

Irrigated Wheat Variety Trial, NMSU Agricultural Science Center at Clovis, 2018

Investigators: A. Scott, B. Niece and A. Mesbah

Location:	Management Practices:	Growing Conditions:																																																																																										
County/Area: Curry Longitude: -103.22 34.60 Elevation: 4435 ft. Soil Name: Olton Soil Texture: clay loam Soil Depth: >60 in.	Previous Crop: fallow Planting Date: 23-Oct Harvest Date: 27-Jun Production Inputs <table border="1"> <thead> <tr> <th></th> <th>Rate</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td colspan="3">Fertilizer:</td> </tr> <tr> <td>N</td> <td>48 lb/ac</td> <td>carryover</td> </tr> <tr> <td>N</td> <td>150 lb/ac</td> <td>pre-plant</td> </tr> <tr> <td>P₂O₅</td> <td>30 lb/ac</td> <td>pre-plant</td> </tr> <tr> <td>S</td> <td>40 lb/ac</td> <td>pre-plant</td> </tr> <tr> <td>N</td> <td>64 lb/ac</td> <td>20-Feb</td> </tr> <tr> <td>S</td> <td>12 lb/ac</td> <td>20-Feb</td> </tr> <tr> <td colspan="3">Herbicides:</td> </tr> <tr> <td>Affinity</td> <td>0.6 oz/ac</td> <td>5-Feb</td> </tr> <tr> <td>LV 6</td> <td>12 oz/ac</td> <td>5-Feb</td> </tr> <tr> <td>Prowl H2O</td> <td>3 pts/ac</td> <td>5-Feb</td> </tr> <tr> <td colspan="3">Insecticides:</td> </tr> <tr> <td>Lorsban 4E</td> <td>1 pt/ac</td> <td>5-Feb</td> </tr> </tbody> </table>		Rate	Date	Fertilizer:			N	48 lb/ac	carryover	N	150 lb/ac	pre-plant	P ₂ O ₅	30 lb/ac	pre-plant	S	40 lb/ac	pre-plant	N	64 lb/ac	20-Feb	S	12 lb/ac	20-Feb	Herbicides:			Affinity	0.6 oz/ac	5-Feb	LV 6	12 oz/ac	5-Feb	Prowl H2O	3 pts/ac	5-Feb	Insecticides:			Lorsban 4E	1 pt/ac	5-Feb	<table border="1"> <thead> <tr> <th></th> <th>Average Temp. °F</th> <th>Precip. in.</th> <th>Irrigation in.</th> </tr> </thead> <tbody> <tr> <td>October</td> <td>56.5</td> <td>2.0</td> <td>1.5</td> </tr> <tr> <td>November</td> <td>50.0</td> <td>-</td> <td>1.0</td> </tr> <tr> <td>December</td> <td>38.1</td> <td>-</td> <td>-</td> </tr> <tr> <td>January</td> <td>35.2</td> <td>-</td> <td>-</td> </tr> <tr> <td>February</td> <td>40.3</td> <td>0.1</td> <td>1.8</td> </tr> <tr> <td>March</td> <td>49.3</td> <td>0.0</td> <td>3.6</td> </tr> <tr> <td>April</td> <td>52.8</td> <td>0.7</td> <td>5.6</td> </tr> <tr> <td>May</td> <td>69.4</td> <td>1.6</td> <td>4.1</td> </tr> <tr> <td>June</td> <td>76.1</td> <td>1.7</td> <td>-</td> </tr> <tr> <td colspan="2">Seasonal Precipitation</td> <td>6.2 in.</td> <td></td> </tr> <tr> <td colspan="2">Total Irrigation</td> <td>17.6 in.</td> <td></td> </tr> </tbody> </table>		Average Temp. °F	Precip. in.	Irrigation in.	October	56.5	2.0	1.5	November	50.0	-	1.0	December	38.1	-	-	January	35.2	-	-	February	40.3	0.1	1.8	March	49.3	0.0	3.6	April	52.8	0.7	5.6	May	69.4	1.6	4.1	June	76.1	1.7	-	Seasonal Precipitation		6.2 in.		Total Irrigation		17.6 in.	
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Test Design: Replications: 3 Planted Plot Length: 30 ft. Harvested Plot Length: 30 ft. Plot Width: 75 in. Rows per Plot: 11 Drill Row Spacing: 6.25 in. Seeding Rate: 70 lb/ac																																																																																												

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Variety Name	Grain Yield ¹ bu/a	Bushel Weight lb/bu	Harvest Moisture %	Plant Height in	Lodging %	Head Date date
Winterhawk	86.75 ***	61.1 *	9.8	30.0 *	0	20-Apr
TAM 113	86.53 *	60.7 *	10.6 *	29.0 *	0	19-Apr
CROPLAN EXP 09-17	86.22 *	59.9	9.5	27.5	0	26-Apr
WB Grainfield	84.76 *	60.1	9.5	29.2 *	0	27-Apr *
Long Branch	84.60 *	58.9	9.0	28.5	0	30-Apr *
CROPLAN EXP 69-16	83.34 *	60.3	9.1	28.5	0	1-May *
SY Grit	83.09 *	59.6	9.3	31.1 *	0	17-Apr
LCS Chrome	82.59 *	59.8	9.2	31.0 *	0	1-May *
TAM 111	82.03 *	61.3 *	10.4 *	30.7 *	0	25-Apr
TAM 304RS	81.69 *	58.2	8.3	27.7	0	26-Apr
Iba	80.45 *	61.3 *	10.2	29.5 *	0	19-Apr
T158	80.35 *	60.7 *	9.9	29.6 *	0	24-Apr
TX12V7415	79.82 *	61.4 *	10.8 *	31.2 ***	0	30-Apr *
SY Rugged	79.76 *	58.3	9.1	27.1	0	24-Apr
SY Monument	79.71 *	59.4	9.1	29.7 *	0	29-Apr *
TAM 112	79.67 *	61.3 *	9.9	28.1	0	13-Apr
TAM 114ET	79.60 *	62.4 ***	11.0 ***	28.5	0	28-Apr *
TAM 304	77.97 *	57.6	8.4	28.7 *	0	29-Apr *
WB4418	77.85 *	57.8	8.7	27.3	0	25-Apr
TAM 204	77.01	55.0	8.2	30.4 *	0	2-May ***
TAM 114	76.57	61.5 *	10.4 *	28.2	0	27-Apr *
WB4458	76.33	57.7	8.8	30.2 *	0	27-Apr *
TX11A001295	76.17	62.1 *	10.4 *	30.6 *	0	22-Apr
CROPLAN EXP 56-17	75.70	61.2 *	10.4 *	26.5	0	20-Apr
LCS Pistol	74.33	59.2	9.2	29.1 *	0	22-Apr
WB4303	73.41	55.6	7.8	28.2	0	20-Apr
SY Flint	70.79	57.9	9.2	29.8 *	0	30-Apr *
TAM W-101	69.80	57.8	8.9	29.4 *	0	29-Apr *
TX13M5625	69.09	58.5	8.4	29.3 *	0	29-Apr *
TAM 305	68.81	58.6	8.9	28.3	0	16-Apr
Trial Mean	78.8	59.5	9.4	29.1	0.0	25-Apr
LSD (P> 0.05)	9.5	1.7	0.7	2.7	0.0	5.24
CV	7.4	1.7	4.7	5.7	0	2.76
F Test	0.0	<.0001	<.0001	0.0	0.0	<.0001

¹Yields 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.