

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 1983

[Full Table of Content](#)



## 83/R/BE/18 Permethrin and Alarm Pheromone - S. Beans

### Rothamsted Research

Rothamsted Research (1984) *83/R/BE/18 Permethrin and Alarm Pheromone - S. Beans* ; Yields Of The Field Experiments 1983, pp 304 - 305 - DOI: <https://doi.org/10.23637/ERADOC-1-44>

83/R/BE/18

SPRING BEANS

PERMETHRIN AND ALARM PHEROMONE

Object: To study the effects of aphid alarm pheromone on the activity of permethrin against bean aphids and on the yield of spring beans - Long Hoos VI/VII 2.

Sponsors: D.C. Griffiths, J.A. Pickett, G.R. Cayley.

Design: 2 randomised blocks of 14 plots.

Whole plot dimensions: 2.4 x 4.5.

Treatments: All combinations of:-

- |             |                                |
|-------------|--------------------------------|
| 1. PERMETH  | Permethrin (g):                |
| 0           | None (duplicated)              |
| 3           |                                |
| 10          |                                |
| 30          |                                |
| 90          |                                |
| 270         |                                |
| 2. PHEROMON | Pheromone:                     |
| NONE        | None                           |
| BETA FAR    | (E), beta farnesene at 0.004 l |

NOTE: Treatments were applied by electrostatic sprayer in 4.2 l hexane on 4 July.

Basal applications: Manures: Chalk at 2.9 t. Weedkillers: Trietazine at 1.1 kg with simazine at 0.16 kg in 220 l. Insecticide: Permethrin at 0.15 kg in 220 l.

Seed: Minden, sown at 280 kg.

Cultivations, etc.: - Chalk applied: 28 Sept, 1982. Ploughed: 4 Nov. Spring-tine cultivated, seed sown: 10 Mar, 1983. Weedkillers applied: 17 Mar. Insecticide applied: 24 May. Combine harvested: 11 Aug. Previous crops: Potatoes 1981, fallow 1982.

NOTE: Aphid infestations were measured in early July.

83/R/BE/18

GRAIN TONNES/HECTARE

\*\*\*\*\* TABLES OF MEANS \*\*\*\*\*

	0	3	10	30	90	270	MEAN
PERMETH PHEROMON							
NONE	1.73	1.51	1.76	1.92	1.87	1.99	1.79
BETA FAR	1.59	1.98	1.99	1.87	1.89	1.91	1.83
MEAN	1.66	1.74	1.88	1.90	1.88	1.95	1.81

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

TABLE	PERMETH	PHEROMON	PERMETH PHEROMON	
SED	0.183		0.259	MIN REP
	0.159	0.098	0.224	MAX-MIN
			0.183	MAX REP

PERMETH  
MAX REP 0  
MAX-MIN 0 V ANY OF REMAINDER  
MIN REP ANY OF REMAINDER

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

STRATUM	DF	SE	CV%
BLOCK.WP	15	0.259	14.3
GRAIN MEAN DM%	86.1		
PLOT AREA HARVESTED	0.00065		