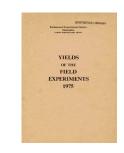
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# Yields of the Field Experiments 1975



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## 75/ R/P/4 - Blight & Aphid Reference Plots - Potatoes

#### **Rothamsted Research**

Rothamsted Research (1976) 75/ R/P/4 - Blight & Aphid Reference Plots - Potatoes; Yields Of The Field Experiments 1975, pp 365 - 368 - DOI: https://doi.org/10.23637/ERADOC-1-141

### 75/R/P/4

#### POTATOES

## BLIGHT AND APHID REFERENCE PLOTS

Object: To study the separate and combined effects of sprays to control blight and aphids on potatoes - Great Harpenden II.

Sponsors: O.J. Stedman, R.W. Gibson.

Design: 4 randomised blocks of 7 plots split into 3.

Whole plot dimensions: 8.53 x 9.53.

Treatments: All combinations of:-Whole plots: 1. Blight fungicide:

FUNGCIDE

None

NONE

Mancozeb applied on 21 July at 1.3 kg in 450 1

MANCOZEB

2. Aphicide:

APHICIDE

None Demeton-s-methyl applied early, on 24 June at 0.25 kg in 450 l

NONE

Demeton-s-methyl applied with the blight spray on 21 July on 0.25 kg DEMETONE

in 450 1

DEMETONI.

Sub plots: 3. Varieties:

VARIETY

King Edward Majestic Pentland Crown

EDWARD MAJESTIC CRCWN

together with one extra treatment, sprayed mancozeb only and split for varieties as above, plot used for sampling (no yields recorded).

Basal applications: Manures: (13:13:20) at 1510 kg. Weedkillers: Linuron at 1.1 kg with paraquat at 0.42 kg ion in 450 1.

## 75/R/P/4

Cultivations, etc.:- Ploughed: 14 Jan, 1975. Spring-tine cultivated and NPK applied: 30 Apr. Spiked rotary cultivated and potatoes machine planted: 6 May. Grubbed: 14 May. Rotary ridged: 22 May. Weedkillers applied: 30 May. Grubbed: 25 June. Rotary ridged: 4 July. Haulm mechanically destroyed: 25 Sept. Sprayed with undiluted BOV at 170 1: 1 Oct. Lifted: 15 Oct. Previous crops: Barley 1973 and 1974.

NOTE: Tuber samples were taken for blight determination.

75/R/P/4
TOTAL TUBERS TONNES/HECTARE
\*\*\* TABLES OF MEANS \*\*\*

APHICIDE FUNGCIDE	NONE	DEMETONE	DEMETONL	MEAN
NONE	20.9	22.4	21.4	21 6
MA NCOZEB	21.7	23.6	21.7	21.6
111100222	21.	20.0	21.1	22.3
MEAN	21.3	23.0	21.5	21.9
VARIETY	EDWARD	MAJESTIC	CROWN	MEAN
FUNGCIDE	10.5			
NONE	18.5	19.0	27.2	21.6
MA NCOZEB	19.5	19.6	27.8	22.3
MEAN	19.0	19.3	27.5	21.9
VARIETY APHICIDE	EDWARD	MAJESTIC	CROWN	MEAN
NONE	18.7	18.5	26.7	21.3
DEMETONE	20.0	20.8	28.2	23.0
DEMETONL	18.4	18.7	27.6	21.5
MEAN	19.0	19.3	27.5	21.9
FUNGCIDE	VARIETY APHICIDE	EDWARD M	AJEST IC	CROWN
NONE	NONE	18.3	17.9	26.6
	DEMETONE	19.3	20.6	27.3
	DEMETONL	18.0	18.5	27.6
MA NCOZEB	NONE	19.1	19.1	26.8
	DEMETONE	20.6	21.0	29.1
	DEMETONL	18.8	18.9	27.5
		2000	1000	2100

# \*\*\*\*\* STANDARD ERRORS OF DIFFERENCES OF MEANS \*\*\*\*

TABLE FU	NGC I DE	APHICIDE	VARIETY	FUNGCIDE APHICIDE
SED	0.36	0.44	0.49	0.62
	NGC I DE ARIETY	APHICIDE VARIETY	FUNGCIDE APHICIDE VARIETY	
SED	0.67	0.82	1.16	
EXCEPT WHEN COMPARING FUNGCIDE	MEANS 0.69	WITH SAME LEV	VEL(S) OF:	
APHICIDE FUNGCIDE • APHICIDE		0.35	1.20	

75/R/P/4

TOTAL TUBERS TONNES /HECTARE

\*\*\*\* S TRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION \*\*\*\*

STRATUM	DF	SE	CV%
BLCCK . WP	15	0.88	4.0
BLCCK.WP.SP	36	1.69	7.7

PERCENTAGE WARE 3.31 CM (1.5 INCH) RIDDLE

APHICIDE FUNGCIDE	NONE	DEMETONE	DEMETONL	MEAN
NONE	89.1	91.0	89.7	89.9
MANCOZEB	90.0	90.8	89.6	
MANCULEB	90.0	90.0	09.0	90.1
MEAN	89.6	90.9	89.7	90.0
VARIETY	EDWARD	MAJES TIC	CROWN	MEAN
FUNGCIDE	DDWILLD	Paro LID 110	OHOMA	rusu
NONE	82.2	90.5	97.1	89.9
MANCOZEB	82.4	90.6	97.3	90.1
MEA N	82.3	90.6	97.2	90.0
VARIETY	EDWARD	MAJESTIC	CROWN	MEAN
APHICIDE	EDWARD	MADELIC	OROWN	MEAN
NONE	81.8	89.9	97.0	89.6
DEMETONE	83.7	91.8	97.1	90.9
DEMETONL	81.5	90.0	97.5	89.7
MEAN	82.3	90.6	97.2	90.0

FUNGCIDE	VARIETY APHICIDE	EDWARD	MAJEST IC	CROWN
NONE	NONE	80.4	90.0	96.9
	DEMETONE	84.2	92.0	96.8
	DEMETONL	82.0	89.5	97.7
MANCOZEB	NONE	83.2	89.8	97.2
	DEMETONE	87.2	91.7	97.4
	DEMETONL	80.9	90.5	97.4

SUB PLOT AREA HARVESTED 0.00271