

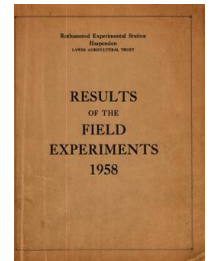
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Yields of the Field Experiments 1958

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58/R/CA/5 and 58/W/CA/5 Spring Wheat - Combine Drilling of N

Rothamsted Research

Rothamsted Research (1959) *58/R/CA/5 and 58/W/CA/5 Spring Wheat - Combine Drilling of N* ;
Yields Of The Field Experiments 1958, pp 82 - 83 - DOI: <https://doi.org/10.23637/ERADOC-1-181>

58/Ca/5.1

SPRING WHEAT

Combine drilling of nitrogen - Rothamsted (R) Great Knott III and Woburn (W) Lansome Field 1958.

Design (each field): 4 randomized blocks of 7 plots each.

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

Treatments: None and all combinations of:-

Nitrogen: 0.22^{*}(N₁); 0.54 (N₂); 0.72^{*}(N₃) cwt N per acre.

Method of application: Broadcast as sulphate of ammonia; combine drilled as compound fertilizer:

N₁: 5% N, 12½% P₂O₅, 12½% K₂O.

N₂: 8% N, 8% P₂O₅, 8% K₂O.

N₃: 12% N, 9% P₂O₅, 9% K₂O.

^{*}Note. For N₁ and N₃ on Great Knott III (R) the compound fertilizer was actually applied at the rates of 0.19 and 0.59 cwt N per acre respectively. The broadcast dressings were corrected to these amounts.

Basal dressing per acre (each field): 0.54 cwt P₂O₅ and 0.54 cwt K₂O combine drilled

(a) as compound 16% P₂O₅, 16% K₂O on the no nitrogen and broadcast nitrogen plots;

(b) as compounds N₁, N₂, N₃ on the plots receiving drilled nitrogen.

Cultivations, etc.:

Great Knott III (R): Ploughed: Oct 28, 1957. Seed combine drilled at 3 bushels per acre: Apr 3, 1958. Sulphate of ammonia broadcast: Apr 4. Sprayed with MCPA at 4 pints in 40 gallons per acre: May 20. Combine harvested: Sept 12. Variety: Koga II. Previous crop: Spring wheat.

Lansome Field (W): Ploughed: Nov 27, 1957. Seed combine drilled at 3 bushels per acre: Apr 11, 1958. Sprayed with MCPA at 5 pints in 40 gallons per acre: May 22. Combine harvested: Oct 9. Variety: Peko. Previous crop: Fallow.

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

Great Knott III (R): 0.94 cwt per acre or 5.1% (18 d.f.)

Lansome Field (W): 1.44 cwt per acre or 7.9% (18 d.f.)

58/Ca/5.2

Summary of Results

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

None	Broadcast			Combine drilled			Mean
	0.22 ⁺	0.54	0.72*	0.22 ⁺	0.54	0.72*	

Great Knott III, Rothamsted

9.9	13.1	20.1	20.2 (±0.46)	18.4	24.9	23.3	18.5
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Mean dry matter % as harvested: 78.6

Lansome Field, Woburn

12.6	17.7	21.7	22.0 (±0.71)	17.4	16.7	19.1	18.2
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Mean dry matter % as harvested: 74.2

⁺0.19 on Great Knott III, Rothamsted.

*0.59 " " " " "