

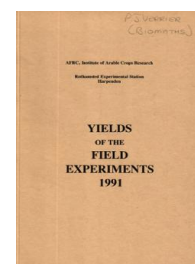
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1991

[Full Table of Content](#)



91/R/WW/8 Foliar Potassium Nitrate - W. Wheat

Rothamsted Research

Rothamsted Research (1992) *91/R/WW/8 Foliar Potassium Nitrate - W. Wheat* ; Yields Of The Field Experiments 1991, pp 121 - 122 - DOI: <https://doi.org/10.23637/ERADOC-1-46>

91/R/WW/8

WINTER WHEAT

FOLIAR POTASSIUM NITRATE

Object: To study the effects of foliar applications of potassium nitrate and urea on the yield and nutrient composition of w. wheat - Summerdells II.

Sponsor: P.B. Barraclough.

Design: 5 randomised blocks of 9 plots.

Whole plot dimensions: 3.0 x 15.0.

Treatments:

FOLIAR N	Foliar nitrogen; all applications were divided equally and applied on two closely spaced days:
NONE	None (duplicated)
K20E	20 kg K as potassium nitrate at GS 39 on 29 and 30 May, 1991
K20EU40E	" " " " " " plus 40 kg N as urea on 29 and 30 May
U40E	40 kg N as urea on 29 and 30 May
K5M	5 kg K as potassium nitrate at GS 59 on 17 and 20 June
K20M	20 kg K " " " " " " 17 and 20 June
K20EK20M	" " " " " " on 29 and 30 May repeated on 17 and 20 June
K20MK20L	" " " " " " on 17 and 20 June repeated at GS 71 on 9 and 10 July

NOTE: All plots received N at 120 kg as 'Nitram' applied on 3 Apr, 1991.

Basal applications: Manures: (0:20:32) at 980 kg. Weedkillers: Bifenox at 0.95 kg and chlorotoluron at 3.5 kg in 200 l. Glyphosate at 1.4 kg in 200 l. Fungicide: Fenpropimorph at 0.38 kg in 200 l.

Seed: Mercia, sown at 170 kg.

Cultivations, etc.:- Deep-tine cultivated: 6 Oct, 1990. Ploughed, furrow pressed: 10 Oct. Rotary harrowed, seed sown: 13 Oct. Bifenox and chlorotoluron applied: 13 Nov. PK applied: 6 Dec. Fungicide applied: 9 May, 1991. Glyphosate applied: 12 Aug. Combine harvested: 22 Aug. Previous crops: W. oilseed rape 1989, potatoes 1990.

NOTES: (1) Leaf samples were taken approximately five days after foliar treatment applications to measure N and K contents.
(2) Components of yield were measured.

91/R/WW/8

GRAIN TONNES/HECTARE

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

FOLIAR N	
NONE	8.71
K20E	8.58
K20EU40E	8.41
U40E	8.12
K5M	8.64
K20M	8.63
K20EK20M	8.89
K20MK20L	8.48
Mean	8.58

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

FOLIAR N	
0.113	min.rep
0.098	max-min

FOLIAR N
max-min NONE v any of the remainder
min.rep any of the remainder

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP	33	0.179	2.1

GRAIN MEAN DM% 87.4
PLOT AREA HARVESTED 0.00230