

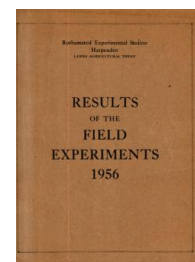
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1956

[Full Table of Content](#)



56/R/CA/5 and 56/W/CA/5 Spring Wheat - Levels and Time of N

Rothamsted Research

Rothamsted Research (1957) *56/R/CA/5 and 56/W/CA/5 Spring Wheat - Levels and Time of N ; Yields Of The Field Experiments 1956*, pp 76 - 78 - DOI: <https://doi.org/10.23637/ERADOC-1-176>

56/Ca/4.2

Summary of Results

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

	T ₁	T ₂	T ₃	T ₄	Mean	
Mean (±0.65)	12.1	12.8	14.7	6.9	11.6	
	(±0.91)					
V ₁	10.7	10.2	12.8	6.8	10.1	
V ₂	13.5	15.5	16.5	6.9	13.1	
Difference (±1.29)	+2.8	+5.3	+3.7	+0.1	+3.0 (±0.65)	
R ₁	10.1	12.0	11.9	4.7	9.7	
R ₂	14.0	13.7	17.5	9.0	13.6	
Difference (±1.29)	+3.9	+1.7	+5.6	+4.3	+3.9 (±0.65)	
N ₁	11.2	10.9	10.6	7.8	10.1	
N ₂	12.9	14.8	18.7	5.9	13.1	
Difference (±1.29)	+1.7	+3.9	+8.1	-1.9	+3.0 (±0.65)	
	R ₁	R ₂	N ₀	N ₁	N ₂	Mean
Mean			(±0.65)	(±0.46)		
			5.3	10.1	13.1	10.3
	(±0.65)		(±0.91)	(±0.65)		(±0.41)
V ₁	9.0	11.2	5.1	8.7	11.6	9.1
V ₂	10.3	15.9	5.5	11.6	14.6	11.6
R ₁			5.3	8.4	10.9	8.8
R ₂			5.3	11.8	15.3	11.9

Mean dry matter % as harvested: 78.7

Treatments

V₁ Holdfast
V₂ Cappelle

R₁, R₂ 1½, 3 bushels per acre
R₁, R₂ 2, 4 bushels per acre

N₀ No N
N₁ 0.46 cwt N per acre
N₂ 0.93 cwt N per acre

T₁ 'Nitro-Chalk' half in March half in May
T₂ 'Nitro-Chalk' all in mid March
T₃ 'Nitro-Chalk' all in mid April
T₄ 'Nitro-Chalk' all in mid May

The V × R table does not include the plots receiving no nitrogen.

56/Ca/5.1

SPRING WHEAT

Rates and times of application of nitrogen - Rothamsted (R) Little Hoos and Woburn (W) Stackyard, Series C.

Design (each field): 22 treatments arranged in 4 blocks of 13 plots each, the control and 3 of the treatments occurring in every block, the other 18 treatments occurring in 2 blocks. The total amounts of N applied per block were equal.

Area of each plot: 0.0212 acres. Area harvested: 0.0141 acres.

Treatments: None, and all combinations of:-

Nitrogen: 0.3; 0.6; 0.9 cwt N per acre as 'Nitro-Chalk'.

Times of application: All in seed bed (S); all as early top dressing (E); all as late top dressing (L); $\frac{1}{2}$ S & $\frac{1}{2}$ E; $\frac{1}{2}$ S & $\frac{1}{2}$ L; $\frac{1}{2}$ E & $\frac{1}{2}$ L; $\frac{1}{3}$ S, $\frac{1}{3}$ E & $\frac{1}{3}$ L.

Basal dressing:

Rothamsted: 1 cwt superphosphate per acre combine drilled with seed.

Woburn: 1 cwt compound fertilizer (16% P₂O₅, 16% K₂O) per acre combine drilled with seed.

Cultivations, etc.:

Little Hoos (R). Ploughed: Oct 14, 1955 and Jan 24, 1956. Seed bed 'Nitro-Chalk' applied, seed combine drilled at 2 $\frac{3}{4}$ bushels per acre: Mar 17. Early 'Nitro-Chalk' top dressing applied: Apr 16. Sprayed with DNOC 6 lb in 90 gallons per acre: May 4. Late 'Nitro-Chalk' top dressing applied: May 17. Combine harvested: Sept 20. Variety: Koga II. Previous crop: Potatoes.

Stackyard (W). Ploughed: Nov 12, 1955. Seed bed 'Nitro-Chalk' applied: Mar 14, 1956. Seed combine drilled at 3 bushels per acre: Mar 16. Early 'Nitro-Chalk' top dressing applied: Apr 16. Late 'Nitro-Chalk' top dressing applied: May 16. Sprayed with MCPA, 3 pints in 20 gallons per acre: May 31. Combine harvested: Sept 12. Variety: Peko. Previous crop: Wheat.

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

Little Hoos (R): 1.87 cwt per acre or 5.7% (27 d.f.)

Stackyard (W): 1.53 cwt per acre or 7.1% (27 d.f.)

56/Ca/5.2

Summary of Results

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

Rothamsted Little Hoos

N: cwt per acre	S	E	Time of application				Mean	
			L	$\frac{1}{2}S\frac{1}{2}E$	$\frac{1}{2}S\frac{1}{2}L$	$\frac{1}{2}E\frac{1}{2}L$		
			(±1.41)				(±0.94)	(±0.47)
None								26.3 ⁽¹⁾
0.3	32.6	31.0	33.1	33.7	33.1	30.7	31.6	32.2
0.6	35.6	36.4	34.4	31.0	33.4	32.6	34.3	34.0
0.9	34.2	33.3	32.9	34.4	33.5	32.5	36.0	34.1
Mean (±0.78)	34.1	33.6	33.5	33.0	33.3	31.9	34.0 ⁽²⁾	32.9

(1) ±0.94 (2) ±0.54

Mean dry matter % as harvested: 80.2

Woburn Stackyard Field

N: cwt per acre	S	E	Time of application				Mean	
			L	$\frac{1}{2}S\frac{1}{2}E$	$\frac{1}{2}S\frac{1}{2}L$	$\frac{1}{2}E\frac{1}{2}L$		
			(±1.15)				(±0.77)	(±0.38)
None								11.4 ⁽¹⁾
0.3	19.6	18.0	18.3	19.4	18.5	20.7	20.6	19.4
0.6	23.6	21.6	20.7	24.9	24.0	22.4	25.0	23.4
0.9	23.0	22.0	22.8	25.8	25.0	23.8	25.1	24.1
Mean (±0.64)	22.1	20.5	20.6	23.4	22.5	22.3	23.5 ⁽²⁾	21.5

(1) ±0.77 (2) ±0.44

Mean dry matter % as harvested: 68.0

Time of application

- S In seedbed.
- E Early top dressing.
- L Late top dressing.