

**Irrigated Wheat Variety Trial, NMSU Agricultural Science Center at Clovis, 2013**

**Investigators:** M.A. Marsalis, A. Scott, and B. Niece

**Test Description**

| <b>Location:</b>   | <b>Management Practices:</b>   | <b>Growing Conditions:</b> |                   |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
|--|--|----------------------------|-------------------|------|--------------------|--|--|---|-----------|-----------|---|----------|-----------|---|----------|-----------|----|---------|-----------|---|--|------------------------|----------------|-------------------|---------|------|-----|-----|----------|------|-----|---|----------|------|-----|-----|---------|------|-----|---|----------|------|-----|---|-------|------|-----|-----|-------|------|-----|-----|-----|------|-----|-----|------|------|-----|-----|------|------|-----|---|------------------------|--|---------|--|------------------|--|--|----------|
| County/Area: Curry<br>Longitude: -103.22<br>Latitude: 34.60<br>Elevation: 4435 ft.<br>Soil Name: Olton<br>Soil Texture: clay loam<br>Soil Depth: >60 in.   | Previous Crop: fallow<br>Planting Date: 18-Oct<br>Harvest Date: 10-Jul<br><br><b>Production Inputs</b><br><table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Rate</th> <th style="text-align: center;">Date</th> </tr> </thead> <tbody> <tr> <td colspan="3"><b>Fertilizer:</b></td> </tr> <tr> <td>N</td> <td style="text-align: center;">104 lb/ac</td> <td style="text-align: center;">carryover</td> </tr> <tr> <td>N</td> <td style="text-align: center;">15 lb/ac</td> <td style="text-align: center;">pre-plant</td> </tr> <tr> <td>P</td> <td style="text-align: center;">50 lb/ac</td> <td style="text-align: center;">pre-plant</td> </tr> <tr> <td>Zn</td> <td style="text-align: center;">2 qt/ac</td> <td style="text-align: center;">pre-plant</td> </tr> </tbody> </table><br>Herbicides:<br>Weedone LV6            8 oz/ac            12-Mar<br>Affinity BS            0.6 oz/ac            12-Mar<br>Insecticides:<br>Lorsban            1 pt/ac            12-Mar |                            | Rate              | Date | <b>Fertilizer:</b> |  |  | N | 104 lb/ac | carryover | N | 15 lb/ac | pre-plant | P | 50 lb/ac | pre-plant | Zn | 2 qt/ac | pre-plant | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Average<br/>Temp.<br/>°F</th> <th style="text-align: center;">Precip.<br/>in.</th> <th style="text-align: center;">Irrigation<br/>in.</th> </tr> </thead> <tbody> <tr><td>October</td><td style="text-align: center;">57.3</td><td style="text-align: center;">0.4</td><td style="text-align: center;">1.3</td></tr> <tr><td>November</td><td style="text-align: center;">50.4</td><td style="text-align: center;">0.0</td><td style="text-align: center;">-</td></tr> <tr><td>December</td><td style="text-align: center;">40.6</td><td style="text-align: center;">0.1</td><td style="text-align: center;">1.5</td></tr> <tr><td>January</td><td style="text-align: center;">38.3</td><td style="text-align: center;">0.5</td><td style="text-align: center;">-</td></tr> <tr><td>February</td><td style="text-align: center;">38.0</td><td style="text-align: center;">0.8</td><td style="text-align: center;">-</td></tr> <tr><td>March</td><td style="text-align: center;">46.9</td><td style="text-align: center;">0.0</td><td style="text-align: center;">3.0</td></tr> <tr><td>April</td><td style="text-align: center;">52.4</td><td style="text-align: center;">0.0</td><td style="text-align: center;">6.0</td></tr> <tr><td>May</td><td style="text-align: center;">64.0</td><td style="text-align: center;">0.5</td><td style="text-align: center;">5.4</td></tr> <tr><td>June</td><td style="text-align: center;">74.7</td><td style="text-align: center;">1.7</td><td style="text-align: center;">3.5</td></tr> <tr><td>July</td><td style="text-align: center;">74.0</td><td style="text-align: center;">0.8</td><td style="text-align: center;">-</td></tr> <tr> <td>Seasonal Precipitation</td> <td></td> <td style="text-align: center;">4.7 in.