

1997

**Colorado  
State  
University**

**SPRING FEED & MALT BARLEY  
&  
SPRING OATS  
VARIETY TRIAL DATA**



**CENTER  
&  
FRUITA**

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**1997 Irrigated Feed Barley Variety Trial, San Luis Valley, Colorado. By Merlin Dillon, Area Extension Agent, Agronomy. Grain yield based on 48 lbs/bushel and 12% moisture.**

Source	Cultivar	Grain Yield	Test Weight	Heading Date	Plant Height	Plant Lodging
		bu/acre	lbs/bu	**	inches	%
Westbred	Nebula	203 a <sup>1</sup>	48.5	27.0	35.7	0.0
Westbred	WB 501	182 b	51.1	24.8	35.4	0.0
Coors	Moravian 14	170 bc	53.4	21.8	33.6	0.0
Idaho	Payette	169 bc	49.9	28.8	36.0	0.0
Idaho	Colter	164 bcd	48.7	19.3	46.2	26.3
Westbred	Baronesse	159 cd	51.9	23.0	36.6	13.8
Arkansas Valley	AVS 6597	147 de	48.5	17.5	41.4	10.0
Arkansas Valley	AVS 6C97	137 e	48.6	18.5	42.0	25.0
<b>Means</b>		<b>166</b>	<b>50.1</b>	<b>22.6</b>	<b>38.4</b>	<b>9.4</b>
LSD <sub>(.05)</sub>		19.7	1.3	1.2	2.4	18.2

\*\*Date 50% of the plants headed; days after June 1.

<sup>1</sup>Duncan's Multiple Range Test; yields followed by the same letter are not statistically different.

**Location:** San Luis Valley Research Center

**Planted:** April 8

**Seeding Rate:** 100 lbs acre<sup>-1</sup>

**Soil Type:** Sandy Loam

**Fertilizer:** Nitrogen @ 99 lbs/acre; Phosphate @ 100 lbs acre<sup>-1</sup>

**Herbicide:** Buctril chemigated @ 1 pt acre<sup>-1</sup>

**Harvested:** August 21

**Plot Size:** 6 ft. X 26 ft.

**Irrigation:** Center Pivot

**COMMENTS:** Barley yields were exceptionally high this year; averaging 166 bu/acre. All of the varieties performed satisfactory with only minimal plant lodging. Nebula, a new entry from Westbred, produced the highest yield (203 bu/ac) followed by WB 501 (182 bu/acre). Moravian 14 produced 170 bu/acre, an outstanding yield. Payette also produced 169 bu/acre. Many growers prefer early maturity and standability which includes WB 501 and Moravian 14.

**1997 Irrigated Malt Barley Variety Trial, San Luis Valley, Colorado. By Merlin Dillon, Area Extension Agent, Agronomy. Grain yield based on 48 lbs/bushel and 12% moisture.**

Cultivar	Grain Yield	Test Weight	Heading Date	Plant Height	Plant Lodging	Grain Protein	Grain Screenings
	bu/acre	lbs/bu	**	inches	%	%	%
Stander	173 a <sup>1</sup>	50.8	22.5	46.4	32	11.0	6.0
Moravian 19	165 ab	53.2	29.0	33.9	0	10.3	3.3
Comarque	162 abc	53.6	30.3	35.1	0	10.1	3.6
C 32	162 abc	52.4	29.3	31.8	0	10.3	4.8
Moravian 14	161 a--d	54.0	23.3	34.2	0	9.8	4.2
AVS 1651	158 a---e	53.4	29.0	33.9	0	10.9	0.9
Russell	158 a---e	49.9	20.5	47.7	15	10.3	3.1
Triumph	156 a----f	52.5	30.8	35.7	0	11.3	7.5
AVS51817	154 a----f	53.6	30.3	39.0	0	10.2	2.7
Moravian 22	151 a----f	52.3	29.8	36.6	0	10.3	1.4
2B91-4947	150 b---f	51.3	27.8	42.6	37	10.5	6.6
C 27	148 b---f	52.2	26.5	30.0	0	10.2	1.7
C 28	147 b---f	51.9	27.0	32.7	0	10.5	3.4
B 1202	143 b---f	51.8	25.8	43.2	33	11.0	2.5
Harrington	143 b---f	52.1	25.8	39.6	39	10.6	3.2
Crystal	139 c--f	54.1	29.0	40.2	26	11.1	2.0
Ab 321	139 def	51.5	20.8	41.4	19	12.1	1.3
Ab2317	135 ef	53.1	26.0	40.2	21	9.5	1.4
Ab 2323	135 ef	52.1	23.3	41.4	68	11.5	7.5
B93-2978	134 f	50.0	24.3	48.0	65	11.5	7.3
Morex	109 g	48.9	21.8	47.4	84	12.2	10.7
<b>Means</b>	<b>149</b>	<b>52.1</b>	<b>26.3</b>	<b>39.0</b>	<b>21</b>	<b>10.7</b>	<b>4.0</b>
LSD <sub>(.05)</sub>	19.4	1.1	1.7	2.4	22	1.1	2.8

\*\*Date 50% of the plants headed; days after June 1.

