

Oat in the West River Region**Combined Means**

Variety	Days to Head	Plant Height	Seeds / Pound	Test Weight	---- Grain Yield ----			Average Yield	
					2005	2006	2007	2 yr	3 yr
		inches	#	lbs/bu	----- Bushels per acre -----				
Killdeer	66	34	16,864	35.9	112.5	63.1	100.2	81.6	91.9
Maida	65	39	15,523	36.4	98.9	54.1	96.6	75.4	83.2
Beach	65	38	16,336	36.2	100.6	57.0	86.8	71.9	81.5
Morton	66	40	16,440	35.3	98.5	54.7	86.0	70.4	79.7
Souris	66	33	18,151	36.2		56.2	96.4	76.3	
Jerry	64	37	16,364	36.8		60.5	88.1	74.3	
Stark (hulless)	68	38	18,473	37.3			56.9		
# of Locations*	2	6	2	6	3	5	6	11	14

* Locations:2006 = Hettinger, Dickinson, New Leipzig, Selfridge, Mandan & Bison, SD.
2005 = Hettinger, Dickinson, New Leipzig, Selfridge & Mandan.
2005 = Hettinger, Dickinson & Selfridge.

2007 Oat Variety Trial - Continuously Cropped - No-till Mandan

Cooperator: USDA-ARS NGP Research Center, Mandan

Variety	Plant	Test	----- Grain Yield -----			Average Yield		
	Height	Weight	2004	2006	2007	2 yr	3 yr	
	inches	lbs/bu	----- Bushels per acre -----					
Killdeer	35	38.0	86.1	53.3	124.5	88.9	88.0	
Beach	41	36.9	64.2	44.4	126.1	85.2	78.2	
Morton	43	37.2	60.8	47.0	119.9	83.4	75.9	
Souris	37	38.0		50.4	141.5	96.0		
Maida	41	38.5		51.1	136.8	94.0		
Jerry	37	37.6		54.8	111.5	83.2		
Stark*	40	38.5			87.7			
Trial Mean	39	37.8	67.0	50.2	121.9	--	--	
C.V. %	3.3	3.9	9.5	11.3	6.5	--	--	
LSD .05	2	NS	11.6	NS	13.9	--	--	
LSD .01	3	NS	16.5	NS	19.3	--	--	

*Stark is a naked (hulless) type.

Planting Date: April 24, 2007

Harvest Date: August 3, 2007

Seeding Rate: 750,000 live seeds / acre (approx. 1.7 bu/A).

Previous Crop: 2003 = barley, 2005 & 2006 = hrww.

NS = no statistical difference between varieties.

Note: The 2006 trial sustained moderate heat and moisture stress.

2007 Oat Variety Trial - Continuously Cropped - No-till New Leipzig

Cooperator: Daryl Birdsall, New Leipzig

Variety	Plant	Test	----- Grain Yield -----			Average Yield		
	Height	Weight	2003	2006	2007	2 yr	3 yr	
	inches	lbs/bu	----- Bushels per acre -----					
Killdeer	29	38.9	72.7	25.8	65.1	45.4	54.5	
Morton	34	39.1	50.4	22.3	63.9	43.1	45.5	
Maida	31	38.3		24.2	80.4	52.3		
Jerry	32	39.6		25.0	71.4	48.2		
Beach	33	37.8		23.1	59.5	41.3		
Souris	28	39.2		15.2	66.8	41.0		
Stark*	33	42.8			33.7			
Trial Mean	31	39.4	57.7	22.6	63.0	--	--	
C.V. %	2.7	2.5	12.9	13.8	11.9	--	--	
LSD .05	1	1.5	11.5	4.7	11.1	--	--	
LSD .01	2	2.0	16.1	6.5	15.2	--	--	

* Naked (hulless) type

Planting Date: April 24, 2007

Harvest Date: August 1, 2007

Seeding Rate: 750,000 live seeds / acre (approx. 1.7 bu/A).

Previous Crop: 2002 = lentil, 2005 & 2006 = hrww.

NS = no statistical difference between varieties.

Note: The 2006 trial sustained severe heat and moisture stress.