</td> <td></td> </tr> <tr> <td>Total Irrigation</td> <td></td> <td></td> <td style="text-align: center;">20.7 in.</td> </tr> </tbody> </table> |  | Average<br>Temp.<br>°F | Precip.<br>in. | Irrigation<br>in. | October | 57.3 | 0.4 | 1.3 | November | 50.4 | 0.0 | - | December | 40.6 | 0.1 | 1.5 | January | 38.3 | 0.5 | - | February | 38.0 | 0.8 | - | March | 46.9 | 0.0 | 3.0 | April | 52.4 | 0.0 | 6.0 | May | 64.0 | 0.5 | 5.4 | June | 74.7 | 1.7 | 3.5 | July | 74.0 | 0.8 | - | Seasonal Precipitation |  | 4.7 in. |  | Total Irrigation |  |  | 20.7 in. |
|  | Rate   | Date                       |                   |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| <b>Fertilizer:</b>   |  |                            |                   |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| N  | 104 lb/ac  | carryover                  |                   |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| N  | 15 lb/ac   | pre-plant                  |                   |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| P  | 50 lb/ac   | pre-plant                  |                   |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| Zn   | 2 qt/ac  | pre-plant                  |                   |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
|  | Average<br>Temp.<br>°F   | Precip.<br>in.             | Irrigation<br>in. |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| October  | 57.3   | 0.4                        | 1.3               |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| November   | 50.4   | 0.0                        | -                 |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| December   | 40.6   | 0.1                        | 1.5               |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| January  | 38.3   | 0.5                        | -                 |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| February   | 38.0   | 0.8                        | -                 |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| March  | 46.9   | 0.0                        | 3.0               |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| April  | 52.4   | 0.0                        | 6.0               |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| May  | 64.0   | 0.5                        | 5.4               |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| June   | 74.7   | 1.7                        | 3.5               |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| July   | 74.0   | 0.8                        | -                 |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| Seasonal Precipitation   |  | 4.7 in.                    |                   |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| Total Irrigation   |  |                            | 20.7 in.          |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |
| <b>Test Design:</b><br>Replications: 3<br>Planted Plot Length: 30 ft.<br>Harvested Plot Length: 30 ft.<br>Plot Width: 75 in.<br>Rows per Plot: 11<br>Drill Row Spacing: 6.25 in.<br>Seeding Rate: 70 lb/ac |  |                            |                   |      |                    |  |  |   |           |           |   |          |           |   |          |           |    |         |           |   |  |                        |                |                   |         |      |     |     |          |      |     |   |          |      |     |     |         |      |     |   |          |      |     |   |       |      |     |     |       |      |     |     |     |      |     |     |      |      |     |     |      |      |     |   |                        |  |         |  |                  |  |  |          |

