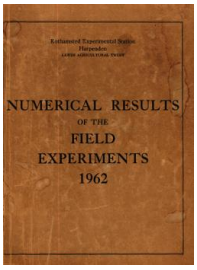
This work is licensed under a Creative Commons Attribution 4.0 International License.

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.

ROTHAMSTED RESEARCH

Yields of the Field Experiments 1962

Full Table of Content



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**

This work is licensed under a Creative Commons Attribution 4.0 International License.

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: 1½ 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.)

https://doi.org/10.23637/ERADOC-1-164

This work is licensed under a Creative Commons Attribution 4.0 International License.

62/C/2.2

Summary of Results

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

N to leys 1961

	C_o	R_o	R_1	R_2	CR_o	CR_1	Mean
K_2O: cwt per acre 1962			(±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
N: cwt per acre 1962			(±0.89)(1)	(±1.00)(2)			(±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_2O: cwt per acre 1962		
	None	1.2	2.4
N: cwt per acre 1962	(±0.63)(1)	(±0.71)(2)	
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_o = Clover	None
R_o = Ryegrass	None
R_1 = "	1
R_2 = "	2
CR_o = Clover-ryegrass	None
CR_1 = " "	1

https://doi.org/10.23637/ERADOC-1-164