

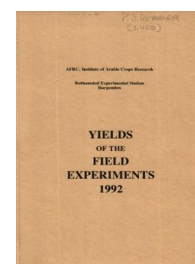
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED  
RESEARCH

## Yields of the Field Experiments 1992

[Full Table of Content](#)



### 92/R/BES/3 Effects of Semiochemicals - S. Beans

#### Rothamsted Research

Rothamsted Research (1993) *92/R/BES/3 Effects of Semiochemicals - S. Beans* ; Yields Of The Field Experiments 1992, pp 140 - 141 - DOI: <https://doi.org/10.23637/ERADOC-1-47>

92/R/BES/3

SPRING BEANS

EFFECTS OF SEMIOCHEMICALS

**Object:** To study the effects of a fungal pathogen, attractant and anti-feedant compounds on *Sitona* sp. - Delafield.

**Sponsors:** L.E. Smart, M.M. Blight, B.J. Pye.

**Design:** 6 x 6 quasi-complete latin square.

**Whole plot dimensions:** 6.0 x 6.0.

**Treatments:**

| <b>CHEMICAL</b> | Type of chemical or agent applied:             |
|-----------------|--|
| NONE            | None   |
| FUNGPATH        | Fungal pathogen ( <i>Beauveria</i> sp.)        |
| ATTRACTN        | Attractant (pheromone) lures                   |
| ATTRDELT        | Attractant (pheromone) lures plus deltamethrin |
| ANTIFEED        | Anti-feedant (neem oil 50% a.i.)               |
| DELT METH       | Deltamethrin                                   |

**Experimental diary:**

- 06-Dec-91 : B : Sting CT at 2.0 l in 200 l.
- 03-Jan-92 : B : Ploughed.
- 24-Feb-92 : B : PK as (0:20:32) at 1050 kg.
- 27-Feb-92 : B : Spring-tine cultivated.
- 27-Feb-92 : B : Rotary harrowed, Alfred drilled at 310 kg.
- 05-Mar-92 : B : Rolled.
- 09-Mar-92 : B : Opogard at 2.3 l in 200 l.
- 08-Apr-92 : T : **CHEMICAL** ATTRACTN and ATTRDELT: Attractant lures installed.
- 10-Apr-92 : T : **CHEMICAL** ANTIFEED: Anti-feedant at 8.0 kg in 25 l.
- 22-Apr-92 : T : **CHEMICAL** ATTRDELT: Decis at 0.40 l in 25 l.  
ANTIFEED: Anti-feedant at 8.0 kg in 25 l.  
DELT METH: Decis at 0.40 l in 25 l.
- 05-May-92 : T : **CHEMICAL** ANTIFEED: Anti-feedant at 8.0 kg in 25 l.
- 13-May-92 : T : **CHEMICAL** ATTRDELT: Decis at 0.40 l in 25 l.  
ANTIFEED: Anti-feedant at 8.0 kg in 25 l.  
DELT METH: Decis at 0.40 l in 25 l.
- 03-Jun-92 : T : **CHEMICAL** FUNGPATH: Fungal pathogen applied as suspension of spores in water.
- 09-Sep-92 : B : Combine harvested.

Previous crops: W. wheat 1990 and 1991.

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

92/R/BES/3

GRAIN TONNES/HECTARE

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

**CHEMICAL**

|           |      |
|-----------|------|
| NONE      | 4.39 |
| FUNGPATH  | 4.34 |
| ATTRACTN  | 4.26 |
| ATTRDELT  | 4.81 |
| ANTIFEED  | 4.27 |
| DELT METH | 4.50 |

Mean 4.43

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

**CHEMICAL**

0.193

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

| Stratum | d.f. | s.e. | cv% |
|---------|------|------|-----|
|---------|------|------|-----|

|         |    |       |     |
|---------|----|-------|-----|
| ROW.COL | 20 | 0.335 | 7.6 |
|---------|----|-------|-----|

GRAIN MEAN DM% 82.9

PLOT AREA HARVESTED 0.00138