



OAT

Oat varieties are classed into groups under the headings Recommended, Not Adequately Tested, Special Purpose, and Other. Variety descriptions are arranged alphabetically within these groups. The relative maturities of varieties are indicated in the tables as date of heading, measured as days after planting, and varieties are listed in the tables in order of maturity.

Crown Rust Caution

Crown rust infection has dramatically increased in Minnesota oat fields since 1990, and at least five new races have been identified in recent years. As a result, varieties previously reported to have good crown rust resistance are now known to be vulnerable. Varieties with little or no rust resistance should be grown with caution.

Recommended Varieties

Belle – Late maturity, high yield, tall, fair lodging resistance, high test weight and very high groat percentage, yellow seed. Resistant to crown rust and smut, some tolerance to red leaf. Selected at Wis. AES. Released in 1995. Foundation seed available to certified seed producers only under a license/fee collection agreement. **PVP (94)**

Gem – Medium-late maturity, high yield, medium height, good lodging resistance, high test weight and groat percentage, yellow seed. Resistant to crown rust and smut, good tolerance to red leaf. Selected at Wis. AES. Released in

1995. Foundation seed available to certified seed producers only under a license/fee collection agreement. **PVP (pending)**

Milton – Medium-late maturity, high yield, medium height, good lodging resistance, medium test weight and groat percentage, yellow seed. Small resistance to crown rust, resistant to smut, susceptible to red leaf. Selected at Minn. AES. Released in 1994. **PVP**

Special Purpose Varieties

Pal – Forage establishment only. Medium-late maturity, low grain yield, very short, good lodging resistance, low test weight, medium groat percentage, yellow seed. Moderately susceptible to crown rust, susceptible to red leaf, resistant to smut. Selected at Minn. AES. Released in 1994 as a special-purpose forage oat variety. Pal has good forage yield with high levels of crude protein and good relative feed value, although no forage data are provided in this publication.

Paul – Hulless. Medium-late maturity, high yield for hulless cultivar, tall, very good lodging resistance; hulless, so very high test weight. Moderately susceptible to crown rust and red leaf. Resistant to smut. Selected at N.D. AES. Released in 1994. **PVP (94)**

Varieties Not Adequately Tested
Ebeltoft – No Minnesota data, but it is tall and six days later than Jerry; ivory seed. Selected at N.D. AES. Released in 1999. **PVP (pending)**

Jay – Medium maturity, high yield, short, very good lodging resistance, medium test weight and groat percentage. Resistant to crown rust, susceptible to smut, some tolerance to red leaf, ivory seed. Selected at Purdue AES. Released in 1998. *Because of smut susceptibility, planting only treated seed is recommended.* **PVP (pending)**

Jud – Late maturity, high yield, very tall, poor lodging resistance. Very high test weight and groat percentage, white seed. Resistant to crown rust and smut, good tolerance to red leaf. Selected at N.D. AES. Released in 1998. **PVP (pending)**

Triple Crown – Late, medium yield, tall, very good lodging resistance, low test weight and groat percentage. Resistant to crown rust, moderately resistant to smut and susceptible to red leaf, white seed. Selected by the Svalöf Weibull Seed Company and distributed by Svalöf Weibull Seed Company, Lindsay, Ontario Canada. They can be contacted at www.swseed.ca.

Vista – Medium maturity, high yield, tall, average lodging resistance, medium test weight and groat percentage, yellow

Oat yield, bushels/acre by location, 1997-1999.

Variety	5-Location						Grand Rapids ¹
	Rosemount	Waseca	Lamberton	Morris	Crookston	Average	
Riser ³	59	57	58	92	104	74	78
Jerry	78	68	79	113	112	90	120
Rodeo	85	88	98	132	127	106	122
Blaze	85	75	92	104	119	95	134
Chaps	88	90	95	134	110	103	130
Gem	86	90	103	123	121	104	121
Vista ²	85	104	94	126	129	108	n/a
Milton	79	84	85	122	126	99	116
Jud ³	87	74	104	106	111	97	120
Belle	78	84	93	111	124	98	109
Paul ³	40	55	75	70	91	66	31
Triple Crown ²	48	103	70	83	147	90	n/a
LSD	7.6	9.2	12.3	16.1	13.0	5.4	21.7

