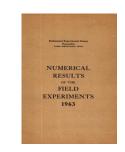
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readible, or you suspect there are some problems, please let us know and we will correct that.



Yields of the Field Experiments 1963



Full Table of Content

63/R/AN/C/4 Methods of Application of Fertiliser 1962-63 - Winter Wheat

Rothamsted Research

Rothamsted Research (1964) 63/R/AN/C/4 Methods of Application of Fertiliser 1962-63 - Winter Wheat; Yields Of The Field Experiments 1963, pp 139 - 141 - **DOI**:

https://doi.org/10.23637/ERADOC-1-183

63/c/4.1

METHODS OF APPLICATION OF FERTILISER 1962 - 63

(AN)

Methods of application of fertiliser - Great Knott I 1963, the second year - Winter wheat.

Design: 3 x 3 x 3 in 3 blocks of 9 plots each together with 3 additional plots per block.

Area of each plot: 0.0199 acres. Area harvested: 0.0129 acres.

Treatments:

3 x 3 x 3: All combinations of:

To wheat 1963. NPK: None (FO), 0.66 (F1), 1.32 (F2) cwt N per acre as spring top dressings of 'Nitro-Chalk', each with superphosphate and muriate of potash applied in autumn in the seedbed in the proportion 13 N, 13 P205, 20 K20.

To potatoes 1962:

Levels of compound fertiliser (13% N, 13% P205, 20% K20) to supply (cwt per acre):

| N | P205 | K20 | |
|------|------|------|-----|
| 0.66 | 0.66 | 1.02 | |
| 1.32 | 1.32 | 2.03 | (2) |
| 2.00 | 2.00 | 3.07 | (3) |

Methods of application: Broadcast (B), placed (P), broadcast and rotary cultivated in (ER).

Additional plots:

To wheat 1963. NPK: FO, F1, F2 as above to plots receiving no treatment in 1962.

Basal dressing: None.

Cultivations, etc.: Chisel ploughed: Oct 29, 1962. PK applied, seed drilled at 3 bushels per acre: Nov 14. 'Nitro-Chalk' applied - 1st half dressing: Apr 24, 1963, 2nd half dressing: May 9. Sprayed with mecopror/2, 4-D at 7 pints in 40 gallons per acre: May 17. Combine harvested: Sept 10. Variety: Cappelle. Previous crops: Barley 1961, potatoes 1962.

Note: For details of the previous year's results see 'The Numerical Results of the Field Experiments' 62/C/9.

Standard error per plot. Winter wheat: Grain (at 85% dry matter): 3.97 cwt per acre or 10.6% (18 d.f.)

63/c/4.2

Summery of Results

Grain (at 85% dry matter): cwt per acre

| NPK 1963 | Method of application of compound fertiliser to potatoes 1962 | | | Levels of compound fertiliser to potatoes 1962 | | | | |
|----------------|---|----------------------|----------------------|--|---------------------------------|----------------------|----------------------|--|
| | В | P | BR | 1 | 2 | 3 | Mean | |
| | | (±2.29) | | | (±2.29) | | (±1.32) | |
| FO F1 F2 | 33.1 38.4 45.7 | 34.1 38.7 45.3 | 32.5 40.9 40.1 | 28.4 38.9 40.5 | 32.2 39.4 45.2 | 39.1 39.8 45.5 | 33.2 39.3 43.7 | |
| | | B P BR | | 37.4 34.6 35.7 | (±2.29) 40.0 37.7 39.0 | 39.8 45.7 38.8 | 39.1 39.4 37.8 | |
| | | Mean (| ±1.32) | 35.9 | 38.9 | 41.5 | 38.8 (±0.76) | |

Plots untreated in 1962

| FO | NPK 1963 F1 | F2 | Mean | |
|------|-----------------|------|-----------------|--|
| 26.1 | 34.3 (±2.29) | 39.9 | 33.4 (±1.32) | |

General mean: 37.5

Mean dry matter % as harvested: 78.5

For explanation of treatment symbols see 63/C/4.1

63/c/4.3

Straw (at 85% dry matter): cwt per acre

| NPK 1963 | Method of application of compound fertiliser to potatoes 1962 | | | Levels of compound fertiliser to potatoes 1962 | | | |
|----------|---|--------------|--------------|--|----------------------|----------------------|----------------------|
| | В | P | BR | 1 | 2 | 3 | Mean |
| FO Fl | 15.2 28.2 | 17.3 | 15.6 23.1 | 14.1 24.8 | 15.4 | 18.6 | 16.0 |
| F2 | 24.7 | 29.2 | 26.0 | 27.1 | 28.4 | 24.4 | 26.6 |
| | | B P BR | | 25.2 22.0 18.7 | 23.5 25.8 23.0 | 19.3 21.9 23.0 | 22.7 23.2 21.6 |
| | | Mean | | 22.0 | 24.1 | 21.4 | 22.5 |

Plots untreated in 1962

| | 1 | | | |
|------|----------------|------|------|---|
| FO | NPK 1963 F1 | F2 | Mean | |
| 13.2 | 22.6 | 26.3 | 20.7 | - |

General mean: 22.0

Mean dry matter % as harvested: 63.8

For explanation of treatment symbols see 63/C/4.1