

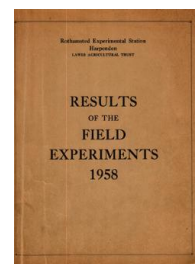
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Yields of the Field Experiments 1958

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58/R/CB/5 and 58/W/CB/5 Barley - Varieties and N

Rothamsted Research

Rothamsted Research (1959) *58/R/CB/5 and 58/W/CB/5 Barley - Varieties and N* ; Yields Of The Field Experiments 1958, pp 97 - 98 - DOI: <https://doi.org/10.23637/ERADOC-1-181>

58/Cb/5.1

BARLEY

Varieties and levels of nitrogen - Rothamsted (R) Great Knott III and Woburn (W) Lansome Field.

Design: 3 randomized blocks of 6 plots each, plots being split into 2 for the application of nitrogen.

| Area of each sub plot (acres): | Area harvested (acres): |
|--------------------------------|-------------------------|
| Great Knott III (R): 0.0103. | 0.0069 |
| Lansome Field (W): 0.0167. | 0.0111. |

Treatments: All combinations of:-

Whole plots. Varieties: Domen (1); Herta (2); Ingrid (3); Plumage Archer (4); Proctor (5); Rika (6).

Sub plots. Nitrogen, applied as sulphate of ammonia.

Great Knott III (R): None; 0.3 cwt N per acre
Lansome Field (W): 0.4; 0.8 cwt N per acre.

Basal dressing:

Great Knott III (R): $2\frac{1}{2}$ cwt compound fertilizer (12% N, 9% P_2O_5 , 9% K_2O) per acre combine drilled with seed.

Lansome Field (W): $2\frac{1}{2}$ cwt compound fertilizer (16% P_2O_5 , 16% K_2O) per acre combine drilled with seed.

Cultivations, etc.:

Great Knott III (R): Ploughed: Oct 28 - Nov 6, 1957. Seed combine drilled at $2\frac{1}{2}$ bushels (Proctor - 2 bushels) per acre: Apr 3 - 4, 1958. Sulphate of ammonia applied: Apr 8. Sprayed with MCPA at 4 pints in 40 gallons per acre: Apr 22. Combine harvested: Aug 26. Previous crop: Spring wheat.

Lansome Field (W): Ploughed: Nov 27 - 29, 1957. Sulphate of ammonia applied: Apr 3, 1958. Seed combine drilled at $2\frac{3}{4}$ bushels per acre: Apr 11. Sprayed with MCPA at 5 pints in 40 gallons per acre: May 22. Combine harvested: Aug 27. Previous crop: Fallow.

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

Great Knott III (R):

Whole plot: 1.14 cwt per acre or 3.7% (10 d.f.)

Sub plot: 0.81 cwt per acre or 2.6% (12 d.f.)

Lansome Field (W):

Whole plot 1.38 cwt per acre or 4.2% (10 d.f.)

Sub plot: 1.88 cwt per acre or 5.8% (12 d.f.)

58/Cb/5.2

Summary of Results

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

| N: cwt per acre (including basal) | Variety | | | | | | Mean |
|--------------------------------------|---------------------|------|------|------|------|------|-----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| | Great Knott III (R) | | | | | | |
| | (± 0.73)* | | | | | | |
| 0.3 | 26.5 | 30.5 | 26.8 | 24.9 | 30.6 | 29.7 | 28.1 |
| 0.6 | 30.0 | 36.4 | 33.2 | 30.6 | 36.7 | 34.2 | 33.5 |
| Mean (± 0.65) | 28.2 | 33.5 | 30.0 | 27.8 | 33.6 | 31.9 | 30.8 |
| Difference (± 0.66) | 3.5 | 5.9 | 6.4 | 5.7 | 6.1 | 4.5 | 5.4 (± 0.27) |

Mean dry matter % as harvested: 74.4

| N: cwt per acre | Lansome Field (W) | | | | | | Mean |
|---------------------------|-------------------|------|------|------|------|------|------------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| | (± 1.10)* | | | | | | |
| 0.4 | 32.1 | 33.0 | 33.4 | 29.9 | 34.1 | 35.0 | 32.9 |
| 0.8 | 31.3 | 30.9 | 33.5 | 26.3 | 37.1 | 32.8 | 32.0 |
| Mean (± 0.79) | 31.7 | 31.9 | 33.4 | 28.1 | 35.6 | 33.9 | 32.4 |
| Difference (± 1.54) | -0.8 | -2.1 | +0.1 | -3.6 | +3.0 | -2.2 | -0.9 (± 0.63) |

Mean dry matter % as harvested: 83.1

* for use in comparisons other than vertical.