

**Table 4. 2007 Irrigated Spring Barley Variety Performance Trial at Center<sup>1</sup>.**

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Variety	Source	Grain Yield <sup>2</sup> bu/ac	Bushel Weight lbs/bu	Heading Date <sup>4</sup> (June)	Grain Moisture %	Plant Height in.	Grain Protein %	Grain Color %	Grain Screen <sup>5</sup> %
Ab 11720	ARS-Idaho	155.5 a <sup>3</sup>	52.5	30.0	12.0	32.1	9.8	39.6	2.2
01ST 1758	ARS-Idaho	148.3 ab	51.6	29.0	12.8	29.1	10.5	39.1	1.9
Alexis	ARS-Idaho	146.0 ab	51.7	32.8	15.4	30.3	11.0	41.7	2.6
Ab 11993	ARS-Idaho	146.0 ab	50.7	27.8	14.2	32.7	10.5	39.5	1.2
C84	Coors Brewing	143.5 abc	50.0	30.0	12.2	28.5	11.5	39.6	2.2
Baronesse	ARS-Idaho	141.8 abcd	51.3	29.3	11.5	29.7	9.7	36.7	2.0
C106	Coors Brewing	139.0 abcde	50.3	30.3	12.8	28.5	11.0	36.2	2.0
Scarlet	Rio Grande Co	134.2 bcdefg	49.9	29.8	12.4	34.2	10.8	43.2	1.5
Ab13449	ARS-Idaho	134.1 bcdefg	48.5	22.0	13.4	31.5	10.3	38.2	6.3
Eslick	Montana St. U	133.8 bcdefg	51.7	31.3	14.1	32.1	11.3	42.6	2.9
Legacy	Cargill	129.3 cdefg	48.6	26.0	12.8	34.5	11.3	41.1	2.7
Copeland	Cargill	124.4 efghij	49.8	31.5	14.1	34.2	11.0	44.2	1.6
C 69	Coors Brewing	124.2 efghij	49.9	33.3	12.5	27.6	10.4	40.2	1.9
C 699	Coors Brewing	122.5 fghijk	47.0	36.8	29.1	28.5	10.1	35.3	6.8
Craft	Montana St. U	118.9 ghijk	50.6	25.8	11.6	30.6	11.1	42.6	2.3
Clearwater	ARS-Idaho	112.7 hijkl	52.4	28.8	13.6	32.4	12.5	41.1	9.8
Herald	ARS-Idaho	110.0 ijkl	46.2	28.0	13.4	33.0	11.0	38.6	3.6
Mt960101	Montana St. U	108.3 jkl	50.6	32.0	17.1	29.4	11.6	41.9	2.8
Burton	ARS-Idaho	107.1 kl	50.7	32.5	12.9	29.4	10.4	40.7	1.6
Haxby	Montana St. U	100.9 l	50.0	32.8	13.8	27.6	10.9	39.9	3.9
<b>Trial Average</b>		<b>130.2</b>	<b>50.4</b>	<b>29.9</b>	<b>13.8</b>	<b>30.4</b>	<b>10.9</b>	<b>39.9</b>	<b>3.2</b>
<b>LSD, .10<sup>6</sup></b>		<b>16.3</b>	<b>1.16</b>	<b>4.32</b>	<b>2.81</b>	<b>1.67</b>	<b>N S</b>	<b>1.4</b>	<b>1.7</b>
<b>CV, %</b>		<b>10.6</b>	<b>2.0</b>	<b>12.3</b>	<b>17.3</b>	<b>4.7</b>	<b>7.8</b>	<b>2.9</b>	<b>45</b>

<sup>1</sup> Trial conducted at the San Luis Valley Research Center, 0249 E Road 9 North, Center, CO.<sup>2</sup> Yield based on 48 lbs/bu and 12% moisture.<sup>3</sup> Yields followed by the same letter (Tukey's Test) are in the same statistical yield group.<sup>4</sup> Days after June 1.<sup>5</sup> Grain screenings: the percent that falls through 6/64 inch screen.<sup>6</sup> Means must differ more than LSD or one is likely not superior.

**Important Note:** Crop growth was affected by a residual soil problem; now determined to be from a heavy infestation of Cereal Cyst Nematode. Trial variability was high like last year and for the same reason. Some varieties may have more tolerance to CCN. Cultivars with less tolerance would perform relatively poorly in this trial.

**Site Information:****Soil Type:** Norte gravelly sandy loam**Irrigation:** center pivot irrigation = ET.**Planted:** April 16**Previous Crop:** potatoes**Herbicide:** Bronate at 1.6 pt/acre**Harvest:** August 28**Fertilizer:** Nitrogen; 95 #/ac dry preplant + 30 #/ac fertigation**Comments:**

\*\* Cargill Malt entered 5 unknown varieties in this trial; results are not shown in public information.

\*\* Grain yields were fairly good, ranging from 101- 156 bu/acre; the average yield was 130 bu/acre. Yields were similar and statistical precision was about as good as last year; indicated by the CV = 10.6 %. LSD at 10% was 16.3 bu/acre.

\*\* Weed control was good this year.

\*\* Color readings are shown as measured; but may be skewed by maturity. Early maturing varieties stayed in the field longer after maturity. Data may be of some interest anyway. Many rains and showers and heavy dew reduced color again this year; it ranged from 35-42 and averaged only 40, same as last year but lower than the 68 two years ago.

\*\* Heading dates were late because planting was late again this year; heading dates were similar to last year, from June 22 - July 3.

\*\* Plant height varied from 28 - 34 inches; fewer tall entries this year.

\*\* Lodging was low again this year; higher nitrogen rates would have increased plant lodging and impacted yield of some taller entries.

\*\* Protein was low ranging from 9.7 - 12.5%.

\*\* Screening % was very low for most entries; however, a few entries were up to 10%.

### **Variety Performance:**

Only 9 varieties made up the top yield group this year with a top yield almost as high as last year. The top yield was 156 bu/acre and the average of all varieties was 130 bu/acre. Varieties that have yielded very well in both 2006 and 2007 include: Ab11720, 01ST1758, and AB 11993 with Ab13449, Eslick and Legacy performing almost as well both years.