

FIELD EXPERIMENTS 1955

Crop: Potatoes (King Edward)

Field: Outside Trial at:-
J. J. A. Kendall, Esq.,
The Grove,
Ingham,
Near Stalham.

Experiment: Level of Manuring.

(near Free Close)

Treatments & Layout: 3 x 3 x 3 Factorial Design, including 3 extra plots receiving no fertilizer, this giving a total of 30 plots.

Nitrogen:- 3 cwt per acre of Sulphate of Ammonia (20.6% N):
 $4\frac{1}{2}$ " " " " " " " "
 6 " " " " " " " "

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

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

Plot Size: Treatment: 8 rows @ 28" x 10 yd. Harvest: 6 rows x 8 yd.

Manuring with dates of: Fertilizer treatments applied on 14th April, on the ridges before planting.

Date of Drilling: 14th April Variety: King Edward Seed Rate:

Date of Scoring for Vigour: July 13th.

Date of Harvest: November 3rd.

Remarks (previous cropping, cultivations, etc.)

The Potatoes followed Barley. (1954)
 Harvesting was by spinner.
 Riddle Sizes:- $1\frac{1}{4}$ " and 1".

1953 Cropping :- Wheat (straw ploughed in & supplemented with S/A)
 1952 " :- Sugar Beet (Tops ploughed in)
 1951 " :- Barley (straw ploughed in)

1954 Soil Analysis :-

Organic Matter :- 1.9
 p.H. :- 7.8
 Phosphate :- low
 Potash :- low.

Note Book No.

Results of King Edward Trial

Total Yield in tons per acre

Nitrogen S/A in owt/acre	Superphosphate in owt/acre			Nitrogen Means
	4	6	8	
3	12.8	13.4	13.4	13.2
4½	13.8	14.3	13.5	13.9
6	13.8	13.5	14.2	13.9
				N.S.
	Bicrate of Potash in owt/acre			
	2	3	4	
3	12.2	13.7	13.6	
4½	14.1	13.5	14.0	
6	14.0	14.1	13.5	
Superphosphate in owt/acre				Phosphate Means
4	13.2	13.6	13.7	13.5
6	13.6	13.8	13.8	13.7
8	13.5	13.9	13.7	13.7
Potash Means	13.4	13.8	13.7	N.S.

Mean Yield of Control Plots:- 8.5 tons per acre.
Coefficient of Variations:- 6.84%

Yield of Ware only in tons per acre (Top Riddle Size = 1½")

Nitrogen S/A in owt/acre	Superphosphate in owt/acre			Nitrogen Means
	4	6	8	
3	12.5	13.1	13.1	12.9
4½	13.5	14.0	13.2	13.6
6	13.5	13.3	13.9	13.6
				N.S.
	Bicrate of Potash in owt/acre			
	2	3	4	
3	11.9	13.4	13.3	
4½	13.8	13.2	13.7	
6	13.7	13.8	13.2	
Superphosphate in owt/acre				Phosphate Means
4	12.9	13.2	13.3	13.1
6	13.3	13.6	13.5	13.4
8	13.2	13.6	13.4	13.4
Potash Means	13.1	13.5	13.4	N.S.

Mean Yield of Control Plots:- 8.3 tons per acre.
Coefficient of Variations:- 6.80%

Scores (0-10) for Vigour

Nitrogen S/A in cwt/acre	Superphosphate in cwt/acre			Nitrogen Means
	4	6	8	
3	7	7	6	$6\frac{1}{2}$
$4\frac{1}{2}$	$8\frac{1}{2}$	$8\frac{1}{2}$	6	$7\frac{1}{2}$
6	$7\frac{1}{2}$	$7\frac{1}{2}$	$7\frac{1}{2}$	$7\frac{1}{2}$
	Muriate of Potash in cwt/acre			
	2	3	4	
3	7	7	$6\frac{1}{2}$	
$4\frac{1}{2}$	8	7	7	
6	8	7	$7\frac{1}{2}$	
Superphosphate in cwt/acre				Phosphate Means
4	$7\frac{1}{2}$	8	$7\frac{1}{2}$	$7\frac{1}{2}$
6	8	7	$7\frac{1}{2}$	$7\frac{1}{2}$
8	7	$6\frac{1}{2}$	6	$6\frac{1}{2}$
Potash Means	$7\frac{1}{2}$	7	7	

