

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 1973

[Full Table of Content](#)



73/R/RN/9 - Cereal Disease Reference Plots - Beans, Oats, Wheat

Rothamsted Research

Rothamsted Research (1974) 73/R/RN/9 - *Cereal Disease Reference Plots - Beans, Oats, Wheat ; Yields Of The Field Experiments 1973*, pp 113 - 114 - DOI:

<https://doi.org/10.23637/ERADOC-1-98>

73/R/RN/9

CEREAL DISEASE REFERENCE PLOTS

Object: To study the effects of intensive cereal cropping on the incidence of soil-borne diseases, especially in relation to seasonal variation - Pennell's Piece.

Sponsors: D.B. Slope, E.W. Broom, G.A. Salt.

The eleventh year, winter wheat, spring oats, beans.

For previous years see 63/C/10(t), 64-65/C/9, 66/C/7, 67-68/C/5 and 69-72/R/RN/9.

Design: 2 randomised blocks of 6 plots.

Whole plot dimensions: 17.1 x 4.27. Area harvested: 0.00479.

Treatments: Previous crops (1963-72):-

PREVCROP

1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	
W	W	W	BE	O	W	W	W	BE	O	W/W/BE/O
W	W	BE	O	W	W	W	BE	O	W	W/BE/O/W
W	BE	O	W	W	W	BE	O	W	W	BE/O/W/W
BE	O	W	W	W	BE	O	W	W	W	-
O	W	W	W	BE	O	W	W	W	BE	-
W	W	W	W	W	W	W	W	W	W	W/W/W/W

where: W = wheat, BE = beans, O = oats

NOTE: Spring wheat series discontinued from 1973.

Standard applications:

Winter wheat: Manures: (0:14:28) at 270 kg, combine drilled, 'Nitro-Chalk' at 500 kg. Weedkillers: Terbutryne and related triazines ('Prebane' at 4.5 kg in 220 l), MCPA, mecoprop and dicamba ('Tetralix Plus' at 9.1 l in 220 l).

Spring beans: Manures: (0:14:28) at 450 kg, placement drilled. Insecticide: Demeton-s-methyl at 0.25 kg in 370 l.

Spring oats: Manures: (0:14:28) at 270 kg, combine drilled, 'Nitro-Chalk' at 200 kg. Weedkiller: MCPA, mecoprop and dicamba ('Tetralix Plus' at 7.0 l in 220 l).

Seed: Winter wheat: Cappelle, sown at 200 kg
 Spring beans: Minor, sown at 220 kg
 Spring oats: Manod, sown at 190 kg.

73/R/RN/9

Cultivations, etc.: - All plots: Ploughed: 12 Oct, 1972. Winter wheat: Rotary harrowed, seed sown: 13 Oct. 'Prebane' applied: 20 Oct. N applied: 23 Mar, 1973. 'Tetralix Plus' applied: 26 Apr. Combine harvested: 22 Aug.
 Spring beans: Power harrowed: 8 Mar, 1973. Seed sown: 9 Mar. Insecticide applied: 8 June. Combine harvested: 4 Sept.
 Spring oats: Power harrowed: 8 Mar, 1973. Seed sown: 14 Mar. N applied: 23 Mar. Weedkiller applied: 15 May. Combine harvested: 23 Aug.

- NOTES: (1) Yields were taken for winter wheat only.
 (2) Estimates were made in July of incidence of Take-all (*Gaeumannomyces graminis*) and eyespot (*Cercospora herpotrichoides*) in the wheat.

TABLES OF MEANS

WINTER WHEAT

GRAIN: TONNES/HECTARE

PREVCROP				Mean
W/W/BE/O	W/BE/O/W	BE/O/W/W	W/W/W/W	
5.51	5.13	4.01	5.05	4.92

Mean D.M. % 82.5