¹ 1998 data only. ² 1999 data only. ³ 1998 and 1999 data only.

seed. Resistant to crown rust and smut, susceptible to red leaf. Selected at Wis. AES. Released in 1999. **PVP (pending)**

Youngs – No Minnesota data, but it is medium height and six days later than Jerry, white seed. Selected at N.D. AES. Released in 1999. **PVP (pending)**

Other Varieties

Blaze – Medium maturity, high yield, medium height, good lodging resistance, very high test weight and groat percentage. Ivory seed. Susceptible to rust and smut, very tolerant to red leaf. Selected at Ill. AES. Released in 1997. *Because of smut susceptibility, planting only treated seed is recommended.* **PVP (pending)**

Chaps – Medium maturity, high yield, good lodging resistance, high test weight and groat percentage. Yellow seed. Susceptible to crown rust and smut, tolerant to red leaf. Selected at Ill. AES. Released in 1997. *Because of smut susceptibility, planting only treated seed is recommended.* **PVP (pending)**

Dane – Early maturity, lower yield, short, good lodging resistance, fair test weight, high groat percentage, yellow seed. Moderately resistant to crown rust and smut, susceptible to red leaf. Selected at Wis. AES. Released in 1990. Foundation seed available to certified seed

producers only under a license/fee collection agreement. **PVP**

Don – Early maturity, medium yield, short, fair lodging resistance, medium test weight and groat percentage, low protein percentage, white seed. Susceptible to crown rust and red leaf, some resistance to smut. Selected at Ill. AES. Released in 1985. *Because of smut susceptibility, planting only treated seed is recommended.*

Ida – Late maturity, medium yield and height, good lodging resistance, fair test weight and groat percentage. Ivory seed. Susceptible to rust, moderately suscepti-

ble to smut and tolerant to red leaf. Selected at the Mich. AES. Released in 1997. *Because of smut susceptibility, planting only treated seed is recommended.* **PVP (pending)**

Jerry – Medium maturity, medium yield, tall, good lodging resistance, very high test weight, high groat percentage, ivory seed. Moderately susceptible to crown rust, susceptible to smut, tolerant to red leaf. Selected at N.D. AES. Released in 1994. *Because of smut susceptibility, planting only treated seed is recommended.* **PVP (94)**

Oat yield, bushels/acre at off-station locations, 1999 only.

	Roseau	Stephen	Winona*	Wells*	Madison*
Variety					
Riser	117	101	20	43	25
Jerry	129	144	40	29	73
Blaze	130	135	38	32	67
Rodeo	156	168	48	49	59
Chaps	141	138	37	48	71
Gem	120	145	44	49	51
Vista	177	131	n/a	n/a	n/a
Milton	158	136	47	40	40
Jud	178	145	40	46	47
Belle	154	143	36	55	61
Paul	95	101	28	32	44
Triple Crown	126	149	n/a	n/a	n/a
LSD	56.2	34.0	12.5	8.6	17.3

* These locations are pesticide-free/organic farmer fields and Madison is planted no-till.

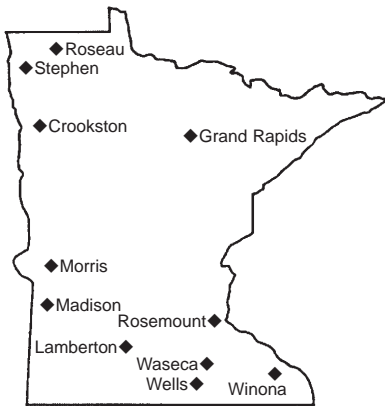
Oat traits, 1997-1999.