<sup>1</sup>Duncan's Multiple Range Test; yields followed by the same letter are not statistically different.

**Planted:** April 10

**Seeding Rate:** 100 lbs acre<sup>-1</sup>

**Soil Type:** Sandy Loam

**Fertilizer:** Nitrogen @ 99 lbs/acre; Phosphate @ 100 lbs acre<sup>-1</sup>

**Herbicide:** Buctril chemigated @ 1 pt acre<sup>-1</sup>

**Harvested:** August 21

**Plot Size:** 6 ft. X 26 ft.

**Irrigation:** Center Pivot

The irrigated spring oat trial at the San Luis Valley Research Center was not harvestable. The farmer's field showed severe residual herbicide damage in streaks. The damage ranged from 30% to 90% damage.

**1997 Irrigated Spring Feed Barley Variety Trial, Fruita Research Center, Colorado. By Harold Golus, Superintendent. Grain yield based on 48 lbs/bushel and 12% moisture.**

Cultivar	Grain Yield	Grain Moisture	Test Weight	Plant Height	Heading Date	Plant Lodging	Lodging Intensity
	bu/ac	%	lbs/bu	inches	**	%	0-5
Steptoe	142	10.2	47.0	32	62	10.0	1
Baronesse	130	10.1	48.9	28	64	21.3	2
Camarque	122	10.3	49.0	29	70	11.3	2
Triumph	116	10.0	48.0	29	70	28.8	2
Otis	93	10.0	47.6	30	62	87.5	4
<b>Means</b>	<b>121</b>	<b>10.1</b>	<b>48.1</b>	<b>29</b>	<b>66</b>	<b>31.8</b>	<b>2</b>
CV%	8.7						
LSD <sub>(.3)</sub>	6						

\*\*Date 50% of the plants were headed; days after planting date.

**Planted:** March 26, 1997

**Harvested:** July 24, 1997

**Seeding Rate:** 100 lbs acre<sup>-1</sup>

**Plot Size:** 5 ft. x 42 ft.

**Soil Type:** Younston Clay Loam

**Irrigation:** furrow (5 applications)

**Fertilizer:** 120 lbs N acre<sup>-1</sup> following sweet corn

**Insecticide:** 1 pt. Lorsban acre<sup>-1</sup>

**Herbicide:** ½ oz Harmony Extra; 4 oz 2,4-D acre<sup>-1</sup>

**COMMENTS:** Outstanding year for spring barley - additional 20 lbs nitrogen fertilizer may have helped.

**1997 Irrigated Spring Oat Variety Trial, Fruita Research Center, Colorado. By Harold Golus, Superintendent. Grain yield based on 38 lbs/bushel and 12% moisture.**

Cultivar	Grain Yield	Grain Moisture	Test Weight	Heading Date	Plant Height	Plant Lodging	Lodging Intensity
	bu/ac	%	lbs/bu	**	inches	%	0-5
Rio Grande	139	11.3	36.5	68	39	92.5	4
Border	136	11.5	35.5	70	39	92.5	4
Poturoo	113	11.6	33.9	62	22	13.8	1
Ajay	110	11.4	35.0	72	31	42.5	3
Monida	105	12.0	34.2	74	38	93.8	4
Powell	103	12.0	34.9	73	37	90.0	4
<b>Means</b>	<b>118</b>	<b>11.6</b>	<b>35.0</b>	<b>70</b>	<b>34</b>	<b>70.8</b>	<b>3</b>
CV%	7.7						
LSD <sub>(.3)</sub>	4						

\*\*Date 50% of the plants were headed; days after planting date.

**Planted:** March 31, 1997

**Harvested:** August 20, 1997

**Seeding Rate:** 90 lbs acre<sup>-1</sup>

**Plot Size:** 5 ft. x 40 ft.

**Soil Type:** Younston Clay Loam

**Irrigation:** furrow (7 applications)

**Fertilizer:** 120 lbs N acre<sup>-1</sup> following corn

**Insecticide:** 1 pt. Lorsban acre<sup>-1</sup>

**Herbicide:** ½ oz Harmony Extra; 4 oz 2,4-D acre<sup>-1</sup>

**COMMENTS:** As in previous years, lodging a problem in oats.