                   |
| HYC115W      | Croplan Genetics    | 100                   | 100                 | 0                         | 2,805                   |
| HYC125W      | Croplan Genetics    | 100                   | 100                 | 0                         | 2,708                   |
| KSR07361     | Kansas State Univ.  | 100                   | 100                 | 0                         | 2,633                   |
| DKW 47-15    | Dekalb              | 100                   | 100                 | 0                         | 2,625                   |
| DKW 44-10    | Dekalb              | 100                   | 100                 | 0                         | 2,604                   |
| HYC154W      | Croplan Genetics    | 100                   | 100                 | 0                         | 2,537                   |
| KSR07352S    | Kansas State Univ.  | 100                   | 100                 | 0                         | 2,392                   |
| DKW 46-15    | Dekalb              | 100                   | 100                 | 0                         | 2,382                   |
| DKW 41-10    | Dekalb              | 100                   | 100                 | 0                         | 2,294                   |
| Mean         |                     |                       |                     |                           | 2,685                   |
| LSD (P=0.05) |                     |                       |                     |                           | 384                     |
| CV           |                     |                       |                     |                           | 14                      |

† Fall stand rating was based on a 0 to 10 scale with 10 being a full stand.

| Cultivar     | Company            | Fall Stand<br>Rating† | Winter<br>Survival‡ | Estimated<br>Shatter Loss | Seed Yield<br>2011-2012 |
|--------------|--------------------|-----------------------|---------------------|---------------------------|-------------------------|
|              |                    | %                     | 5                   | %                         | Ibs/ac                  |
| Sitro        | DL Seeds           | 100                   | 100                 | 0                         | 3,667                   |
| Baldur       | DL Seeds           | 100                   | 100                 | 0                         | 3,076                   |
| KS4428       | Kansas State Univ. | 100                   | 100                 | 0                         | 2,743                   |
| Wichita      | Kansas State Univ. | 100                   | 100                 | 0                         | 2,724                   |
| Riley        | Kansas State Univ. | 100                   | 100                 | 0                         | 2,662                   |
| KS4083       | Kansas State Univ. | 100                   | 100                 | 0                         | 2,630                   |
| Sumner       | Kansas State Univ. | 100                   | 100                 | 0                         | 2,527                   |
| KS4564       | Kansas State Univ. | 100                   | 100                 | 0                         | 2,371                   |
| Claremore CL | Johnston Seed Co.  | 100                   | 100                 | 0                         | 2,142                   |
| Mean         |                    |                       |                     |                           | 2,727                   |
| LSD (P=0.05) |                    |                       |                     |                           | 312                     |
| CV           |                    |                       |                     |                           | 17                      |

Table 8. Selected cultivar characteristics and seed yields for the conventional winter canola performance trial at Fort Cobb, OK in 2011-2012.

† Fall stand rating was based on a 0 to 10 scale with 10 being a full stand.

## Lahoma, OK Winter Canola Performance Trials

### **Observations:**

A decent stand was achieved in the fall and no winter kill was observed. Plants were 3-4 leaves going into winter dormancy. For some unexplainable reason this location had very little growth in the fall and regrowth in the spring was slow as well. Yields were a little lower than usual at this location. Overall, seed yields at Lahoma averaged 1467 lb/ac in the Glyphosate resistant trial and 1859 lb/ac in the conventional test. No shattering or lodging was observed at this location.

| Date Planted              | 23-Sep |                             |
|---------------------------|--------|-----------------------------|
| Soil Moisture at Planting | Good   | Fertilizer Applied (lbs/ac) |
| Soil Characteristics/Mgt  |        | Fall Nitrogen 30            |
| Conventional-till Seedbed |        | Spring Nitrogen 100         |
| Grant Silt Loam           |        | Total Nitrogen 130          |
|                           |        | $P_2O_5$ 0                  |
|                           |        | K <sup>2</sup> 0 0          |
|                           |        | Sulfur 10                   |
| Swathed                   | 11-May |                             |
| Harvested                 | 22-May |                             |

Table 9. Information on soil properties and management practices for Lahoma, OK in 2011-2012.

