

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

Numerical Results of the Field Experiments 1968

[Full Table of Content](#)



68/C/12 Previous Crops X N for Barley

Rothamsted Research

Rothamsted Research (1970) *68/C/12 Previous Crops X N for Barley* ; Numerical Results Of The Field Experiments 1968, pp 173 - 174 - DOI: <https://doi.org/10.23637/ERADOC-1-58>

68/c/12.1

PREVIOUS CROPS X N FOR BARLEY 1966 - 68

(BY)

The effect of previous cropping and nitrogen on the yield of barley -
Fosters Corner 1968, the third year - barley.

Design: A single replicate of 3 x 3 x 3 x 3 in 3 blocks of 9 plots,
split for N in 1967 and 1968, with split plot confounding and a
component of the 4 factor interaction confounded with blocks.
Whole plot randomisation restricted.

Area of each sub plot: 0.0107. Area harvested: 0.0063.

Treatments: All combinations of:-

Whole plots (applied 1966):-

1. Cropping: Spring wheat (W), Kale (K), Italian Ryegrass (G).
2. Nitrogen: None (Q0), 1.0 (Q2), 2.0 (Q4) cwt N as 'Nitro-Chalk'.

Sub plots (applied to barley 1967 and 1968):-

3. 1967 Nitrogen: None (R0), 0.5 (R1), 1.0 (R2) N as 'Nitro-Chalk'.
4. 1968 Nitrogen: None (N0), 0.5 (N1), 1.0 (N2) N as 'Nitro-Chalk'.

Basal applications: 2.5 cwt (0:20:20) combine drilled.

Cultivations, etc.: Ploughed: 18 Sept, 1967. Seed drilled at
145 lb, 'Nitro-Chalk' applied: 29 Feb, 1968. Combine harvested:
22 July. Variety: Maris Badger.

NOTES: (1) For previous years' results see 'Results' 66/c/19 and
67/c/15.

- (2) Samples of grain were taken at harvest for determination
of percentage N.

Standard errors per plot. Grain:

Whole plot: 2.34 or 8.5% (16 d.f.)
Sub plot: 5.39 or 19.6% (40 d.f.)

68/C/12.2

SUMMARY OF RESULTS

GRAIN

| Crop in 1966 | N 1966 | | | N 1967 | | | N 1968 | | | Mean |
|-----------------|---------|------|------|-------------|------|------|-------------|------|------|---------|
| | Q0 | Q2 | Q4 | R0 | R1 | R2 | N0 | N1 | N2 | |
| | (±1.35) | | | (1) and (2) | | | (1) and (2) | | | (±0.78) |
| W | 24.9 | 27.8 | 26.6 | 27.4 | 25.3 | 26.6 | 29.0 | 25.2 | 25.1 | 26.4 |
| K | 28.0 | 26.9 | 29.1 | 27.0 | 30.4 | 26.6 | 33.6 | 26.7 | 23.7 | 28.0 |
| G | 28.3 | 27.7 | 28.8 | 31.0 | 29.9 | 23.9 | 36.4 | 26.3 | 22.2 | 28.3 |
| | | | | (1) and (2) | | | (1) and (2) | | | |
| | Q0 | | | 27.1 | 28.6 | 25.5 | 32.2 | 26.0 | 22.9 | 27.1 |
| | Q2 | | | 30.1 | 27.5 | 24.8 | 32.2 | 26.8 | 23.4 | 27.5 |
| | Q4 | | | 28.2 | 29.4 | 26.9 | 34.5 | 25.3 | 24.7 | 28.2 |
| | | | | | | | (±1.80) | | | (±1.04) |
| | | | | R0 | | | 34.9 | 28.3 | 22.2 | 28.5 |
| | | | | R1 | | | 33.0 | 26.2 | 26.3 | 28.5 |
| | | | | R2 | | | 31.1 | 23.7 | 22.4 | 25.7 |
| Mean (±1.04) | | | | | | | 33.0 | 26.0 | 23.7 | 27.6 |

(1) (±1.66) For use in vertical and diagonal comparisons

(2) (±1.80) For use in horizontal and interaction comparisons

Mean D.M. %: 86.4