

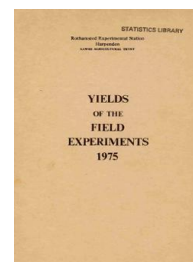
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1975

[Full Table of Content](#)



75/ W/CS/138 - Control of Pcn - Potatoes

Rothamsted Research

Rothamsted Research (1976) 75/ W/CS/138 - *Control of Pcn - Potatoes* ; Yields Of The Field Experiments 1975, pp 226 - 228 - DOI: <https://doi.org/10.23637/ERADOC-1-141>

75/W/CS/138

CONTROL OF PCN

Object: To study the effects of rates and depths of applying nematicides on control of *Heterodera rostochiensis* (PCN) and yield of early and maincrop potatoes - Woburn Butt Close.

Sponsor: A.G. Whitehead.

The second year, potatoes.

For previous year see 74/W/CS/138.

Design: 2 series (for early and maincrop varieties in 1974, both maincrop in 1975) each of 3 blocks of 7 plots.

Whole plot dimensions: 2.84 x 7.01.

Treatments: To each series: Nematicides, times and depths of application (cumulative to 1974):

	NEMACIDE
None	NONE
Autumn applications, all also given dichloropropene (200 kg) injected at 20 cm:	
Dazomet at 100 kg, worked in to top 7.5 cm of soil	DID1/7.5
Dazomet at 100 kg, worked in to top 15 cm of soil	DID1/15
Dazomet at 200 kg, worked in to top 7.5 cm of soil	DID2/7.5
Dazomet at 200 kg, worked in to top 15 cm of soil	DID2/15
Dichloropropene at 200 kg in autumn, injected at 20 cm + oxamyl at 6 kg (a.i.) in spring	DIDP
Oxamyl at 6 kg (a.i.) in spring	DP

Basal applications: Manures: (13:13:20) at 1860 kg. Weedkiller: Linuron at 1.2 kg plus paraquat at 0.28 kg ion in 280 l. Insecticide: Demeton-s-methyl at 0.25 kg in 280 l. Fungicide: Mancozeb at 1.3 kg in 390 l.

Seed: Pentland Crown.

Cultivations, etc.:-

Both series: Deep-tine cultivated: 6 Dec, 1974. Dichloropropene and dazomet applied, spring-tine cultivated: 11 Dec. NPK applied: 22 Apr, 1975. Spring-tine cultivated, oxamyl applied, spring-tine cultivated: 25 Apr. Insecticide applied: 26 June. Fungicide applied: 15 July. Haulm mechanically destroyed: 29 Sept. Sprayed with undiluted BOV at 160 l: 2 Oct. Lifted: 17 Oct. Series I: Rotary cultivated, King Edward potatoes planted in error: 28 Apr. King Edward potatoes lifted and replanted with Pentland Crown: 13 May. Weedkiller applied: 30 May.

75/W/CS/138

Series II: Rotary cultivated, potatoes planted: 28 Apr. Ridged up:
12 May. Weedkiller applied: 29 May.

- NOTES: (1) Soil samples were taken before planting and after harvest for cyst and egg counts of *Heterodera rostochiensis*.
(2) One block of each series was not harvested for yield because of very poor growth caused by wet conditions at planting.

75/W/CS/138

SERIES I

TOTAL TUBERS TONNES/HECTARE

*** TABLES OF MEANS ***

NEMACIDE	NONE	DID1/7.5	DID1/15	DID2/7.5	DID2/15	DIDP	DP	MEAN
	3.2	7.4	4.0	13.9	10.4	24.8	19.2	11.8

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

TABLE	NEMACIDE

SED	5.08

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

STRATUM	DF	SE	CV%
BLOCK.WP	6	5.08	42.9

PERCENTAGE WARE 3.81 CM (1.5 INCH) RIDDLE

*** TABLES OF MEANS ***

NEMACIDE	NONE	DID1/7.5	DID1/15	DID2/7.5	DID2/15	DIDP	DP	MEAN
	56.5	76.5	62.7	85.1	80.1	87.3	84.9	76.1

PLOT AREA HARVESTED 0.00100

75/W/CS/138

SERIES II

TOTAL TUBERS TONNES/HECTARE

*** TABLES OF MEANS ***

NEMACIDE	NONE	DID1/7.5	DID1/15	DID2/7.5	DID2/15	DIDP	DP	MEAN
	2.9	14.7	10.1	14.4	12.7	27.6	22.3	15.0

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

TABLE	NEMACIDE
-----	-----
SED	5.37

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

STRATUM	DF	SE	CV%
BLOCK.WP	6	5.37	35.9

PERCENTAGE WARE 3.81 CM (1.5 INCH) RIDDLE

*** TABLES OF MEANS ***

NEMACIDE	NONE	DID1/7.5	DID1/15	DID2/7.5	DID2/15	DIDP	DP	MEAN
	28.9	80.9	80.5	84.2	83.9	84.4	85.3	76.2

PLOT AREA HARVESTED 0.00100