

FIELD EXPERIMENTS 1956

Crop: Potatoes (King Edward)

Field: Gravel Pit Piece.

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

On Mucked Land.

Treatments &amp; Layout: 3x3x3 Factorial design, including 3 extra control plots receiving no fertilizer: total of 30 plots.

|             |               |   |
|-------------|---------------|---|
| Nitrogen:-  | 3             | cwt per acre of Sulphate of Ammonia (20.6%N)                        |
|             | $\frac{1}{2}$ | " " "   |
|             | 6             | " " "   |
| Phosphate:- | 4             | cwt per acre of superphosphate (18% P <sub>2</sub> O <sub>5</sub> ) |
|             | 6             | " " "   |
|             | 8             | " " "   |
| Potash:-    | 2             | cwt per acre of Muriate of Potash (50% K <sub>2</sub> O)            |
|             | 3             | " " "   |
|             | 4             | " " "   |

Plot Size: Treatment: 6 $\frac{1}{2}$ ' x 3 rows @ 28"  
 Harvest: 6' x 1 row

Manuring with dates of:

27th, 28th and 29th March:- Treatment fertilizer applied.

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

Date of Drilling: 27th, 28th and 29th March. Variety: King Edward Seed Rate: 18" spacing

Date of

Date of Harvest: 10th and 11th October, 1956 using Elevator Digger.

Remarks (previous cropping, cultivations, etc.)

|      |                     |
|------|---------------------|
| 1955 | Vining Peas         |
| 1954 | Winter Wheat Trials |
| 1953 | Clover ley.         |

Spraying for blight 6th, 16th and 23rd July and 8th August.

Spraying for haul destruction (H<sub>2</sub>SO<sub>4</sub>) 26th July, 1956.

Note Book No.

Results of King Edward Trial.

Total yield in Tons per acre

| <u>Nitrogen</u><br>S/A in cwt/acre | <u>Superphosphate in cwt per acre</u> |      |      | <u>Nitrogen</u><br><u>Means</u> |
|------------------------------------|---------------------------------------|------|------|---------------------------------|
|                                    | 4                                     | 6    | 8    |                                 |
| 3                                  | 14.4                                  | 15.0 | 15.3 | 14.9                            |
| 4½                                 | 14.3                                  | 13.9 | 14.0 | 14.1                            |
| 6                                  | 14.3                                  | 16.3 | 15.8 | 15.5                            |

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|    | <u>Muriate of Potash in cwt./acre.</u> |      |      |  |
|----|--|------|------|--|
|    | 2                                      | 3    | 4    |  |
| 3  | 13.3                                   | 15.6 | 15.6 |  |
| 4½ | 14.4                                   | 14.6 | 13.2 |  |
| 6  | 15.8                                   | 15.2 | 15.4 |  |

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| <u>Superphosphate</u><br>in cwt per acre |      |      |      | <u>Phosphate</u><br><u>Means</u> |
|--|------|------|------|----------------------------------|
| 4  | 13.3 | 15.1 | 14.6 | 14.3                             |
| 6  | 15.3 | 15.5 | 14.5 | 15.1                             |
| 8  | 14.9 | 14.9 | 15.3 | 15.0                             |
| <b>Potash Means.</b>                     | 14.5 | 15.2 | 14.8 |                                  |

Mean yield of control plots:- 8.5 tons per acre.

Total yield not statistically analysed.

Yield of Ware only in tons per acre (Top riddle size 1½")

| <u>Nitrogen</u><br>S/A in cwt/acre | <u>Superphosphate in cwt per acre.</u> |      |      | <u>Nitrogen</u><br><u>Means</u> |
|------------------------------------|--|------|------|---------------------------------|
|                                    | 4                                      | 6    | 8    |                                 |
| 3                                  | 13.9                                   | 14.3 | 14.6 | 14.3                            |
| 4½                                 | 13.7                                   | 13.6 | 13.4 | 13.5                            |
| 6                                  | 13.9                                   | 15.8 | 15.1 | 14.9                            |

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|    | <u>Muriate of Potash in cwt per acre</u> |      |      |  |
|----|--|------|------|--|
|    | 2  | 3    | 4    |  |
| 3  | 12.7                                     | 14.9 | 15.2 |  |
| 4½ | 14.0                                     | 14.0 | 12.6 |  |
| 6  | 15.3                                     | 14.7 | 14.9 |  |

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| <u>Superphosphate</u><br>in cwt per acre |      |      |      | <u>Phosphate</u><br><u>Means</u> |
|--|------|------|------|----------------------------------|
| 4  | 12.9 | 14.5 | 14.1 | 13.8                             |
| 6  | 14.7 | 14.9 | 14.0 | 14.6                             |
| 8  | 14.3 | 14.1 | 14.6 | 14.4                             |
| <b>Potash Means.</b>                     | 14.0 | 14.5 | 14.2 | N.S                              |

Mean yield of control plots:- 7.9 tons per acre.

Coefficient of Variation:- 22.9%

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