

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 1979

[Full Table of Content](#)



79/R/CS/223 Late N - Wheat

Rothamsted Research

Rothamsted Research (1980) *79/R/CS/223 Late N - Wheat* ; Yields Of The Field Experiments 1979, pp 226 - 227 - DOI: <https://doi.org/10.23637/ERADOC-1-45>

79/R/CS/223

LATE N

Object: To study the residual effects on wheat of a range of fertilisers applied to potatoes in 1978 - Long Hoos III.

Sponsors: T.M. Addiscott, J. Ashworth, A. Penny, F.V. Widdowson.

The second year, wheat.

For previous year see 78/R/CS/223.

Design: 3 randomised blocks of 18 plots.

Whole plot dimensions: 9.14 x 4.27.

Treatments: All combinations of:-

1. N FORM(78) Forms of nitrogen fertiliser in 1978:
 - AA Aqueous ammonia, injected before planting
 - AA+NITRA Aqueous ammonia + nitrapyrin at 1.1 kg, injected before planting
 - AA+STC Aqueous ammonia + sodium trithiocarbonate at 22 kg injected before planting
 - AU Aqueous urea, injected before planting
 - AN E Ammonium nitrate, all to the seedbed
 - AN E+L Ammonium nitrate, half to the seedbed, half top-dressed
 - IBDU Isobutylidene diurea, medium granules all to the seedbed
2. N RATE(1) Rates of nitrogen fertiliser in 1978 (kg N):
 - 200
 - 300

plus four extra treatments given ammonium nitrate, all to the seedbed in 1978 (kg N):

EXTRA

- AN E 150
- AN E 250
- AN E 350
- AN E 400

Basal applications: Manures: (0:20:20) at 310 kg, combine drilled. 'Nitro-Chalk' at 370 kg. Weedkillers: Mecoprop at 2.5 kg in 220 l. Growth regulator: Chlormequat at 1.7 kg in 220 l.

Seed: Flanders, sown at 190 kg.

Cultivations, etc.: - Heavy spring-tine cultivated twice: 26 Oct, 1978. Seed sown: 27 Oct. N applied: 30 Apr, 1979. Weedkiller applied: 9 May. Growth regulator applied: 1 June. Combine harvested: 29 Aug.

NOTE: Grain samples were taken for N determinations.

79/R/CS/223

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

N RATE(1)	200	300	MEAN
N FORM			
AA	6.30	6.42	6.36
AA+NITRA	6.51	6.40	6.45
AA+STC	6.40	6.47	6.44
AU	6.41	6.57	6.49
AN E	6.53	6.44	6.49
AN E+L	6.39	6.59	6.49
IBDU	6.71	6.59	6.65
MEAN	6.47	6.50	6.48

EXTRA	AN E 150	AN E 250	AN E 350	AN E 400	MEAN
	6.25	6.52	6.57	6.70	6.51

GRAND MEAN 6.49

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	EXTRA	N FORM	N RATE(1)	N FORM N RATE(1) & EXTRA

SED	0.145	0.102	0.055	0.145

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	34	0.177	2.7

GRAIN MEAN DM% 86.4

PLOT AREA HARVESTED 0.00290