

Busch Agricultural Resources, Inc.

Malting Barley Variety Evaluation in Large Plots 2007

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The University of Wyoming, Powell Research and Extension Center in cooperation with Busch Agricultural Resources conducted a study designed to evaluate the grain yield and quality characteristics of six malting barley varieties. The varieties were planted in 1.0 acre strips and managed using the best management practices for the soil and growing conditions at the University of Wyoming Research and Extension Center in Powell, Wyoming during 2007.

Materials and Methods

The soil was a Garland clay loam (fine, mixed, mesic; Typic Haplargid) and had a cropping history of: 2006, beets; 2005, barley; and 2004, beets. The soil was fertilized for a yield goal of 100 bushels of grain per acre. Fertilizer was applied on 16 March, at the rate of 120 pounds N and 50 pounds P₂O₅, in the form of urea (46-0-0) and diammonium phosphate (11-52-0). The soil in the study area was prepared for planting by spring vibra shanking and roller harrowing. On 22 March, six barley varieties were established in plots 64 feet by 700 feet using a Case IH drill with double disk openers set at a row spacing of 6 inches. Seeding depth was 1.5 inches, and the seeding rate was 100 pounds of seed per acre. Weeds were controlled by a post application of a tank mixture of bromoxynil and MCPA (Bronate Advanced-1 pt) and pinoxaden (Axial-8 oz) broadcast at 0.50, 0.50, and 0.05 pounds active ingredient per acre on 16 May. Furrow irrigations were 17 May, 4 June, 20 June, 2 July and 12 July. Plots were harvested using an IH 1440 Axial flow combine on 31 July. 150 lbs of each variety was sub-sampled and sent to Busch Agricultural Resources for quality evaluation. The results are as follows:

Variety	Grain Yield	Height	Lodge 1=upright 9=flat	Heading Date	Test	Splits & Broken	Thin	Plump	Protein
	bu/a	in	1-9	June	Lb/bu	%	%	%	%
Conrad	141	33.5	2	14	50.7	1.3	1.3	96.6	9.8
Merit	139	32.7	3	18	47.7	0.4	1.9	93.6	9.3
2657	136	33.5	2	16	47.0	0.9	3.3	88.5	9.3
2316	133	33.1	2	15	48.0	0.8	3.2	87.0	9.2
Metcalf	128	39.0	3	15	49.7	2.4	1.7	95.4	9.4
Hockett	124	36.2	5	12	50.9	0.6	2.6	92.1	9.3