

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 2000

[Full Table of Content](#)



00/R/CS/355 Rates of Mineralization - W. Wheat

Rothamsted Research

Rothamsted Research (2001) *00/R/CS/355 Rates of Mineralization - W. Wheat* ; Yields Of The Field Experiments 2000, pp 67 - 68 - DOI: <https://doi.org/10.23637/ERADOC-1-55>

00/R/CS/355

RATES OF N AND MINERALIZATION

Object: To study the cumulative effects of rates of nitrogen fertilizer on soil mineralization capacity and yields of continuous winter wheat - Claycroft.

Sponsor: P.R. Poulton.

The tenth year, w. wheat.

For previous years see 91-99/R/CS/355.

Design: 3 randomised blocks of 7 plots.

Whole plot dimensions: 21.0 x 23.0.

Treatments:

NITROGEN Nitrogen fertilizer (kg N) as 34.5% N cumulative to previous dressings:

0
50
100
150
200
250
300

Experimental diary:

29-Aug-99 : B : : Ploughing started.
30-Aug-99 : B : : Ploughing completed.
31-Aug-99 : B : : Rotary harrowed.
03-Sep-99 : B : : Rolled.
14-Sep-99 : B : : Discd.
16-Sep-99 : B : : Combination drilled, Consort, tr. Sibutol at 350 seeds/m² with the Nordsten drill.
22-Sep-99 : B : : Genesis at 5.0 kg.
27-Oct-99 : B : : tm)Lexus 50 DF at 20 g in 200 l.
 : B : : tm)Stomp 400 SC at 2.5 l in 200 l.
 : B : : tm)Cyperkill 10 at 250 ml in 200 l.
18-Apr-00 : T : 50,100,150,200,250,300 : 34.5% N at 145, 290, 435, 580, 725, 870 kg respectively
29-Apr-00 : B : : Landmark at 0.5 l in 200 l.
15-May-00 : B : : tm)Ally at 30 g in 200 l.
 : B : : tm)Starane 2 at 0.5 l in 200 l.
 : B : : tm)Topik at 0.125 l in 200 l.
 : B : : tm)Toil at 1.0 l in 200 l.
20-May-00 : B : : Landmark at 1.0 l in 100 l.
15-Aug-00 : B : : Combine harvested.

Previous crops: W. wheat since 1990.

NOTE: Samples of grain were taken for chemical analysis.

00/R/CS/355

GRAIN TONNES/HECTARE

***** Tables of means *****

NITROGEN

0	0.92
50	2.56
100	2.89
150	5.18
200	5.28
250	6.72
300	7.55

Mean	4.44
------	------

*** Standard errors of differences of means ***

NITROGEN

0.407

***** Stratum standard errors and coefficients of variation *****

Stratum	d.f.	s.e.	cv%
BLOCK.WP	12	0.499	11.2

GRAIN MEAN DM% 85.3

PLOT AREA HARVESTED 0.00504