

FIELD EXPERIMENTS 1956

Crop: Potatoes (Majestic)

Field: Gravel Pit Piece.

Experiment: Level of Manuring (N x P x K)

On Mucked Land.

Treatments & Layout: 3x3x3 Factorial Design, including 3 extra control plots receiving no fertilizer: total 30 plots.

Nitrogen:-	3 cwt per acre of Sulphate of Ammonia (20.6% N)
	4 ¹ / ₂ " " " " " " " "
	6 " " " " " " " "
Phosphate:-	4 cwt per acre of Superphosphate (18% P ₂ O ₅)
	6 " " " " " " " "
	8 " " " " " " " "
Potash:-	2 cwt per acre of Muriate of Potash (50% K ₂ O)
	3 " " " " " " " "
	4 " " " " " " " "

Plot Size: Treatment: 64^x x 3 rows @ 28". Harvest: 6^x x 1 row

Manuring with dates of:

27th 28th & 29th March:- Treatment fertilizer applied.

Autumn 1955:- 12 loads per acre of F.Y.M. applied

Date of Drilling: 27th 28th & 29th March. Variety: Majestic Seed Rate: 18" spacing

Date of

Date of Harvest 11 oct. 1956. using elevator digger.

Remarks (previous cropping, cultivations, etc.)

1955 Vining Peas.

1954 Winter wheat trials

1953 Clover ley.

Spraying for Blight. 6th, 16th, & 23rd July & 8th August.

Spraying for Haulm destruction (H₂ SO₄) 26th August.

Note Book No.

Results of Majestic Trial

Total Yield in Tons per acre.

Nitrogen S/A in cwt/acre	Superphosphate in cwt per acre.			Nitrogen Means
	4	6	8	
3	15.8	16.2	18.1	16.7
4½	16.9	14.9	15.8	15.8
6	18.7	18.0	17.5	18.1
N.S				
	Muriate of Potash in cwt per acre			
	2	3	4	
3	16.3	16.7	17.2	
4½	15.5	15.7	16.4	
6	17.8	18.3	18.1	
Superphosphate in cwt/acre				Phosphate Means
4	16.6	17.4	17.4	17.1
6	15.8	16.9	16.4	16.4
8	17.1	16.3	17.9	17.1
Potash Means	16.5	16.9	17.2	N.S

Mean yield of control Plots:- 11.8 tons/acre
Coefficient of variation:- 11.5%

Yield of Ware Only in tons per acre (Top riddle Size 1½")

Nitrogen S/A in cwt/acre	Superphosphate in cwt per acre.			Nitrogen Means
	4	6	8	
3	15.5	15.8	17.7	16.4
4½	16.6	14.6	15.5	15.6
6	18.4	17.7	17.2	17.8
N.S				
	Muriate of Potash in cwt per acre			
	2	3	4	
3	16.0	16.3	16.8	
4½	15.2	15.4	16.1	
6	17.5	18.1	17.8	
Superphosphate in cwt/acre				Phosphate Means
4	16.3	17.2	17.1	16.8
6	15.5	16.6	16.0	16.1
8	16.8	16.0	17.6	16.8
Potash Means	16.2	16.6	16.9	

Mean yield of control Plots:- 11.4 tons per acre.
Yield of ware ~~no~~ not statistically analysed.

Majestic Potato N.P.K. Trial 1955. Loke Piece

Results of Analysis for Linear and Curvature Effects

Linear Effects in tons per acre

<u>Factor</u>	<u>Total Yield</u>	<u>Ware Only</u>
N	+ 1.02	+ 0.99
P	+ 0.73	+ 0.76
K	+ 0.17	+ 1.03
Value required for significance.	0.69	0.65