

2004 Barley Variety Trial - Continuously Cropped - No-till

Hettinger

Variety	Days to Head	Plant Height	Test Weight	% Plump	Grain Protein	---- Grain Yield ----			Average Yield	
						2002	2003	2004	2 yr	3 yr
		inches	Lbs/bu	>6/64	%	----- Bushels per acre -----				
Two Row Types										
Logan	73	22	50.7	96	12.2	33.3	90.8	68.1	79.4	64.1
Stark	74	27	52.0	97	12.5	30.6	84.9	70.2	77.6	61.9
Bowman	72	25	51.3	97	12.6	30.0	84.3	63.5	73.9	59.3
Valier	82	23	52.4	95	12.6	25.1	77.8	73.9	75.8	58.9
Conlon	70	24	50.5	97	11.8	23.9	96.4	44.5	70.4	54.9
Harrington	83	24	51.8	92	12.9	16.5	63.4	69.4	66.4	49.8
Eslick	82	22	52.8	97	11.6			78.3		
Haxby	79	23	53.4	97	12.0			76.9		
AC Metcalfe	82	22	51.5	96	12.2			68.3		
Six Row Types										
Lacey	76	25	51.0	96	12.3	24.3	82.6	67.2	74.9	58.0
Morex	78	28	49.7	92	11.9	23.1	83.3	66.0	74.6	57.5
Drummond	75	27	49.8	95	12.3	21.4	79.4	62.4	70.9	54.4
Robust	78	28	51.7	96	12.8	24.4	74.7	62.6	68.6	53.9
Foster	77	27	50.2	97	11.6	21.0	73.9	66.2	70.0	53.7
Stander	80	27	48.6	96	12.0	22.8	77.5	60.1	68.8	53.5
Tradition	79	25	50.7	95	12.6	19.3	77.3	62.0	69.6	52.9
Excel	78	26	49.4	96	11.8	20.0	71.1	66.7	68.9	52.6
Legacy	79	26	49.9	95	12.2	18.5	68.7	67.6	68.2	51.6
Trial Mean	77	25	50.9	96	11.9	22.9	77.2	66.7	--	--
C.V. %	1.3	7.0	1.2	1.2	1.9	18.0	7.1	5.8	--	--
LSD .05	1	2	0.9	2	0.3	5.8	7.8	5.4	--	--
LSD .01	2	3	1.1	2	0.4	7.8	10.4	7.1	--	--

Planting Date: April 5, 2004

Harvest Date: August 2, 2004

Seeding Rate: 750,000 live seeds / acre (approx. 1.4 bu/A).

Previous Crop: 2001 = barley, 2002 & 2003 = soybean.

Notes: The 2002 trial sustained severe heat and moisture stress. The 2004 trial sustained hard frosts on May 13 (18° F), May 14 (16° F) and on June 18 (25° F).

2004 Barley Variety Trial - Continuously Cropped - No-till**Mandan**

Variety	Plant	Test	%	Grain	---- Grain Yield ----			Average Yield	
	Height	Weight	Plump	Protein	2001	2003	2004	2 yr	3 yr
	inches	Lbs/bu	>6/64	%	----- Bushels per acre -----				
Conlon	24	47.5	92	12.8	104.9	42.9	24.7	33.8	57.5
Robust	26	48.2	85	12.6	85.8	43.5	43.2	43.4	57.5
Haxby	23	49.8	84	12.6			56.1		
Drummond	27	47.0	91	11.9			48.1		
Tradition	23	47.1	89	12.6			41.3		
Trial Mean	24	47.7	89	12.4	87.6	45.2	43.6	--	--
C.V. %	10.3	1.1	3.1	2.5	5.9	11.7	16.3	--	--
LSD .05	NS	1.0	5	0.6	11.8	NS	12.9	--	--
LSD .01	NS	1.4	7	0.8	NS	NS	18.4	--	--

Planting Date: April 13, 2004

Harvest Date: August 13, 2004

Seeding Rate: 750,000 live seeds / acre (approx. 1.4 bu/A).

Previous Crop: 2000 – 2003 = Barley.

NS = no statistical difference between varieties.

