

2008 Irrigated Spring Barley Variety Performance Trial at Center¹.

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Variety	Source	Grain ₂ Yield ^{3/} bu/ac	Bushel Weigh t lbs/bu	Headin g Date ⁴ (June)	Grain Moisture %	Plant Lodgin g %	Plant Heigh t Inches	Grain Protei n %	Grain ⁵ Screen %
C69	Miller/Coors	197.6*	52.0	35.0	12.8	0.0	38.1	11.3	2.0
Ab13449	ARS Aberdeen	183.7*	48.5	22.8	11.1	25.0	41.7	9.8	5.1
Tetonia	ARS Aberdeen	173.1	51.7	32.8	16.4	76.3	40.2	13.0	7.6
B3719	Busch Ag Res.	160.1	51.9	28.8	12.8	50.0	43.5	11.9	5.6
01ST1758	ARS Aberdeen	159.4	50.9	27.8	13.5	21.3	36.6	12.9	4.7
Alexis	Rio Grande Com.	158.6	51.5	37.3	13.3	5.9	35.7	13.0	5.0
Hockett	Mont. St. Univ.	155.0	52.2	26.8	15.0	23.8	38.7	13.6	3.8
Baronesse	ARS Aberdeen	151.3	50.2	28.5	14.3	38.8	36.3	12.2	5.6
Conrad	Busch Ag Res.	149.5	51.1	32.5	12.5	37.6	39.0	14.2	3.7
Craft	Mont. St. Univ.	140.9	51.6	27.5	10.9	6.3	40.5	13.2	0.3
Eslick	Mont. St. Univ.	138.5	50.8	28.0	13.3	72.5	38.7	13.0	4.4
Haxby	Mont. St. Univ.	136.7	51.7	32.3	12.1	55.9	39.0	12.4	3.0
Tradition	Busch Ag Res.	133.6	49.2	26.3	12.4	12.5	41.7	14.6	3.2
Scarlet	Rio Grande Com.	121.7	51.4	35.3	12.2	44.2	41.1	12.8	2.5
Trial Average		158.3	50.9	30.2	12.8	29.9	38.9	12.7	4.0
LSD, ₁₀⁶		15.9	0.73	3.1	1.55	25.9	3.79	4.51	2.8
CV, %		8.4	1.21	8.6	10.2	72.5	8.25	5.50	58.0

^{1/} Trial conducted at the San Luis Valley Research Center, 0249 E Road 9 North, Center, CO.

^{2/} Yield based on 48 lbs/bu and 12% moisture.

^{3/} The top yield group are marked with asterisk.

^{4/} Days after June 1.

^{5/} Grain screenings equal nonplump: the percent that falls through 6/64 inch screen.

^{6/} Means must differ more than LSD or cultivar yields are likely not different.

Important Note: Cereal Cyst Nematode has affected trials here at SLVRC in 3 of 4 years. The field area for small grain trials was fumigated with *Telone* with outstanding results this year. This trial averaged 158 bu/ac; the highest yielding cultivar produced 198 bu/ac.

Site Information:

Soil Type: Norte gravelly sandy loam

Irrigation: center pivot irrigated every three days as needed

Previous Crop: potatoes

Herbicide: Husky at 15oz/acre + Wildcard@1pt/ac

Planted: April 23

Harvest: August 27

Fertilizer: Nitrogen; 120 #/ac dry + 20 #/ac fertigation

****Several plots were damaged by potato herbicide remaining in the center pivot. These plots were not harvested.**

****Three cultivars were entered in the trial by Cargill Malt; results are not shown as per request.**

Comments: Nitrogen was applied at slightly higher rate this year resulting in more lodging and more harvesting difficulty. This probably increased the trial variability but it also revealed which cultivars resist lodging. Though the trial averaged 30% lodging, many varieties lodged less than 10% including C69, Alexis, and Craft. Yields were outstanding with the high yield of 198 bu/acre. The top statistical yield group consisted of only 2 cultivars: C69, and Ab13449.

Bushel weights were only average at 50.9#/bu. Plant height was much greater than the CCN affected barley last year. Since protein content and grain yield were both higher this year; this is probably a result of higher N application. Screenings were higher for most cultivars this year.