

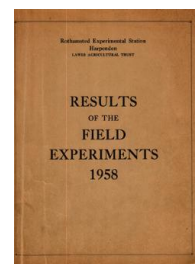
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Yields of the Field Experiments 1958

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58/R/CA/6 and 58/W/CA/6 Spring Wheat - Levels and Time of N

Rothamsted Research

Rothamsted Research (1959) *58/R/CA/6 and 58/W/CA/6 Spring Wheat - Levels and Time of N ; Yields Of The Field Experiments 1958*, pp 84 - 85 - DOI: <https://doi.org/10.23637/ERADOC-1-181>

58/Ca/6.1

SPRING WHEAT

Levels and times of application of nitrogen - Rothamsted (R)
Great Knott III and Woburn (W) Stackyard, Series C 1958.

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 seedbed (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:

Great Knott III (R): 2 cwt compound fertilizer (16% P₂O₅, 16% K₂O) per acre combine drilled with seed.

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

Cultivations, etc.:

Great Knott III (R). Ploughed: Oct 28, 1957. Seedbed 'Nitro-Chalk' applied, seed combine drilled at 3 bushels per acre: Apr 2, 1958.

Early 'Nitro-Chalk' top dressing applied: Apr 25. Late 'Nitro-Chalk' top dressing applied: May 16. Sprayed with MCPA at 4 pints in 40 gallons per acre: May 20. Combine harvested: Sept 12. Variety: Kog II. Previous crop: Spring wheat.

Stackyard (W). Ploughed: Feb 13, 1957 to Mar 5, 1958. Seedbed 'Nitro-Chalk' applied: Mar 21. Seed combine drilled at 3 bushels per acre: Mar 22. Early 'Nitro-Chalk' top dressing applied: Apr 23. Late 'Nitro-Chalk' top dressing applied: May 16. Sprayed with MCPA at 4 pints in 40 gallons per acre: May 27. Combine harvested: Oct 9. Variety: Peko. Previous crop: Potatoes.

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

Great Knott III (R): 2.58 cwt per acre or 14.0% (27 d.f.)

Stackyard (W): 1.97 cwt per acre or 7.4% (27 d.f.)

Note. Estimates of incidence of Eyespot (*Cercospora herpotrichoides*) and Take-all (*Ophiobolus graminis*), and counts of plant number were made.

58/Ca/6.2

Summary of Results

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

N: cwt per acre	Time of application						Mean	
	S	E	L	$\frac{1}{2}S\frac{1}{2}E$	$\frac{1}{2}S\frac{1}{2}L$	$\frac{1}{2}E\frac{1}{2}L$		$\frac{1}{3}S\frac{1}{3}E\frac{1}{3}L$
Great Knott III, Rothamsted								
	(± 1.94)						(± 1.29)	(± 0.64)
None							8.5 ⁽¹⁾	
0.3	19.4	16.1	16.4	14.5	13.8	21.4	13.9	16.2
0.6	24.6	21.9	13.4	16.4	24.1	17.6	21.6	20.2
0.9	20.3	22.2	18.5	22.2	23.8	14.7	24.5	21.4
Mean (± 1.08)	21.4	20.1	16.1	17.7	20.6	17.9	20.0 ⁽²⁾	18.4

(1) ± 1.29 (2) ± 0.74

Mean dry matter % as harvested: 80.0

Stackyard Field, Woburn

	(± 1.48)						(± 0.99)	(± 0.49)
None							16.0 ⁽¹⁾	
0.3	27.4	24.1	21.7	24.9	23.7	22.9	25.7	24.5
0.6	31.1	26.9	26.2	31.4	25.7	25.2	29.3	28.1
0.9	31.4	29.4	26.3	32.4	29.9	31.1	31.1	30.3
Mean (± 0.83)	30.0	26.8	24.7	29.6	26.4	26.4	28.7 ⁽²⁾	26.8

(1) ± 0.99 (2) ± 0.57

Mean dry matter % as harvested: 72.5