

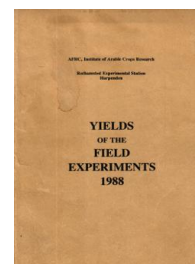
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1988

[Full Table of Content](#)



88/R/PE/1 Effects of Pea Seed-borne Mosaic Virus - Peas

Rothamsted Research

Rothamsted Research (1989) *88/R/PE/1 Effects of Pea Seed-borne Mosaic Virus - Peas* ; Yields Of The Field Experiments 1988, pp 209 - 210 - DOI: <https://doi.org/10.23637/ERADOC-1-43>

88/R/PE/1

PEAS

EFFECTS OF PEA SEED-BORNE MOSAIC VIRUS

Object: To study the transmission, symptoms and effects on yield of pea seed-borne mosaic virus in two varieties of peas with and without insecticide - Long Hoos IV 6.

Sponsors: A.J. Cockbain, D. Wang.

Design: 4 randomised blocks of 2 whole plots split into 3.

Whole plot dimensions: 9.2 x 5.0.

Treatments: All combinations of:-

Whole plots

1. **INSCTCDE** Insecticide:

NONE	None
PH+CY+PI	Phorate at 1.7 kg to the seedbed on 26 Apr, 1988. Cypermethrin at 0.025 kg with pirimicarb at 0.14 kg in 220 l on 1 and 20 June, 5 July

Sub plots

2. **VAR INF** Varieties and infection:

PROGR H	Progreta, healthy stock
WAVER H	Waverex, healthy stock
WAVER I	Waverex, seed infected with 4% pea seed-borne mosaic virus

NOTE: Plots were netted against birds from early June to harvest.

Basal applications: Manure: Chalk at 2.9 t. Weedkillers: Terbutryne at 0.98 kg and terbuthylazine at 0.42 kg in 220 l. Fungicides: Benomyl at 0.50 kg with chlorothalonil at 1.0 kg in 220 l on four occasions. Desiccant: Diquat at 0.60 kg ion in 220 l.

Seed: All sown at 600,000 seeds per hectare:

Progreta at 200 kg.
Waverex (healthy) at 66 kg.
Waverex (infected) at 54 kg.

Cultivations, etc.:- Chalk applied: 2 Oct, 1987. Ploughed: 14 Dec. Rotary harrowed, seed sown: 26 Apr, 1988. Weedkillers applied: 27 Apr. Fungicides applied: 30 June, 2, 11, 23 Aug. Desiccant applied: 5 Sept. Combine harvested: 9 Sept. Previous crops: Maize 1986, fallow 1987.

NOTE: Aphid numbers were assessed during the growing season. Virus incidence was assessed in the plants during the season and in the seed from all plots after harvest.

88/R/PE/1

GRAIN TONNES/HECTARE

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

VAR INF INSCDCDE	PROGR H	WAVER H	WAVER I	Mean
NONE	2.81	2.49	1.22	2.17
PH+CY+PI	3.65	2.87	2.30	2.94
Mean	3.23	2.68	1.76	2.56

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

VAR INF	INSCDCDE*
	VAR INF
0.158	0.223

* Within the same level of INSCDCDE only

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

Stratum	d.f.	s.e.	cv%
BLOCK.WP.SP	12	0.316	12.4

GRAIN MEAN DM% 77.8

SUB PLOT AREA HARVESTED 0.00072