

# Agronomic, milling and baking characteristics of selected hard red winter wheat varieties

Milling and baking values were evaluated from samples at three locations (Casselton, Dickinson, Minot) in 2021.

Variety	Straw	Winter	2021 Yield		Test	Protein	1000	Falling	Milling	Farinograph		Loaf
	Strength <sup>1</sup>	Hardiness <sup>2</sup>	Casselton	Hettinger	Weight	12% mb	Kernel wt	number <sup>3</sup>	extraction <sup>4</sup>	abs <sup>5</sup>	stability <sup>6</sup>	volume <sup>7</sup>
			( bu/a )		(lb/bu)	(%)	(g)	(sec)	(%)	(%)	(min)	(cc)
Draper	NA	NA	122.7	29.4	61.5	14.0	27.8	423	73.2	60.2	5.4	1062
Ideal	4	4	116.6	25.5	62.1	13.8	29.6	444	72.0	59.6	18.4	1025
Jerry	5	3	115.9	28	60.6	14.3	32.5	455	75.8	60.7	7.1	987
ND Noreen	4	3	119.4	27.5	63.2	14.4	34.0	415	72.0	60.1	7.5	1048
Northern	4	5	126.7	31.6	61.4	14.0	30.9	474	75.5	63.1	6.9	1075
SD Andes	NA	NA	122.9	30.3	62.3	14.0	32.4	460	72.7	60.3	6.9	1060
SY Monument	4	3	115.1	30.4	59.7	13.6	31.2	396	73.5	59.7	18.2	928
SY Wolf	3	6	107.8	25.9	61.8	14.0	31.2	414	72.1	60.7	7.7	998
WB4309	NA	NA	119.1	32.7	60.9	13.9	29.2	433	72.5	61.4	16.0	973
WB4462	4	4	110.3	30.5	60.2	14.4	34.1	445	71.9	59.4	6.9	925
Winner	NA	NA	120.3	30.8	61.5	14.0	32.8	454	70.0	59.9	9.5	1008
Mean			117.9	29.3	61.4	14.0	31.4	437.5	72.8	60.5	10.0	1008.2

<sup>1</sup>Straw strength: 1 = strongest, 9 = weakest.

<sup>2</sup>Relative winter hardiness rating: 1 = excellent, 10 = no survival.

<sup>3</sup>Falling number: Expressed in seconds at 14% moisture basis. Low falling number indicates sprout damage.

<sup>4</sup>Milling extraction: Percent of milled flour recovered from cleaned and tempered wheat. A high percentage is desirable.

<sup>5</sup>Farinograph absorption: A measure of dough water absorption, expressed as a percent. A high absorption is desirable.

<sup>6</sup>Farinograph stability: A measure of dough strength. A high stability is desirable.

<sup>7</sup>Loaf volume: Volume of a pup loaf of bread expressed in cubic centimeters. A high volume is desirable.