Table 10. Selected cultivar characteristics and seed yields for the glyphosate tolerant winter canola performance trial at Lahoma, OK in 2011-2012, and 2- and 3-year averages.

| Cultivar   | Company                 | Fall Stand<br>Rating <sup>†</sup> | Winter<br>Survival <sup>‡</sup> | Seed Yield<br>2011-2012 | 2-year Average<br>Seed Yield | 3-year Average<br>Seed Yield |
|------------|-------------------------|-----------------------------------|---------------------------------|-------------------------|------------------------------|------------------------------|
|            |                         | 9                                 | 6                               |                         | Ibs/ac                       |                              |
| HYC154W    | <b>Croplan Genetics</b> | 100                               | 100                             | 1848                    | 2,709                        | 2,513                        |
| HYC125W    | Croplan Genetics        | 100                               | 100                             | 1601                    | 2,631                        | 2,499                        |
| DKW 44-10  | Dekalb                  | 100                               | 100                             | 1566                    | 2,741                        | 2,695                        |
| 46W94      | Pioneer Hi-Bred Int     | 100                               | 100                             | 1552                    | -                            | -                            |
| 46W99      | Pioneer Hi-Bred Int     | 100                               | 100                             | 1493                    | -                            | -                            |
| KSR07363   | Kansas State Univ.      | 100                               | 100                             | 1492                    | -                            | -                            |
| DKW 47-15  | Dekalb                  | 100                               | 100                             | 1490                    | 2,533                        | 2,385                        |
| KSR07361   | Kansas State Univ.      | 100                               | 100                             | 1484                    | -                            | -                            |
| KSR07352S  | Kansas State Univ.      | 100                               | 100                             | 1395                    | -                            | -                            |
| DKW 46-15  | Dekalb                  | 100                               | 100                             | 1326                    | 2,424                        | 2,335                        |
| HYC115W    | Croplan Genetics        | 100                               | 100                             | 1289                    | 2,464                        | 2,333                        |
| DKW 41-10  | Dekalb                  | 100                               | 100                             | 1065                    | 1,873                        | 1,779                        |
| Mean       |                         |                                   |                                 | 1467                    | 2,482                        | 2,363                        |
| LSD (P=0.0 | 05)                     |                                   |                                 | NS                      |                              |                              |
| CV         | •                       |                                   |                                 | 27                      |                              |                              |

† Fall stand rating was based on a 0 to 10 scale with 10 being a full stand.

Table 11. Selected cultivar characteristics and seed yields for the conventional winter canola performance trial at Lahoma, OK in 2011-2012, and 2- and 3-year averages.

| Cultivar     | Company            | Fall Stand<br>Rating <sup>†</sup> | Winter<br>Survival <sup>‡</sup> | Seed Yield<br>2011-2012 | 2-year Average<br>Seed Yield | 3-year Average<br>SeedYield |
|--------------|--------------------|-----------------------------------|---------------------------------|-------------------------|------------------------------|-----------------------------|
|              |                    | %                                 |                                 |                         | Ibs/ac                       |                             |
| Sitro        | DL Seeds           | 100                               | 100                             | 2501                    | -                            | -                           |
| Baldur       | DL Seeds           | 100                               | 100                             | 2180                    | 2,699                        | 2,629                       |
| KS4564       | Kansas State Univ. | 100                               | 100                             | 1843                    | -                            | -                           |
| Wichita      | Kansas State Univ. | 100                               | 100                             | 1830                    | 2,417                        | 2,546                       |
| Claremore CL | Johnston Seed Co.  | 100                               | 100                             | 1799                    | -                            | -                           |
| Riley        | Kansas State Univ. | 100                               | 100                             | 1792                    | 2,356                        | 2,302                       |
| KS4428       | Kansas State Univ. | 100                               | 100                             | 1647                    | 2,274                        | -                           |
| KS4083       | Kansas State Univ. | 100                               | 100                             | 1597                    | 2,241                        | -                           |
| Sumner       | Kansas State Univ. | 100                               | 100                             | 1541                    | 2,469                        | 2,364                       |
| Mean         |                    |                                   |                                 | 1859                    | 2,409                        | 2,460                       |
| LSD (P=0.05  | 5)                 |                                   |                                 | 402                     |                              |                             |
| CV           |                    |                                   |                                 | 21                      |                              |                             |

† Fall stand rating was based on a 0 to 10 scale with 10 being a full stand.

### Lamont, OK Winter Canola Performance Trials

### **Observations:**

An excellent stand was achieved in the fall and no winter kill was observed. Plants were 4-5 leaves going into winter dormancy. Overall, seed yields at Lamont averaged 1394 lb/ac in the Glyphosate resistant trial and 1495 lb/ac in the conventional test. Severe lodging and shattering were observed prior to swathing. High winds, rain, and hail hit the plot area 1-2 weeks prior to swathing that caused lodging and shattering. When viewing the yield data please keep in mind some cultivars had more shatter than others.

| Date Planted              | 28-Sep |                             |
|---------------------------|--------|-----------------------------|
| Soil Moisture at Planting | Good   | Fertilizer Applied (lbs/ac) |
| Soil Characteristics/Mgt  |        | Fall Nitrogen 100           |
| Vertical-till Seedbed     |        | Spring Nitrogen 100         |
| Pond Creek Silt Loam      |        | Total Nitrogen 200          |
|                           |        | $P_2O_5 = 0$                |
|                           |        | K,O 0                       |
|                           |        | Sulfur 10                   |
| Swathed                   | 7-May  |                             |
| Harvested                 | 21-May |                             |

