

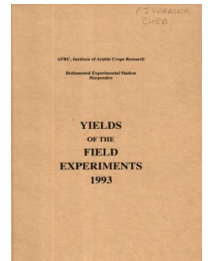
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1993

[Full Table of Content](#)



93/R/BES/3 Pheromone, Fungal Pathogens and Insecticide - S. Beans

Rothamsted Research

Rothamsted Research (1994) *93/R/BES/3 Pheromone, Fungal Pathogens and Insecticide - S. Beans* ;
Yields Of The Field Experiments 1993, pp 150 - 151 - DOI:

<https://doi.org/10.23637/ERADOC-1-48>

93/R/BES/3

SPRING BEANS

PHEROMONE, FUNGAL PATHOGENS AND INSECTICIDE

Object: To test the most effective timing of application of insecticide and fungal pathogen to plots treated with *Sitona lineatus* aggregation pheromone - White Horse II.

Sponsors: L.E. Smart, M.M. Blight, R.T. Glinwood.

Design: 5 x 5 quasi-complete latin square.

Whole plot dimensions: 6.0 x 6.0.

Treatments:

CHEMPATH Pheromone and time of application of fungal pathogen and insecticide:

NONE	None
PHER+BEA	Pheromone plus fungal pathogen early and late
P+D E	Pheromone plus deltamethrin early
P+D E+L	Pheromone plus deltamethrin early and late
PHER	Pheromone alone

NOTES: (1) The pheromone was 4-methyl-3,5-heptanedione and was released slowly from a point source at the centre of the plot at approximately 100 µg per day per plot.
(2) The fungal pathogen was spores of *Beauveria bassiana* in surfactant solution. 6×10^{10} spores in 200 ml were applied to the centre square metre of each plot.

Experimental diary:

10-Feb-93 : B : Ploughed.
22-Feb-93 : B : Rotary harrowed.
23-Feb-93 : B : Rotary harrowed, Alfred, undressed, drilled at 60 seeds per square metre.
22-Mar-93 : T : **CHEMPATH:** PHER+BEA, P+D E, P+D E+L, PHER: Pheromone source applied.
08-Apr-93 : T : **CHEMPATH:** P+D E, P+D E+L: Deltamethrin (as Decis) at 7.5 g in 200 l.
14-Apr-93 : T : **CHEMPATH:** PHER+BEA: *Beauveria sp.* spores applied.
30-Apr-93 : T : **CHEMPATH:** P+D E+L: Deltamethrin (as Decis) at 7.5 g in 200 l.
18-May-93 : T : **CHEMPATH:** PHER+BEA: *Beauveria sp.* spores applied.
03-Sep-93 : T : Combine harvested.

Previous crops: Linseed 1991 and 1992.

NOTE: Assessments of adult and larval *Sitona lineatus* population size and feeding damage were made between April and June.

93/R/BES/3

GRAIN TONNES/HECTARE

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

CHEMPATH	NONE	PHER+BEA	P+D E	P+D E+L	PHER	Mean
	4.83	4.74	4.64	4.47	4.83	4.70

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

CHEMPATH
0.140

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

Stratum	d.f.	s.e.	cv%
ROW.COL	12	0.221	4.7

GRAIN MEAN DM% 83.3

PLOT AREA HARVESTED 0.00138