

## MSU Soil Fertility Research Program

## RESPONSE OF CORN TO FALL AND SPRING APPLIED FERTILIZERS., 2015-2016

Trial ID: CEL06-15.16 Location: CAMPUS Trial Year: 2015

Investigator: Kurt Steinke

Project ID: MOFALL

Crop Code						ZEAMX
Crop Name						Corn
Crop Variety						PO157AMX
Description						bu/ac@15.5%
Rating Date						Oct-18-2016
Rating Type						YIELD
Rating Unit						BU
Crop Stage Scale						HARVEST
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Growth Unit Stage
						6
TABLE OF R MEANS						
Replicate 1						177
Replicate 2						181
Replicate 3						176
Replicate 4						161
TABLE OF A (Cultural) MEANS						
1 FALL						174 a
1	Urea 46-0-0	46	GR	116 lb ai/a	252 lb/a	SprPPI
2 SPRING						173 a
2	Urea 46-0-0	46	GR	116 lb ai/a	252 lb/a	SprPPI
LSD P=.05						13.2
Standard Deviation						16.7
CV						9.6
TABLE OF B (Fertilizer) MEANS						
1 Nitrogen Only						172 a
1	Urea 46-0-0	46	GR	24 lb ai/a	52 lb/a	FALL
2 MAP 11-52-0						168 a
2	Urea 46-0-0	46	GR	7 lb ai/a	15.2 lb/a	FALL
3 MAP 11-52-0						178 a
3	MOP Mosaic	60	GR	60 lb ai/a	100 lb/a	FALL
3	Urea 46-0-0	46	GR	7 lb ai/a	15.2 lb/a	FALL
4 MAP 11-52-0						174 a
4	MOP Mosaic	60	GR	60 lb ai/a	100 lb/a	
4	GRANuBor 2	14.3	GR	0.5 lb ai/a	3.5 lb/a	
4						
5 MAP 11-52-0						174 a
5	Aspire	58	GR	60 lb ai/a	103 lb/a	
5	Urea 46-0-0	46	GR	7 lb ai/a	15.2 lb/a	FALL
6 MESZ						173 a
6	MOP Mosaic	60	GR	60 lb ai/a	100 lb/a	
7 MESZ						176 a
7	Aspire	58	GR	60 lb ai/a	103 lb/a	
8 MOP Mosaic						175 a
8	EXPPBSP	52	GR	80 lb ai/a	154 lb/a	
8	Urea 46-0-0	46	GR	7 lb ai/a	15.2 lb/a	FALL
LSD P=.05						10.5
Standard Deviation						10.5
CV						6.0
TABLE OF A (Cultural) B (Fertilizer) MEANS						

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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	Crop Code Crop Name Crop Variety Description Rating Date Rating Type Rating Unit Crop Stage Scale									ZEAMX Corn PO157AMX bu/ac@15.5% Oct-18-2016 YIELD BU HARVEST
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1	FALL									177 a
1	Urea 46-0-0	46	GR	116	lb ai/a	252	lb/a		SprPPI	
1	Nitrogen Only									
1	Urea 46-0-0	46	GR	24	lb ai/a	52	lb/a		FALL	
2	SPRING									166 a
2	Urea 46-0-0	46	GR	116	lb ai/a	252	lb/a		SprPPI	
1	Nitrogen Only									
1	Urea 46-0-0	46	GR	24	lb ai/a	52	lb/a		FALL	
1	FALL									169 a
1	Urea 46-0-0	46	GR	116	lb ai/a	252	lb/a		SprPPI	
2	MAP 11-52-0	52	GR	80	lb ai/a	154	lb/a		FALL	
2	Urea 46-0-0	46	GR	7	lb ai/a	15.2	lb/a		FALL	
2	SPRING									167 a
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3	MOP Mosaic	60	GR	60	lb ai/a	100	lb/a		FALL	
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2	Urea 46-0-0	46	GR	116	lb ai/a	252	lb/a		SprPPI	
3	MAP 11-52-0	52	GR	80	lb ai/a	154	lb/a		FALL	
3	MOP Mosaic	60	GR	60	lb ai/a	100	lb/a		FALL	
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COMPLETE SPLIT-PLOT AOV For ZEAMX Corn PO157AMX bu/ac@15.5% Oct-18-2016 YIELD BU HARVEST (Data Column 6)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	LSD (.05)
Total	63	10767.575273				
R	3	3636.672286	1212.224095	11.092	0.0001	
A	1	34.041642	34.041642	0.123	0.7492	13
ERROR A	3	831.867936	277.289312			
B	7	544.254299	77.750614	0.711	0.6625	11
AB	7	1130.501039	161.500148	1.478	0.2015	15
ERROR B	42	4590.238071	109.291383			
FACTORIAL/POOLED ERROR AOV For ZEAMX Corn PO157AMX bu/ac@15.5% Oct-18-2016 YIELD BU HARVEST (Data Column 6)						
Source	DF	Sum of Squares	Mean Square	F	Prob(F)	LSD (.05)
Total	63	10767.575273				
R	3	3636.672286	1212.224095	10.061	0.0001	
A	1	34.041642	34.041642	0.283	0.5977	6
B	7	544.254299	77.750614	0.645	0.7162	11
AB	7	1130.501039	161.500148	1.340	0.2541	16
ERROR	45	5422.106007	120.491245			

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

YIELD = yield

Rating Unit

BU = bushel

ARM Action Codes

TY1 = 3.889286\*[C3]\*(100-@MVAVGREP([C4]))/84.5