#### Table 12. Information on soil properties and management practices for Lamont, OK in 2011-2012.

## Table 13. Selected cultivar characteristics and seed yields for the glyphosate resistant winter canola performance trial at Lamont, OK in 2011-2012.

| Cultivar     | Company             | Fall Stand<br>Rating† | Winter<br>Survival‡ | Estimated<br>Shatter Loss | Seed Yield<br>2011-2012 |  |
|--------------|---------------------|-----------------------|---------------------|---------------------------|-------------------------|--|
|              |                     |                       |                     |                           |                         |  |
|              |                     | %                     | 5                   | %                         | Ib/ac                   |  |
| 46W94        | Pioneer Hi-Bred Int | 100                   | 100                 | 23                        | 1,846                   |  |
| KSR07363     | Kansas State Univ.  | 100                   | 100                 | 17                        | 1,597                   |  |
| 46W99        | Pioneer Hi-Bred Int | 100                   | 100                 | 20                        | 1,564                   |  |
| HYC115W      | Croplan Genetics    | 100                   | 100                 | 20                        | 1,460                   |  |
| HYC154W      | Croplan Genetics    | 100                   | 100                 | 13                        | 1,419                   |  |
| KSR07352S    | Kansas State Univ.  | 100                   | 100                 | 10                        | 1,405                   |  |
| HYC125W      | Croplan Genetics    | 100                   | 100                 | 13                        | 1,370                   |  |
| KSR07361     | Kansas State Univ.  | 100                   | 100                 | 17                        | 1,293                   |  |
| DKW 41-10    | Dekalb              | 100                   | 100                 | 37                        | 1,225                   |  |
| DKW 46-15    | Dekalb              | 100                   | 100                 | 17                        | 1,190                   |  |
| DKW 47-15    | Dekalb              | 100                   | 100                 | 20                        | 1,184                   |  |
| DKW 44-10    | Dekalb              | 100                   | 100                 | 13                        | 1,174                   |  |
| Mean         |                     |                       |                     | 18                        | 1,394                   |  |
| LSD (P=0.05) |                     |                       |                     |                           | 317                     |  |
| CV           |                     |                       |                     |                           | 20                      |  |

† Fall stand rating was based on ratings taken in November.

| Cultivar     | Company            | Fall Stand<br>Rating† | Winter<br>Survival‡ | Estimated<br>Shatter Loss | Seed Yield<br>2011-2012 |
|--------------|--------------------|-----------------------|---------------------|---------------------------|-------------------------|
|              |                    | %                     | ,<br>               | %                         | Ibs/ac                  |
| Sitro        | DL Seeds           | 100                   | 100                 | 10                        | 2,201                   |
| KS4428       | Kansas State Univ. | 100                   | 100                 | 13                        | 1,564                   |
| Wichita      | Kansas State Univ. | 100                   | 100                 | 13                        | 1,513                   |
| Baldur       | DL Seeds           | 100                   | 100                 | 13                        | 1,492                   |
| Sumner       | Kansas State Univ. | 100                   | 100                 | 17                        | 1,456                   |
| Riley        | Kansas State Univ. | 100                   | 100                 | 20                        | 1,392                   |
| KS4083       | Kansas State Univ. | 100                   | 100                 | 17                        | 1,363                   |
| ClaremoreCL  | Johnston Seed Co.  | 100                   | 100                 | 10                        | 1,320                   |
| KS4564       | Kansas State Univ. | 100                   | 100                 | 17                        | 1,155                   |
| Mean         |                    |                       |                     | 14                        | 1495                    |
| LSD (P=0.05) |                    |                       |                     |                           | 266                     |
| CV           |                    |                       |                     |                           | 21                      |

Table 14. Selected cultivar characteristics and seed yields for the conventional winter canola performance trial at Lamont, OK in 2011-2012.

† Fall stand rating was based on ratings taken in November.

### Stillwater, OK Winter Canola Performance Trials

### **Observations:**

An excellent stand was achieved in the fall and no winter kill was observed. Plants were 4-5 leaves going into winter dormancy. Overall, seed yields at Stillwater averaged 2006 lb/ac in the Glyphosate resistant trial and 1739 lb/ac in the conventional test. Some lodging and shattering were observed prior to swathing and harvest. High winds hit the plot area 1 week prior to swathing that caused most of the lodging and shattering. Lodging was most likely a result of the excellent growth potential (thick stand, warm temperatures, and abundant moisture) we experienced in late winter and early spring. In most years we would not have to consider lodging to be a problem.

