

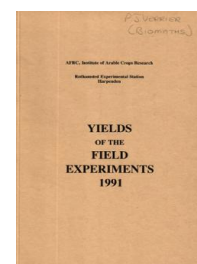
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1991

[Full Table of Content](#)



91/R/P/1 Control of Storage Diseases - Potatoes

Rothamsted Research

Rothamsted Research (1992) *91/R/P/1 Control of Storage Diseases - Potatoes* ; Yields Of The Field Experiments 1991, pp 169 - 170 - DOI: <https://doi.org/10.23637/ERADOC-1-46>

91/R/P/1

POTATOES

CONTROL OF STORAGE DISEASES

Object: To study the effects of applying fungicides to seed tubers, harvest dates and post-harvest treatments on tuber diseases - Great Harpenden I.

Sponsors: S.M. Hall, G.A. Hide.

Design: 3 randomised blocks of 3 whole plots split into 9 sub plots.

Whole plot dimensions: 16.5 x 11.4.

Treatments: All combinations of:-

Whole plots

1. **HARVDATE** Dates of harvest:

H1	28 Aug, 1991
H2	18 Sept
H3	9 Oct

Sub plots

2. **FUNGRATE** Concentration of a mixture of thiabendazole (30%) and imazalil (10%) as a pre-planting dip:

0	None
F1	0.27% active ingredient of mixture
F2	0.07% active ingredient of mixture

NOTE: **HARVDATE** H1 and H2 haulm was pulverised 16 days before lifting and **HARVDATE** H3 was pulverised 14 days before lifting.

Basal applications: Manures: (0:20:32) at 980 kg. (12:20:20) at 1530 kg. Weedkillers: Linuron at 1.6 kg with paraquat at 0.60 kg ion in 200 l. Fungicides: Maneb at 0.96 kg and zinc oxide at 22 g in 200 l on three occasions, the first and third occasion with a wetting agent, 'Bond' at 0.2 l, and the second with the pirimicarb. Mancozeb at 1.4 kg with a wetting agent, 'Bond' at 0.2 l, in 200 l. Fentin hydroxide at 0.27 kg with a wetting agent, 'Nu Film P' at 0.18 l, in 200 l. Insecticide: Pirimicarb at 0.14 kg. Irrigation: 19 mm.

Variety: King Edward.

Cultivations, etc.:- PK applied: 4 Dec, 1990. Ploughed: 11 Dec. NPK applied: 11 Apr, 1991. Rotary harrowed, ridged: 15 Apr. Hand planted, split back: 16 Apr. Rotary ridged: 9 May. Weedkillers applied: 21 May. First maneb, zinc oxide and wetting agent applied: 1 July. Maneb, zinc oxide and pirimicarb applied: 10 July. Second maneb, zinc oxide and wetting agent applied: 19 July. Mancozeb with wetting agent applied: 1 Aug. Fentin hydroxide with wetting agent applied: 12 Aug. Irrigation applied: 14 Aug.

91/R/P/1

NOTES: (1) Tuber diseases were assessed after harvest and in storage.
 (2) Yields were not taken on HARVDATE H1.

TOTAL TUBERS TONNES/HECTARE

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

FUNGRATE HARVDATE	O	F1	F2	Mean
H2	44.0	45.3	46.7	45.4
H3	48.7	47.4	47.3	47.8
Mean	46.4	46.4	47.0	46.6

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

FUNGRATE	HARVDATE*
1.77	FUNGRATE 2.50

* Within the same level of HARVDATE only

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP.SP	44	5.31	11.4

PERCENTAGE WARE 4.44 CM (1.75 INCH) RIDDLE

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

FUNGRATE HARVDATE	O	F1	F2	Mean
H2	64.0	67.8	65.4	65.7
H3	68.6	70.8	61.7	67.0
Mean	66.3	69.3	63.6	66.4

SUB PLOT AREA HARVESTED 0.00171