Notes: The 2004 trial sustained moderate moisture stress.

2004 Barley Variety Trial - Continuously Cropped - No-till New Leipzig

Variety	Plant	Test	%	Grain	--- Grain Yield ---			Average Yield	
	Height	Weight	Plump	Protein	2002	2003	2004	2 yr	3 yr
	inches	Lbs/bu	>6/64	%	----- Bushels per acre -----				
Robust	22	47.8	87	14.2	12.0	43.1	32.6	37.8	29.2
Conlon	19	47.5	93	13.2		44.2	27.4	35.8	
Drummond	20	46.2	88	12.9			38.9		
Tradition	20	46.5	86	13.0			34.7		
Trial Mean	20	46.7	89	13.1	11.9	46.0	34.2	--	--
C.V. %	7.4	1.4	2.6	2.7	17.8	5.7	11.1	--	--
LSD .05	NS	1.0	4	0.5	--	NS	5.9	--	--
LSD .01	NS	1.4	5	0.8	--	NS	8.3	--	--

Planting Date: April 14, 2004

Harvest Date: August 11, 2004

Seeding Rate: 750,000 live seeds / acre (approx. 1.4 bu/A).

Previous Crop: 2001 – 2003 = Lentil.

NS = no statistical difference between varieties.

2004 Barley Variety Trial - Continuously Cropped - No-till

Scranton

Variety	Plant Height	Lodging	Test Weight	% Plump	Grain Protein	---- Grain Yield ----			Average Yield	
						2002	2003	2004	2 yr	3 yr
	inches	0 – 9*	Lbs/bu	>6/64	%	----- Bushels per acre -----				
Robust	35	3.0	48.4	86.0	13.7	42.4	58.5	75.4	67.0	58.8
Drummond	35	2.8	47.0	81.8	12.6			89.9		
Tradition	33	2.0	47.2	86.0	13.0			81.1		
Conlon – destroyed by wildlife										
Trial Mean	34	2.1	47.2	87.6	12.6	42.1	64.3	82.1	--	--
C.V. %	2.6	20.2	2.5	3.8	2.7	14.4	11.5	6.5	--	--
LSD .05	1	0.7	NS	NS	0.6	--	--	8.5	--	--
LSD .01	NS	NS	NS	NS	0.8	--	--	12.2	--	--

Planting Date: April 14, 2004

Harvest Date: August 16, 2004

Seeding Rate: 750,000 live seeds / acre (approx. 1.4 bu/A).

Previous Crop: 2001 – 2003 = Lentil.

*Lodging: 0 = none, 9 = lying flat on ground.

NS = no statistical difference between varieties.

2004 Barley Variety Trial - Continuously Cropped - No-till

Selfridge

Variety	Plant Height inches	Lodging 0 – 9*	Test Weight Lbs/bu	% Plump >6/64	Grain Protein %	---- Grain Yield ----			Average Yield	
						2002	2003	2004	2 yr	3 yr
						----- Bushels per acre -----				
Two Row Types										
Conlon	36	1.8	51.4	98.0	12.2	21.7	58.6	81.7	70.2	54.0
Six Row Types										
Robust	44	5.0	50.5	91.6	12.3	17.5	50.6	66.3	58.4	44.8
Tradition	40	3.8	49.8	92.8	11.5			87.9		
Drummond	40	4.0	49.1	92.2	11.9			87.4		
Trial Mean	40	3.0	49.8	94.4	11.8	19.9	57.3	82.0	--	--
C.V. %	4.2	26.4	0.9	1.1	2.2	10.7	7.0	7.5	--	--
LSD .05	3	1.2	0.7	1.7	0.4	3.2	6.1	9.5	--	--
LSD .01	4	1.7	1.0	2.3	0.6	NS	NS	13.3	--	--

Planting Date: April 13, 2004

Harvest Date: August 11, 2004

Seeding Rate: 750,000 live seeds / acre (approx. 1.4 bu/A).

Previous Crop: 2001 – 2003 = Lentil.

*Lodging: 0 = none, 9 = lying flat on ground.

NS = no statistical difference between varieties.