



NEW VARIETIES FOR 2005 DISTRIBUTED BY MINNESOTA CROP IMPROVEMENT ASSOCIATION

INTRODUCTION

Following is a brief description of newly released varieties that will be available through the Minnesota Crop Improvement Association (MNCIA). MNCIA increased and will distribute Winona oats and Ulen spring wheat. Please note on the cover letter how to request seed of these varieties. MNCIA did not receive any new varieties for distribution from other states. Contact MNCIA (1-800-510-6242) if you have any questions.

Winona Oat

Winona, tested as MN98236, is an early oat variety with high yield potential and good lodging resistance. It was the earliest heading variety in Minnesota trials equal to Reeves and earlier than Moraine. Winona is similar to Richard for tolerance to crown rust and is rated moderately resistant to smut and moderately tolerant to barley yellow dwarf virus. Winona is slightly shorter than Moraine with better straw strength. It has yellow seed with slightly above average test weight and average groat percentage. See tables 1 and 2 for additional information. The variety is named after the southeastern Minnesota city of Winona. A variety development fee will be assessed on seed sold, released by the Minnesota Agricultural Experiment Station (MAES).

Ulen Spring Wheat

Ulen, tested as MN97803-A, is an early maturity hard red spring wheat with excellent yield potential across the state (see table 3). It was derived from a cross of (Grandin/Nordic)/HJ98. The heading date of Ulen is similar to Oklee and one day earlier than Oxen. In 3 years of testing at Minnesota locations Ulen has been among the highest yielding varieties in both northern and southern locations. The variety has above average protein levels and good test weight with medium high baking qualities. It is medium height with medium straw strength (see table 4). Ulen is resistant to stem rust and moderately resistance to leaf rust and other leaf diseases. The scab rating for Ulen is similar to Oxen (see table 5). The variety is named after the small town of Ulen in northwest Minnesota. Protection under the Title V provision of the US Plant Variety Protection Act is pending. A variety development fee will be assessed, released by the Minnesota Agricultural Experiment Station (MAES).

Ulen is available in 1 bushel bags, 40 bushel bulk totes and bulk. Please note in your request which you prefer.

Minnesota Oat Trials

TABLE 1: Grain yield (% of mean)

Variety	Test Weight lbs/bu	Groats %	Oat Yield % of nursery average	
			2001-2004	2003-2004
Esker	40.3	72.5	N/A	105 %
Drumlin	39.7	71.9	109 %	111
Gem	39.5	71.1	99	97
Moraine	40.1	72.9	98	97
Reeves	41.6	72.2	91	80
Richard	40.2	70.1	96	96
Winona	40.5	72.5	95 %	94 %
Average*	40.3	72.0	89 bu/acre	115bu/acre

* Averages include varieties not listed above

TABLE 2: Agronomic Characteristics & Disease Resistance

Variety	Days to heading	Height	Lodging Score	Smut Score	BYDV Score	2003 Crown Rust	
						Amount Infected	Reaction Type
Esker	65	38	2.0	MR	5	N/A	N/A
Drumlin	69	40	2.5	R	6	1	MR
Gem	67	41	2.7	MR	7	1	MR
Moraine	65	37	2.3	R	6	5	R-MR
Reeves	63	41	3.2	S	6	10	MR-MS
Richard	65	44	2.3	R	4	15	MR-MS
Winona	63	38	2.1	MR	6	5	MR
Average*	66.1	41	2.3				

* Averages include varieties not listed above

Minnesota Wheat Trials

TABLE 3: Grain Yield (% of mean)

Variety	North Average			South Average			State Average		
	2004	2 year	3 year	2004	2 year	3 year	2004	2 year	3 year
Alsen	99	96.6	98.4	92	91.4	89.6	95	93.6	93.4
Briggs	103	102.9	104.2	101	97.5	98.4	102	99.8	100.9
Granger	94	94.1	N/A	102	100.7	N/A	99	97.9	N/A
HJ98	109	111.0	108.4	89	99.1	99.5	98	104.2	103.9
Oklee	101	98.7	99.9	102	96.9	102.1	101	97.7	101.1
Oxen	95	96.0	96.7	96	103.6	106.3	96	100.4	102.2
Reeder	98	98.4	98.6	102	103.8	103.9	100	101.5	101.6
Steele-ND	98	100.8	N/A	108	102.8	N/A	103	102.0	N/A
Ulen	100	100.7	103.7	114	106.9	110.8	108	104.3	107.8
Walworth	100	98.9	100.6	98	100.3	102	99	99.7	101..4
Mean (bu/acre)	83	83	73	68	72	63	74	77	67
No. Environments	3	6	8	4	8	12	7	14	20

Minnesota Wheat Trials (continued)

TABLE 4: Agronomic Characteristics

Variety	Days to Heading	Height (inches)	Straw Strength	Test Weight (lb/bu)	Protein (%)	Falling Number**	Pre-Harvest Sprouting
				2 year	2 year		
Alsen	67.1	36.3	strong	61.6	15.1	403	R
Briggs	65.3	36.4	medium	61.7	14.6	493	R
Granger	66.3	40.2	medium	61.2	14.8	-	MR
HJ98	68.3	36.0	medium	59.8	14.1	400	MR
Oklee	65.6	35.2	medium	62.2	15.1	398	R
Oxen	66.5	36.7	m. strong	59.8	14.5	386	R
Reeder	67.6	38.9	strong	61.1	14.6	398	R
Steele-ND	67.5	38.6	medium	62.5	15.3	-	R
Ulen	66.0	37.8	medium	61.3	15.1	390	MS
Walworth	65.4	37.8	medium	60.2	14.7	387	R

** Falling number based on 7 environments from 2002 and 2003, data from USDA-ARS Wheat Quality Lab, Fargo

TABLE 5: Disease Resistance

Variety	Leaf Rust	Stem Rust	Other Leaf Diseases	Scab	
				Disease Severity	Grain Soundness
Alsen	MR	R	MR-R	MR	2.0
Briggs	R	R	MR	MR-MS	2.5
Granger	MR	R	MR	MR-MS	2.5
HJ98	MS	R	MS	MS	3.0
Oklee	MR-MS	R	MR	MR-MS	2.5
Oxen	MS-S	R	MS	MS-S	3.0
Reeder	MS	R	MR-R	MS	3.5
Steele-ND	R	R	MR	MS	2.5
Ulen	MR	R	MR-MS	MS	3.0
Walworth	MS	R	MS	MR-MS	2.5

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