

2006 irrigated spring barley performance trial at Yellow Jacket, CO<sup>1</sup>

Entry	Type	Grain	Moisture	Test		Plant Height	Heading Date <sup>3</sup>
		Yield <sup>2</sup>		Weight	Lodging		
		bu/ac	%	lb/bu	%	in	days
Baronesse+Gaucho	feed, 2-row	123.8	9.5	50.2	30	28	195
00ID1550+Gaucho	feed, 6-row	123.7	9.8	45.6	0	33	191
Comarque+Gaucho	feed, 2-row	120.1	9.9	49.2	30	27	195
Nebula	feed, 6-row	119.9	9.5	47.6	0	25	202
Burton	feed, 2-row	119.9	9.6	51.6	5	33	195
01ST1758	feed, 2-row	116.7	9.5	50.2	10	27	191
01ST1587	feed, 2-row	116.2	9.7	50.2	25	28	191
Comarque	feed, 2-row	115.5	9.6	51.1	20	27	202
Eslick	feed, 2-row	112.3	9.6	51.1	35	30	198
Haxby	feed, 2-row	106.9	9.3	51.6	0	29	195
Baronesse	feed, 6-row	106.8	9.9	50.9	50	27	195
Alexis	malt, 2-row	106.5	9.6	50.9	20	27	202
00ID1550	feed, 6-row	105.0	10.0	44.9	0	31	191
Triumph	malt, 2-row	103.0	9.8	49.6	50	27	202
<b>Average</b>		<b>114.0</b>	<b>9.7</b>	<b>49.6</b>		<b>28</b>	
CV%		8.6					
LSD <sub>(0.05)</sub>		14.1					

<sup>1</sup>Trial conducted at the Southwestern Colorado Research Center: seeded 5/12/06 and harvested 10/2/06.

<sup>2</sup>Yield based on 48 lb/bu and 12% moisture.

<sup>3</sup>Number of days after January 1.

**Site Information:**

Soil type: Wetherill silty clay loam  
 Previous crop: Dry beans; two-years ago: winter wheat  
 Seeding rate: 100 lb/ac (8-inch row spacing)  
 Fertilizer: 50 lb N/ac broadcast preplant (May 10, 2006)  
 Herbicide: Curtail M 2 pt/ac (June 17, 2006)  
 Insecticide: None  
 Irrigation: 17.6 inches (7 sprinkler wheel-line passes)  
 Precipitation: January 1, 2006 thru August 31, 2006: 6.9 inches  
 (long-term average 9.7 inches)

**Comments:**

The trial averaged 114.0 bu/ac with a test weight of 49.6 lb/bu. The trial was designed to compare Russian wheat aphid (RWA) resistant entries with commercial varieties. The entries 01ST1587 and 01ST1758 are RWA resistant experimental lines from the USDA-ARS at Aberdeen, ID. 00ID1550 is a hulled low-phytate barley with no RWA resistance. Burton is a RWA resistant variety that was released in 2004.

Baronesse, 00ID1550, and Comarque were treated with Gaucho seed insecticide. Gaucho is a systemic seed insecticide with good efficacy on aphids. There was high RWA feeding pressure in 2006 with symptoms readily observed in the non-RWA resistant entries. RWA symptoms were first observed in late June. The symptoms included twisted heads on 00ID1550, Alexis, and Triumph. The trial results illustrate the yield reduction caused by RWA feeding.