2007 Oat Variety Trial - Continuously Cropped - No-till Selfridge

Cooperator: Nick Vollmuth, Selfridge

Variety	Plant	Test	----- Grain Yield -----			Average Yield		
	Height	Weight	2005	2006	2007	2 yr	3 yr	
	inches	lbs/bu	----- Bushels per acre -----					
Killdeer	41	30.9	110.2	38.3	117.6	78.0	88.7	
Souris	38	34.1	99.4	36.3	118.4	77.4	84.7	
Beach	45	34.7	92.3	35.0	107.1	71.0	78.1	
Maida	46	33.3	101.0	21.0	96.1	58.6	72.7	
Morton	47	32.2	97.7	28.1	89.6	58.8	71.8	
Jerry	44	34.7		40.0	100.7	70.4		
Stark*	43	33.3			65.8			
Trial Mean	43	33.3	101.4	33.1	99.3	--	--	
C.V. %	3.6	2.3	8.4	11.2	4.8	--	--	
LSD .05	2	1.1	NS	5.6	7.1	--	--	
LSD .01	3	1.6	NS	7.7	9.7	--	--	

*Stark is a naked (hulless) type.

Planting Date: April 24, 2007

Harvest Date: August 4, 2007

Seeding Rate: 750,000 live seeds / acre (approx. 1.7 bu/A).

Previous Crop: 2004 = lentil, 2005 & 2006 = hrww.

NS = no statistical difference between varieties.

Note: The 2006 trial sustained severe heat and moisture stress.

2007 Oat Variety Trial – Continuously Cropped - No-till

Hettinger

Variety	Days to Head	Plant Height	Lodging	Test Weight	---- Grain Yield ----			Average Yield	
					2005	2006	2007	2 yr	3 yr
	*	inches	0 – 9**	lbs/bu	----- Bushels per acre -----				
Killdeer	68	35	2	37.4	89.3	104.7	78.0	91.4	90.7
Souris	68	37	1	38.4	100.6	82.3	74.7	78.5	85.9
AC Pinnacle	72	37	2	35.0	81.0	103.4	72.9	88.2	85.8
HiFi	70	39	1	36.5	98.1	88.6	69.0	78.8	85.2
Hystest	66	43	0	42.7	91.2	88.2	70.5	79.4	83.3
Jerry	65	40	0	39.2	84.9	92.4	70.4	81.4	82.6
Monida	72	38	3	37.2	79.9	100.0	67.6	83.8	82.5
AC Assiniboia	71	36	1	34.3	83.1	95.7	63.6	79.6	80.8
Beach	67	41	2	37.8	87.5	87.9	65.9	76.9	80.4
AC Ronald	70	37	0	37.5	87.2	86.8	63.1	75.0	79.0
Maida	66	41	1	37.6	77.7	90.0	68.9	79.4	78.9
Youngs	70	42	3	34.3	82.7	87.5	64.9	76.2	78.4
Morton	69	43	0	37.4	76.0	79.0	74.3	76.6	76.4
CDC Pacer	70	39	1	33.2	85.3	82.8	60.2	71.5	76.1
CDC Dancer	70	40	0	36.8	74.2	77.4	64.7	71.0	72.1
Otana	70	41	1	37.1	82.3	84.6	47.4	66.0	71.4
CDC Weaver	72	36	0	33.5	87.1	75.7	50.7	63.2	71.2
Buff***	62	34	0	44.5	78.5	67.2	52.2	59.7	66.0
Stark***	72	40	0	38.9	59.2	63.6	47.8	55.7	56.9
Paul***	72	39	1	38.6	44.8	40.6	29.2	34.9	38.2
Stallion	68	42	1	37.7		109.8	77.1	93.4	
Trial Mean	69	40	1	37.2	82.2	87.3	65.6	--	--
C.V. %	1.1	4.5	105	4.2	10.4	7.6	10.3	--	--
LSD .05	1	3	2	2.2	12.0	9.3	9.5	--	--
LSD .01	1	3	2	3.0	15.8	12.3	12.6	--	--

*Days to Head = the number of days from planting to emergence of panicle.

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

*** Naked (hulless) type.

Planting Date: April 17, 2007

Harvest Date: August 1, 2007

Seeding Rate: 750,000 live seeds / acre (approx. 1.7 bu/A).

Previous Crop: 2006 = HRSW, 2005 = fallow, 2004 = soybean.