**Irrigated Wheat Variety Trial, NMSU Agricultural Science Center at Clovis, 2013**

| Variety Name  | Owner     | Grain Yield <sup>1</sup><br>bu/a | Bushel Weight<br>lb/bu | Harvest Moisture<br>% | Plant Height<br>in | Lodging <sup>1</sup><br>% | Head Date<br>date |
|---------------|-----------|----------------------------------|------------------------|-----------------------|--------------------|---------------------------|-------------------|
| Iba           | OSU       | 51.26 ***                        | 55.0                   | 6.1                   | 24.7 *             | 0                         | 5/20 ***          |
| TX08V7313     | TAMU      | 50.68 *                          | 55.9 *                 | 6.5                   | 26.7 *             | 0                         | 5/18 *            |
| TX07A001505   | TAMU      | 50.57 *                          | 57.7 ***               | 6.2                   | 23.7               | 0                         | 5/18 *            |
| Duster        | OSU       | 50.35 *                          | 54.4                   | 6.3                   | 26.7 *             | 0                         | 5/18 *            |
| TX03A0563-07  | TAMU      | 49.62 *                          | 54.6                   | 5.8                   | 22.3               | 0                         | 5/18 *            |
| TAM 113       | TAMU      | 48.18 *                          | 54.8                   | 6.3                   | 23.3               | 0                         | 5/19 *            |
| WB Grainfield | Westbred  | 46.81 *                          | 55.8                   | 6.1                   | 26.3 *             | 0                         | 5/17              |
| Denali        | CSU       | 46.59 *                          | 55.0                   | 6.4                   | 25.0 *             | 0                         | 5/18 *            |
| T 158         | Limagrain | 45.78 *                          | 56.3 *                 | 5.9                   | 23.3               | 0                         | 5/17              |
| Greer         | Syngenta  | 45.69 *                          | 53.2                   | 5.4                   | 23.0               | 0                         | 5/19 *            |
| Billings      | OSU       | 45.36 *                          | 52.6                   | 6.3                   | 26.7 *             | 0                         | 5/19 *            |
| TAM 111       | TAMU      | 44.90 *                          | 56.5 *                 | 6.4                   | 26.3 *             | 0                         | 5/19 *            |
| Doans         | Syngenta  | 44.71 *                          | 54.8                   | 8.0 ***               | 26.3 *             | 0                         | 5/17 *            |
| Winterhawk    | Westbred  | 44.36 *                          | 54.9                   | 6.3                   | 25.7 *             | 0                         | 5/16              |
| Byrd          | CSU       | 44.29 *                          | 55.2                   | 6.1                   | 26.7 *             | 0                         | 5/17              |
| Garrison      | OSU       | 44.18 *                          | 52.3                   | 5.9                   | 25.3 *             | 0                         | 5/16              |
| TX08A001249   | TAMU      | 43.08 *                          | 57.0 *                 | 6.0                   | 24.3               | 0                         | 5/17              |
| Everest       | OSU       | 42.70 *                          | 53.3                   | 6.1                   | 21.3               | 0                         | 5/16              |
| Endurance     | OSU       | 42.15                            | 55.0                   | 6.2                   | 26.0 *             | 0                         | 5/17              |
| Gallagher     | OSU       | 40.89                            | 54.7                   | 6.3                   | 26.0 *             | 0                         | 5/19 *            |
| TAM 401       | TAMU      | 40.15                            | 50.4                   | 5.6                   | 23.7               | 0                         | 5/17              |
| TAM 112       | TAMU      | 39.97                            | 53.1                   | 6.7 *                 | 24.3 *             | 0                         | 5/16              |
| TX06V7266     | TAMU      | 39.32                            | 50.5                   | 5.6                   | 23.0               | 0                         | 5/19 *            |
| Jackpot       | Syngenta  | 38.91                            | 52.1                   | 6.0                   | 21.3               | 0                         | 5/17              |
| Razor         | Syngenta  | 38.85                            | 54.4                   | 6.4                   | 27.0 ***           | 0                         | 5/18 *            |
| Hatcher       | CSU       | 38.43                            | 54.1                   | 6.2                   | 22.0               | 0                         | 5/19 *            |
| AP11T2214     | Syngenta  | 37.23                            | 52.1                   | 6.9 *                 | 24.3 *             | 0                         | 5/19 *            |
| Ruby Lee      | OSU       | 36.62                            | 55.0                   | 4.6                   | 22.3               | 0                         | 5/18 *            |
| TX08V7173     | TAMU      | 36.58                            | 55.7 *                 | 6.0                   | 23.3 *             | 0                         | 5/18 *            |
| T154          | Limagrain | 36.58                            | 53.9                   | 6.0                   | 23.7               | 0                         | 5/19 *            |
| TAM 304       | TAMU      | 36.30                            | 51.2                   | 5.6                   | 22.3               | 0                         | 5/19 *            |
| T153          | Limagrain | 36.06                            | 53.3                   | 6.3                   | 23.3               | 0                         | 5/16              |
| 04BC574-2     | Syngenta  | 35.10                            | 50.5                   | 5.6                   | 22.3               | 0                         | 5/16              |
| Santa Fe      | Westbred  | 34.10                            | 52.5                   | 7.1 *                 | 24.3 *             | 0                         | 5/16              |
| Armour        | Syngenta  | 33.76                            | 54.1                   | 6.2                   | 22.3               | 0                         | 5/19 *            |
| APH09T9614    | Syngenta  | 33.63                            | 55.0                   | 7.0 *                 | 21.0               | 0                         | 5/19 *            |
| Cedar         | Westbred  | 31.27                            | 53.2                   | 5.7                   | 22.7               | 0                         | 5/17              |
| TAM 305       | TAMU      | 30.15                            | 52.4                   | 6.0                   | 24.0               | 0                         | 5/18 *            |
| TAM W-101     | TAMU      | 28.13                            | 53.2                   | 6.5                   | 23.3               | 0                         | 5/19 *            |
| WB Redhawk    | Westbred  | 27.91                            | 52.5                   | 5.6                   | 24.7 *             | 0                         | 5/18 *            |
| Trial Mean    |           | 40.7                             | 53.9                   | 6.2                   | 24.1               | 0.0                       | 18-May            |
| LSD (P> 0.05) |           | 9.0                              | 2.4                    | 1.3                   | 2.9                | 0.0                       | 2.9               |
| CV            |           | 13.5                             | 2.8                    | 13.2                  | 7.4                | -                         | 0.9               |
| F Test        |           | <.0001                           | <.0001                 | 0.0514                | <.0001             | ns                        | 0.1721            |

<sup>1</sup>Yields adjusted to 60 lb standard bushel weight and 13.5 % moisture.

\*\*\* Highest numerical value in the column.

\* Not significantly different from the highest numerical value in the column based on the 5% LSD.

<sup>1</sup> No lodging reported