Variety	Days After Planting To Heading	Height Inches	Lodging, 1=Erect 5=Flat	Test Weight, Lb/Bu	Groat %	Crown Rust ¹	Smut Score ²	BYD Score ³
Riser	54	35	3.9	40	74.0	MR	MR	6.5
Jerry	59	41	3.8	39	69.7	S-MS	S	4.3
Rodeo	60	39	2.2	37	70.3	MS	MS	3.0
Blaze	60	38	3.3	38	71.0	MS	S	3.0
Chaps	60	38	3.4	38	70.3	MS	S	3.0
Gem	60	40	2.7	39	71.3	MR	R	3.0
Vista	61	41	2.5	38	69.7	HR	R	7.0
Milton	63	36	2.5	36	70.0	MS	MR	6.0
Jud	64	43	3.6	39	68.0	MR	R	4.5
Belle	46	41	2.5	39	73.7	MR	MR	6.5
Paul (hulless)	65	41	2.3	46	97.7	MS	MR	5.5
Triple Crown	69	43	1.8	34	66.7	R	MR	6.5
Mean	61.5	39.6	2.9	38.5	72.7			

¹ HR=highly resistant R= resistant MR=moderately resistant, MS=moderately susceptible S=susceptible

² R=resistant MR=moderately resistant MS=moderately susceptible S=susceptible

³ Barley yellow dwarf virus, 1=no symptoms, 9=dead



Locations of oat trials.

Jim – Early maturity, lower yield, short, good lodging resistance, high test weight and groat percentage, yellow seed. Small resistance to crown rust, resistant to smut, good tolerance to red leaf. Selected at Minn. AES. Released in 1996.

PVF (pending)

Premier – Medium maturity, yield and height, good lodging resistance, medium test weight, groat percentage and protein percentage, yellow seed. Susceptible to crown rust, resistant to smut, some tol-

erance to red leaf. Selected at Minn. AES. Released in 1990. **PVF**

Riser – Early maturity, lower yield, short, fair lodging resistance. High test weight and groat percentage, yellow seed. Resistant to crown rust and smut, susceptible to red leaf. Selected at S.D. AES. Released in 1998. **PVF (pending)**

Rodeo – Medium-late maturity, high yield, good lodging resistance, fair test weight, high groat percentage, yellow seed. Susceptible to crown rust and smut, tolerant to red leaf. Selected at Ill. AES. Released in 1996. *Because of smut susceptibility, planting only treated seed is recommended.* **PVF (pending)**

Starter – Early maturity, lower yield, short, fair lodging resistance, medium test weight and groat percentage, medium protein percentage, yellow seed. Susceptible to crown rust and red leaf, resistant to smut. Selected at Minn. AES. Released in 1986. Well suited for companion cropping. **PVF**

Troy – Medium maturity, high yield, tall, poor lodging resistance, low test weight, medium groat percentage, white seed. Moderately susceptible to crown rust, resistant to smut and good tolerance to red leaf. Selected at S.D. AES. Released in 1991.

Whitestone – Late maturity, high yield, medium height, fair lodging resistance, high test weight and groat percentage, white seed. Resistant to crown rust and smut, some tolerance to red leaf. Selected at N.D. AES. Released in 1994. *Because of smut susceptibility, planting only treated seed is recommended.* **PVF (94)**

Oat Planting Rate and Date

Bushel Weight, Pounds	32
Seeds/Pound.....	16,200
Planting Rate, Pounds/Acre	80
Planting Rate, Seeds/Sq.Ft.	28
Planting Date	Early Spring

Minnesota Seed Producers and Promotion Association (MSPPA)

Since the mid 1970s a large group of Minnesota seed growers has identified and marketed certified public varieties of barley, oats, soybeans and wheat developed at the Minnesota Agricultural Experiment Station and other land-grant universities as MPS Seed. For many years their promotion program included production of *The Seed Book*, a catalogue of public barley, oat, soybean and wheat varieties they distributed without charge to Minnesota farmers, usually as an insert in *The Farmer* magazine.

These certified seed growers have discontinued publication of their *Seed Book* and now make a generous contribution to help support the Minnesota Agricultural Experiment Station's production and widespread distribution of this Varietal Trials publication. They continue to promote and market

quality public varieties of barley, oats, soybeans and wheat under the familiar MPS Seed label.

The Minnesota Agricultural Experiment Station appreciates the long-time support of the seedsmen members of MSPPA, their contribution toward the production and distribution of this publication, and their dedication to the production, conditioning and marketing of quality public varieties of farm crops developed here and at the agricultural experiment stations of other land-grant universities. You will know these seedsmen by the MPS brand label on their certified barley, oat, soybean and wheat seed.