| Date Planted              | 4-Oct  |                                 |  |  |  |
|---------------------------|--------|---------------------------------|--|--|--|
| Soil Moisture at Planting | Good   | Fertilizer Applied (lbs/ac)     |  |  |  |
| Soil Characteristics/Mgt  |        | Fall Nitrogen 30                |  |  |  |
| Conventional Till Seedbed |        | Spring Nitrogen 100             |  |  |  |
| Port Silt Loam            |        | Total Nitrogen 130              |  |  |  |
|                           |        | P <sub>2</sub> O <sub>5</sub> 0 |  |  |  |
|                           |        | K,0 0                           |  |  |  |
|                           |        | Sulfur 10                       |  |  |  |
| Swathed                   | 8-May  |                                 |  |  |  |
| Harvested                 | 18-May |                                 |  |  |  |

### Table 15. Information on soil properties and management practices for Stillwater, OK in 2011-2012.

Table 16. Selected cultivar characteristics and seed yields for the glyphosate resistant winter canola performance trial at Stillwater, OK in 2011-2012, and 2-year averages.

| Cultivar     | Company             | Fall Stand<br>Rating† | Winter<br>Survival‡ | Estimated<br>Shatter Loss | Seed Yield<br>2011-2012 | 2-year Average<br>Seed Yield |
|--------------|---------------------|-----------------------|---------------------|---------------------------|-------------------------|------------------------------|
|              |                     |                       | %                   |                           | Ik                      | os/ac                        |
| 46W94        | Pioneer Hi-Bred Int | 100                   | 100                 | 10                        | 2,554                   | -                            |
| 46W99        | Pioneer Hi-Bred Int | 100                   | 100                 | 10                        | 2,242                   | -                            |
| DKW 41-10    | Dekalb              | 100                   | 100                 | 20                        | 2,102                   | 2,065                        |
| DKW 44-10    | Dekalb              | 100                   | 100                 | 10                        | 2,073                   | 2,453                        |
| HYC154W      | Croplan Genetics    | 100                   | 100                 | 10                        | 2,026                   | 2,239                        |
| KSR07361     | Kansas State Univ.  | 100                   | 100                 | 10                        | 1,997                   | -                            |
| DKW 47-15    | Dekalb              | 100                   | 100                 | 10                        | 1,938                   | 2,354                        |
| KSR07363     | Kansas State Univ.  | 100                   | 100                 | 10                        | 1,916                   | -                            |
| HYC125W      | Croplan Genetics    | 100                   | 100                 | 10                        | 1,894                   | 2,313                        |
| DKW 46-15    | Dekalb              | 100                   | 100                 | 10                        | 1,781                   | 2,138                        |
| HYC115W      | Croplan Genetics    | 100                   | 100                 | 10                        | 1,780                   | 2,343                        |
| KSR07352S    | Kansas State Univ.  | 100                   | 100                 | 10                        | 1,769                   | -                            |
| Mean         |                     |                       |                     |                           | 2,006                   | 2,272                        |
| LSD (P=0.05) |                     |                       |                     |                           | 365                     |                              |
| CV           |                     |                       |                     |                           | 17                      |                              |

† Fall stand rating was based on ratings taken in November.

| Cultivar     | Company            | Fall Stand<br>Rating† | Winter<br>Survival‡ | Estimated<br>Shatter Loss | Seed Yield<br>2011-2012 | 2-year Average<br>Seed Yield |
|--------------|--------------------|-----------------------|---------------------|---------------------------|-------------------------|------------------------------|
|              |                    | %%                    |                     | lbs/ac                    |                         |                              |
| Sitro        | DL Seeds           | 100                   | 100                 | 10                        | 2,137                   | -                            |
| KS4428       | Kansas State Univ. | 100                   | 100                 | 10                        | 1,863                   | 2,495                        |
| KS4083       | Kansas State Univ. | 100                   | 100                 | 10                        | 1,760                   | 2,422                        |
| Claremore CL | Johnston Seed Co.  | 100                   | 100                 | 10                        | 1,754                   | -                            |
| Wichita      | Kansas State Univ. | 100                   | 100                 | 10                        | 1,733                   | 2,329                        |
| KS4564       | Kansas State Univ. | 100                   | 100                 | 10                        | 1,722                   | -                            |
| Baldur       | DL Seeds           | 100                   | 100                 | 10                        | 1,633                   | 2,282                        |
| Riley        | Kansas State Univ. | 100                   | 100                 | 10                        | 1,575                   | 2,214                        |
| Sumner       | Kansas State Univ. | 100                   | 100                 | 10                        | 1,473                   | 2,217                        |
| Mean         |                    |                       |                     |                           | 1,739                   | 2,327                        |
| LSD (P=0.05) |                    |                       |                     |                           | NS                      |                              |
| CV           |                    |                       |                     |                           | 18                      |                              |

Table 17. Selected cultivar characteristics and seed yields for the conventional winter canola performance trial at Stillwater, OK in 2011-2012, and 2-year averages.

† Fall stand rating was based on ratings taken in November.

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