

**Organic Corn Performance Trial, 2017**  
**WCROC**  
**Curt Reese and Brad Heins**

This trial was conducted at two sites at WCROC in Morris MN and in at SWROC in Lamberton MN. One test was under organic management and one was under conventional management. The Morris conventional trial was corn ground in 2016 and received 150-60-0-15 of fertilizer in the fall 2016. The organic trial was planted a field that was alfalfa for two years and liquid swine manure was applied in the fall of 2016. Weed control was excellent at the Morris organic site and no differences in population were noted between plots. Weed control methods for the organic test at Morris was one pass of a flex tine harrow at three inch corn followed by one pass of row cultivation. Weed control methods for the organic test at Lamberton was two passes of a rotary hoe followed by one pass of row cultivation and hand weeding. No fertilizer was applied to the conventional trial at Lamberton. No lodging or ear dropping were noted at both sites in Morris or Lamberton

Plots were four rows wide and 30 inch spacing with a seeding rate was 35,000 seeds per acre at all locations. The Morris organic trial was planted May 30, 2017 and the conventional was planted June 2, 2017. The organic trial was harvested November 3, 2017 and the conventional trial was harvested October 27, 2017.

The Lamberton trials were planted on May 16 and harvested on November 1, 2017.

Each trial was a randomized complete block test with three replications. Data was analyzed by using Statistx version 10 software.

**Morris Organic Trial:**

The ANOVA P value for yield was .034 and a LSD of .1 is reported

<b>Line</b>	<b>Maturity Day</b>	<b>Company</b>	<b>Yield Bu/Acre</b>	<b>LSD 0.1</b>	<b>Moisture %</b>
o.58-85	85	Viking	193.3	A	21.8
o.51-04	104	Viking	174.9	B	38.4
33A16	92	Blue River	171.0	BC	25.5
34C17	94	Blue River	167.6	BC	20.9
o.71-97	97	Viking	167.5	BC	27.8
40R73	97	Blue River	167.5	BC	27.3
27B16	88	Blue River	164.0	BC	24.1
o.69-99	99	Viking	162.4	BC	30.8
38G54	96	Blue River	160.9	BC	29.0
o.82-95	95	Viking	159.4	C	25.8

LSD .1=14.5 bu/acre

### Morris Conventional Trial:

The ANOVA P value for yield was .02 and a LSD of .1 is reported \*

Line	Maturity Day	Company	Yield Bu/Acre	LSD 0.1	Moisture %
o.69-99	99	Viking	178.3	A	24.0
o.71-97	97	Viking	176.8	A	29.0
27B16	88	Blue River	171.0	A	23.4
o.58-85	85	Viking	166.9	AB	29.2
o.82-95	95	Viking	165.2	AB	23.3
33A16	92	Blue River	162.1	AB	25.9
o.51-04	104	Viking	160.4	AB	28.2
34C17	94	Blue River	147.5	BC	27.3
40R73	97	Blue River	136.5	C	33.1
38G54	96	Blue River	135.1	C	27.8

LSD .1=21.0bu/acre

### Lamberton Organic Trial:

The ANOVA P value for yield was .0041 and an LSD of .1 is reported

Line	Maturity Day	Company	Yield Bu/Acre	LSD 0.1	Moisture %
38G54	96.0	Blue River	196.5	A	15.8
o.51-04	104.0	Viking	188.2	A	18.2
o.58-85	85.0	Viking	188.2	A	14.8
27B16	88.0	Viking	177.0	AB	16.0
o.69-99	99.0	Blue River	172.8	ABC	17.8
o.71-97	97.0	Viking	153.9	BCD	16.0
34C17	94.0	Blue River	152.0	BCD	15.4
o.82-95	95.0	Viking	150.1	CD	15.5
33A16	92.0	Blue River	143.6	D	16.3
40R73	97.0	Blue River	129.7	D	16.1

LSD .1=26.4 bu/acre

### Lamberton Conventional Trial

The ANOVA P value for yield was .07 and a LSD of .1 is reported \*

Line	Maturity Day	Company	Yield Bu/Acre	LSD 0.1	Moisture %
o.71-97	97	Viking	118.1	A	16.9
38G54	96	Blue River	114.1	A	14.7
o.58-85	85	Viking	111.4	A	14.4
33A16	92	Blue River	111.4	A	15.5
o.69-99	99	Viking	111.3	A	16.5
o.82-95	95	Viking	104.1	AB	16.7
40R73	97	Blue River	102.9	AB	15.7
o.51-04	104	Viking	100.6	ABC	18.3
27B16	88	Blue River	90.3	BC	14.5
34C17	94	Blue River	83.4	C	14.2

LSD .1=18.3 bu/acre

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