

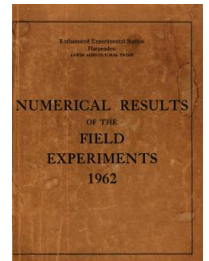
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# Yields of the Field Experiments 1962

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## 62/R/C/2 One Year Leys for Wheat - Winter Wheat

### Rothamsted Research

Rothamsted Research (1963) *62/R/C/2 One Year Leys for Wheat - Winter Wheat* ; Yields Of The Field Experiments 1962, pp 102 - 103 - DOI: <https://doi.org/10.23637/ERADOC-1-164>

62/C/2.1

## WINTER WHEAT

The comparison of different one year leys as a preparation for wheat - Stackyard 1962 - the 2nd year.

Design: 4 randomised blocks of 18 plots each, each plot split into 3 for the application of nitrogen.

Area of each sub plot: 0.0053 acres. Area harvested: 0.0046 acres.

Treatments. All combinations of:-

### Whole plots:

Leys undersown 1960 and cut 1961, with nitrogen as follows:-

Clover: None (Co).

Ryegrass: None (Ro); 1 cwt (R1); 2 cwt (R2) N per acre.

Clover-ryegrass: None (CRo); 1 cwt (CR1) N per acre.

Potassium to wheat: None; 1.2; 2.4 cwt  $K_2O$  per acre, half ploughed in as muriate of potash, half combine drilled as compound fertilisers (16%  $P_{2O_5}$ , 16%  $K_2O$  or 14%  $P_{2O_5}$ , 28%  $K_2O$ ) - in order to include basal  $P_{2O_5}$  described below.

### Sub plots:

Nitrogen to wheat: None; 0.5; 1.0 cwt N per acre as 'Nitro-Chalk' applied in 2 equal dressings.

Basal dressings per acre:

To barley nurse crop 1960: 3 cwt compound fertiliser (16% N, 9%  $P_{2O_5}$ , 9%  $K_2O$ ) combine drilled.

To leys, combine drilled in seedbed 1960:  $1\frac{1}{2}$  cwt superphosphate.

To wheat 1962: 0.6 cwt  $P_{2O_5}$  combine drilled, either as granular superphosphate, or as compound fertilisers (16%  $P_{2O_5}$ , 16%  $K_2O$  or 14%  $P_{2O_5}$ , 28%  $K_2O$ ).

Cultivations, etc.: Ploughed: Sept 28, 1961. Seed drilled at 150 lb per acre: Oct 4. 1st dressing of 'Nitro-Chalk' applied: Mar 23, 1962. Sprayed with CMPP at 6 pints in 40 gallons per acre: Apr 24. 2nd dressing of 'Nitro-Chalk' applied: May 1. Green crop samples taken: June 13. Combine harvested: Sept 10. Variety: Cappelle.

Note: For details of the previous year's results see 'The Numerical Results of the Field Experiments' 61/C/2.

Standard errors per plot. Grain (at 85% dry matter):

Whole plot: 2.38 cwt per acre or 5.1% (51 d.f.)

Sub plot: 3.08 cwt per acre or 6.6% (108 d.f.)

62/C/2.2

Summary of ResultsGrain (at 85% dry matter): cwt per acre

N to leys 1961

|                                          | C <sub>0</sub> | R <sub>0</sub> | R <sub>1</sub>         | R <sub>2</sub> | CR <sub>0</sub>        | CR <sub>1</sub> | Mean    |
|------------------------------------------|----------------|----------------|------------------------|----------------|------------------------|-----------------|---------|
| <u>K<sub>2</sub>O: cwt per acre 1962</u> |                |                | (±1.19)                |                |                        |                 | (±0.49) |
| None                                     | 53.5           | 42.5           | 43.0                   | 39.1           | 45.0                   | 44.8            | 44.6    |
| 1.2                                      | 53.0           | 46.2           | 45.2                   | 44.9           | 49.6                   | 45.9            | 47.5    |
| 2.4                                      | 54.3           | 44.8           | 44.5                   | 45.0           | 47.8                   | 47.4            | 47.3    |
| <u>N: cwt per acre 1962</u>              |                |                | (±0.89) <sup>(1)</sup> |                | (±1.00) <sup>(2)</sup> |                 | (±0.36) |
| None                                     | 47.3           | 31.2           | 33.3                   | 33.6           | 38.4                   | 35.8            | 36.6    |
| 0.5                                      | 55.9           | 46.3           | 45.7                   | 43.6           | 49.7                   | 47.4            | 48.1    |
| 1.0                                      | 57.6           | 56.0           | 53.8                   | 51.7           | 54.3                   | 55.0            | 54.7    |
| Mean (±0.69)                             | 53.6           | 44.5           | 44.2                   | 43.0           | 47.5                   | 46.0            | 46.5    |

K<sub>2</sub>O: cwt per acre 1962

None 1.2 2.4

|                             |                        |      |                        |
|-----------------------------|------------------------|------|------------------------|
| <u>N: cwt per acre 1962</u> | (±0.63) <sup>(1)</sup> |      | (±0.71) <sup>(2)</sup> |
| None                        | 35.1                   | 37.9 | 36.8                   |
| 0.5                         | 45.9                   | 49.5 | 48.9                   |
| 1.0                         | 52.9                   | 55.0 | 56.2                   |

- (1) For use in vertical and interaction comparisons  
 (2) For use in horizontal and diagonal comparisons

Mean dry matter % as harvested: 73.9

Ley 1961

N: cwt per acre 1961

|                   |                 |      |
|-------------------|-----------------|------|
| C <sub>0</sub> =  | Clover          | None |
| R <sub>0</sub> =  | Ryegrass        | None |
| R <sub>1</sub> =  | "               | 1    |
| R <sub>2</sub> =  | "               | 2    |
| CR <sub>0</sub> = | Clover-ryegrass | None |
| CR <sub>1</sub> = | " "             | 1    |