

## 2005 Irrigated spring barley variety performance trial at Center<sup>1</sup>.

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Variety	Source	Grain Yield <sup>2</sup>	Bushel Weight	Heading Date <sup>3</sup>	Grain Moisture	Plant Height	Plant Lodging	Grain Protein	Grain Color	Grain Screen <sup>4</sup>
		bu/ac	lbs/bu	(June)	%	in.	%	%		%
Ab 13449	Idaho	172.7	50.8	15.0	13.9	39.3	0.0	9.1	68	1.6
COO36-25	Coors	167.2	51.7	29.0	15.0	31.5	0.0	9.9	64	1.4
Eslick	Montana	166.7	52.6	20.8	13.9	30.9	10.0	10.4	70	0.5
Comarque	Seed Sol'n	162.6	53.4	24.5	14.7	27.0	0.0	10.0	62	0.7
Baronesse	Idaho	162.2	52.9	22.3	14.3	31.5	2.5	10.2	62	0.5
01ST-1758	ARS	161.7	52.8	21.3	13.9	31.2	1.3	10.0	62	0.6
D02-08-3322	Coors	159.8	51.9	29.3	14.4	27.3	0.0	9.6	62	0.5
Alexis	RG Com. Co	157.8	53.9	26.8	14.6	29.4	0.0	10.4	61	0.7
C 69	Coors	157.3	51.7	25.5	15.3	26.4	0.0	9.4	63	0.6
Mt960101	Montana	156.3	52.2	22.5	14.4	33.9	5.0	10.0	66	0.9
Lacey	Cargill	150.2	51.6	17.5	14.1	38.7	2.5	10.3	70	1.1
C 14	Coors	149.7	52.9	17.8	15.4	27.0	0.0	10.8	71	0.7
Triumph	Seed Sol'n	148.4	52.7	25.5	14.6	28.2	0.0	9.8	70	0.9
Copeland	Cargill	148.0	52.6	25.3	14.5	37.2	0.0	10.6	81	0.2
C 37	Coors	146.6	52.6	23.3	14.8	27.3	0.0	10.2	58	0.4
Burton	Idaho	143.6	51.7	24.5	15.0	33.0	0.0	10.1	73	0.7
01ST1587	Cargill	140.9	52.8	20.3	14.4	32.7	0.0	9.9	66	0.5
Metcalfe	Cargill	140.7	53.4	22.5	14.5	34.8	3.8	10.8	81	0.4
Creel	Idaho	140.5	52.0	23.3	15.0	32.4	0.0	10.4	73	0.6
Haxby	Montana	139.9	52.1	20.5	14.1	35.1	1.3	10.3	68	0.6
Metcalfe	CO-OP	139.3	52.5	21.8	14.6	33.3	0.0	10.8	81	0.4
Harrington	Canada	138.1	53.3	23.0	14.1	33.6	15.0	10.6	78	0.6
Mt910189	Montana	137.9	53.5	19.3	14.8	32.4	18.8	11.1	74	0.4
Ab 11993	Idaho	137.5	50.8	11.5	14.5	37.2	0.0	10.2	62	1.3
Drummond	Cargill	134.0	49.9	19.0	13.9	40.2	0.0	10.8	73	1.0
Mt 970116	Montana	131.2	53.2	18.8	15.2	35.1	2.5	10.9	75	0.5
Robust	Cargill	127.6	53.1	18.0	15.0	41.4	3.8	11.3	74	1.6
Conlon	Cargill	112.2	51.9	14.0	14.6	36.9	0.0	12.0	78	0.2
<b>Trial Average</b>		<b>144.9</b>	<b>52.0</b>	<b>20.7</b>	<b>14.6</b>	<b>33.2</b>	<b>2.8</b>	<b>10.6</b>	<b>68.0</b>	<b>0.67</b>
LSD <sub>(0.10)</sub>		10.9	.91	1.2	.92	2.1	9.5	.53	5.1	.38
CV%		6.4	1.5	5.0	5.3	5.5	301	4.3	6.5	47.5

<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>Days after June 1.

<sup>4</sup>Grain screenings: percent that falls through 6/64 inch screen.

### Site Information:

**Soil Type:** Norte gravelly sandy loam

**Irrigation:** center pivot irrigation = ET.

**Previous Crop:** potatoes

**Herbicide:** Bronate at 1.6 pt/acre mostly missed plot area

**Planted:** April 6

**Harvest:** August 22,23,24

**Fertilizer:** Nitrogen; 70 #/ac dry preplant + 30 #/ac fertigation

**Comments:**

- Grain yields were very good, ranging from 105.5 - 172.7 bu/acre. Statistical precision was great as indicated by the CV = 6.4%. LSD at 10% was only 10.9 bu/acre.
- Plots were weedy as the chemigation started after passing the barley plot area. Weeds were sprayed in gaps between plots but the plots were weedy; sprayed with 2,4-D for harvest aid.
- Color readings may be skewed by maturity; early maturing varieties stayed in the field after maturity. Data may be of some interest to you. Color ranged from 40 - 81.
- Bushel weight differences are noticeable between 2-row and 6-row barleys. Range = 47.8 - 53.5 lbs/bushel.
- Heading dates vary from June 10 - June 29.
- Grain moisture could be skewed by harvesting three days before all was finished; small rain squalls ran us out of the field Monday, Tuesday and also Wednesday.
- Plant height varies from 26 - 41 inches.
- Lodging was low considering the height of some entries; higher nitrogen rates would have increased plant lodging and impacted yield of some taller entries.
- Protein was low ranging from 9.1 - 13.2%. Higher protein was associated with lower yielding entries.
- Screening % was very low; definitely reduced by running samples over grain cleaner with too much air.