

MSU Soil Fertility Research Program

POTATO RESPONSE TO ADITION OF VARIOUS NUTRIENTS OR SOIL ADMENDMENTS

Trial ID: PMRF01-15 Location: MRF Trial Year: 15
Investigator: Kurt Steinke
Project ID: OMISSION

Crop Code Crop Name Crop Variety Description Rating Date Rating Type Rating Unit Crop Stage Scale							SOLTU Potato FL 2137 harvest Sep-15-2015 YIELD B'S CWT	SOLTU Potato FL 2137 harvest Sep-15-2015 YIELD O/S CWT	SOLTU Potato FL 2137 harvest Sep-15-2015 YIELD A'S CWT	SOLTU Potato FL 2137 harvest Sep-15-2015 Total Yield CWT	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Unit Stage	59	60	61	62
1	MAP 11-52-0 K2O 0-0-62 K-Mag AS (21-0-0-)N Urea 46-0-0	52 GR 62 GR 22 GR 21 GR 46 GR	GR GR GR GR GR	120 lb ai/a 100 lb ai/a 250 lb/a 83 lb ai/a 167 lb ai/a	230 lb/a 161 lb/a 250 lb/a 395 lb/a 363 lb/a	APBAND APBAND PPI EMBAND BHILL		91.5 a	43.9	373.6 a	509.1 a
2	MAP 11-52-0 K2O 0-0-62 K2O 0-0-62 K-Mag AS (21-0-0-)N Urea 46-0-0	52 GR 62 GR 62 GR 22 GR 21 GR 46 GR	GR GR GR GR GR GR	120 lb ai/a 100 lb ai/a 195 lb ai/a 250 lb/a 83 lb ai/a 167 lb ai/a	230 lb/a 161 lb/a 315 lb/a 250 lb/a 395 lb/a 363 lb/a	APBAND APBAND PPI PPI EMBAND BHILL		115.3 a	50.4 a	365.3 a	531.0 a
3	MAP 11-52-0 K2O 0-0-62 GYPSUM K-Mag AS (21-0-0-)N Urea 46-0-0	52 GR 62 GR 16 GR 22 GR 21 GR 46 GR	GR GR GR GR GR GR	120 lb ai/a 100 lb ai/a 1000 lb/a 250 lb/a 83 lb ai/a 167 lb ai/a	230 lb/a 161 lb/a 1000 lb/a 250 lb/a 395 lb/a 363 lb/a	APBAND APBAND PPI PPI EMBAND BHILL		117.1 a	18.9 a	392.9 a	529.0 a
4	MAP 11-52-0 K2O 0-0-62 TSP-PHOS K-Mag AS (21-0-0-)N Urea 46-0-0	52 GR 62 GR 45 GR 22 GR 21 GR 46 GR	GR GR GR GR GR GR	120 lb ai/a 100 lb ai/a 60 lb ai/a 250 lb/a 83 lb ai/a 167 lb ai/a	230 lb/a 161 lb/a 133 lb/a 250 lb/a 395 lb/a 363 lb/a	APBAND APBAND APBAND PPI EMBAND BHILL		119.0 a	21.1 a	371.2 a	511.3 a
5	MAP 11-52-0 K2O 0-0-62 K2O 0-0-62 GYPSUM K-Mag AS (21-0-0-)N Urea 46-0-0	52 GR 62 GR 62 GR 16 GR 22 GR 21 GR 46 GR	GR GR GR GR GR GR GR	120 lb ai/a 100 lb ai/a 195 lb ai/a 1000 lb/a 250 lb/a 83 lb ai/a 167 lb ai/a	230 lb/a 161 lb/a 315 lb/a 1000 lb/a 250 lb/a 395 lb/a 363 lb/a	APBAND APBAND PPI PPI PPI EMBAND BHILL		139.1 a	26.9 a	412.3 a	578.3 a
6	MAP 11-52-0 K2O 0-0-62 K2O 0-0-62 TSP-PHOS K-Mag AS (21-0-0-)N Urea 46-0-0	52 GR 62 GR 62 GR 45 GR 22 GR 21 GR 46 GR	GR GR GR GR GR GR GR	120 lb ai/a 100 lb ai/a 195 lb ai/a 60 lb ai/a 250 lb/a 83 lb ai/a 167 lb ai/a	230 lb/a 161 lb/a 315 lb/a 133 lb/a 250 lb/a 395 lb/a 363 lb/a	APBAND APBAND PPI APBAND PPI EMBAND BHILL		124.5 a	45.0 a	366.5 a	535.9 a
7	MAP 11-52-0 K2O 0-0-62 TSP-PHOS GYPSUM K-Mag AS (21-0-0-)N Urea 46-0-0	52 GR 62 GR 45 GR 16 GR 22 GR 21 GR 46 GR	GR GR GR GR GR GR GR	120 lb ai/a 100 lb ai/a 60 lb ai/a 1000 lb/a 250 lb/a 83 lb ai/a 167 lb ai/a	230 lb/a 161 lb/a 133 lb/a 1000 lb/a 250 lb/a 395 lb/a 363 lb/a	APBAND APBAND APBAND PPI PPI EMBAND BHILL		117.1 a	50.2 a	386.1 a	553.5 a

Means followed by same letter or symbol do not significantly differ (P= .10, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Missing data estimates are included in columns: Yates=59,60,61,62

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Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Unit Stage	59	60	61	62
8	MAP 11-52-0	52 GR		120 lb ai/a	230 lb/a		APBAND	97.8 a	30.0 a	413.4 a	541.4 a
	K2O 0-0-62	62 GR		100 lb ai/a	161 lb/a		APBAND				
	K2O 0-0-62	62 GR		195 lb ai/a	315 lb/a		PPI				
	TSP-PHOS	45 GR		60 lb ai/a	133 lb/a		APBAND				
	GYP SUM	16 GR		1000 lb/a	1000 lb/a		PPI				
	K-Mag	22 GR		250 lb/a	250 lb/a		PPI				
	AS (21-0-0)-N	21 GR		83 lb ai/a	395 lb/a		EMBAND				
	Urea 46-0-0	46 GR		167 lb ai/a	363 lb/a		BHILL				
LSD P=.10								33.95	25.86	43.94	59.43
Standard Deviation								27.83	21.02	36.03	48.73
CV								24.16	60.68	9.35	9.09
Replicate F								1.156	0.178	6.098	3.426
Replicate Prob(F)								0.3509	0.9098	0.0040	0.0369
Treatment F								1.138	1.672	1.174	0.851
Treatment Prob(F)								0.3794	0.1885	0.3607	0.5600

Crop Code
 SOLTU, BPOT, Solanum tuberosum, = US
 Rating Unit
 CWT = hundredweight (u.s.=100 lb)
 ARM Action Codes
 TY1 = 7.32187*[C50]
 TY2 = 7.32187*[C51]
 TY3 = 7.32187*[C55]
 T4 = [C61]+[C60]+[C59]