

FIELD EXPERIMENTS 1955

Crop: Potatoes (King Edwards)

Field: Loke Piece

Experiment: Level of Manuring (NPKPK)

Treatments & Layout: 3x3x3 Factorial design, including 3 extra plots receiving no fertilizer, this giving a total of 30 plots

Nitrogen:- 3wrt. per acre of Sulphate of Ammonia (20.6%N)
 4wrt. " " " " " " " "
 6wrt. " " " " " " " "

Phosphate:- 4wrt. per acre of Superphosphate (18%P₂O₅)
 6wrt. " " " " " " "
 8wrt. " " " " " " "

Potash:- 2wrt. per acre of Muriate of Potash (50%K₂O)
 3wrt. " " " " " " "
 4wrt. " " " " " " "

Plot Size: Treatment: 10 rows @ 28" x 10yd. Harvest:- 6 rows x 8 $\frac{1}{2}$ yd.

Manuring with dates of:

28th March to 1st April:- Treatment fertilizer applied to ridges

Date of Drilling: 4th April

Variety: King Edward

Seed Rate: 18" spacing
between tubers

Date of Emergence: 9th June

Date of Scoring for vigour of growth: 16th July

Date of Harvest: 17th and 18th October

Remarks (previous cropping, cultivations, etc.)

1954. Spring Cereals

1953. Peas

1952. Barley

Trial sprayed against blight (copper oxy-chloride) on 5th and 23rd July and 6th August

Haulm burnt off with Sulphuric Acid on 12th September

Note Book No.

Results of King Edwards Trial

Total Yield in Tons/acre

<u>Nitrogen</u> <u>S/A in owt./acre</u>	<u>Superphosphate in owt./acre</u>			<u>Nitrogen</u> <u>Means</u>
	4	6	8	
3	10.2	10.8	10.9	10.6
4½	11.6	10.6	11.1	11.1
6	11.2	11.4	11.0	11.2
<u>Muriate of Potash in owt./acre</u>				N.S.
	2	3	4	
3	10.0	10.6	11.3	
4½	10.8	11.3	11.3	
6	10.5	12.0	11.2	

<u>Superphosphate</u> <u>in owt./acre</u>				<u>Phosphate</u> <u>Means</u>
4	10.2	11.5	11.4	11.0
6	10.6	11.4	10.9	10.9
8	10.6	10.9	11.5	11.0
<u>Potash Means</u>	10.4	11.2	11.2	N.S.
<u>Sig. Diff. for</u> <u>Potash Means:-</u>		0.5		

Mean Yield of Control Plots:- 7.1 tons/acre

Coefficient of Variation:- 3.9%

Yield of Ware only in tons/acre (Top Riddle Size: 1½")

<u>Nitrogen</u> <u>S/A in owt./acre</u>	<u>Superphosphate in owt./acre</u>			<u>Nitrogen</u> <u>Means</u>
	4	6	8	
3	9.0	9.3	9.5	9.3
4½	10.3	9.1	9.7	9.7
6	9.8	10.0	9.5	9.8
<u>Muriate of Potash in owt./acre</u>				N.S.
	2	3	4	
3	8.8	9.1	10.0	
4½	9.4	9.8	9.8	
6	9.1	10.6	9.7	

<u>Superphosphate</u> <u>in owt./acre</u>				<u>Phosphate</u> <u>Means</u>
4	8.9	10.2	10.0	9.7
6	9.1	9.9	9.4	9.5
8	9.3	9.3	10.1	9.6
<u>Potash Means</u>	9.1	9.8	9.8	N.S.
<u>Sig. Diff. for Potash Means:-</u>		0.6		

Mean Yield of Control Plots:- 6.4 tons/acre

Coefficient of Variation:- 5.48%



Scores (1-10) For Vigour on 16th July

<u>Nitrogen</u> <u>A in owt./acre</u>	<u>Superphosphate in owt./acre</u>			<u>Nitrogen</u> <u>Means</u>
	4	5	8	
3	6½	6	6	6½
4½	7	7½	7½	7½
6	7½	7½	7½	7½
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	<u>Muriate of Potash in owt./acre</u>			
	2	3	4	
3	6½	6	6½	
4½	7	7½	7½	
6	7½	7½	7½	
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<u>Superphosphate</u> <u>in owt./acre</u>				<u>Phosphate</u> <u>Means</u>
4	7	7	7	7
6	7	7	7½	7
8	6½	7	7½	7
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<u>Potash Means</u>	7	7	7½	

Mean Score for Control Plots:- 3

