

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/12 Row Spacing and Methods of Applying Phorate - S. Beans

#### Rothamsted Research

Rothamsted Research (1984) *83/R/BE/12 Row Spacing and Methods of Applying Phorate - S. Beans ; Yields Of The Field Experiments 1983*, pp 292 - 293 - DOI:

<https://doi.org/10.23637/ERADOC-1-44>

83/R/BE/12

SPRING BEANS

ROW SPACING AND METHODS OF APPLYING PHORATE

Object: To study the effects of methods of applying phorate on the incidence of Sitona and on the yield of s. beans sown in wide or narrow rows - W. Barnfield II.

Sponsors: R. Bardner, D.C. Griffiths.

Design: 4 randomised blocks of 6 plots.

Whole plot dimensions: 5.33 x 13.7.

Treatments: All combinations of:-

- |             |                                                  |
|-------------|--------------------------------------------------|
| 1. PHORATE  | Methods of applying phorate:                     |
| NONE        | Not applied                                      |
| B CAST      | Broadcast at 1.7 kg and worked in to the seedbed |
| C DRILL     | Combine drilled at 1.7 kg                        |
| 2. ROW SPAC | Spacing between rows:                            |
| 18 CM       | 7 inches (18 cm)                                 |
| 53 CM       | 21 inches (53 cm)                                |

Basal applications: Manures: Chalk at 5.0 t. Weedkillers: Glyphosate at 1.4 kg in 250 l. Trietazine and simazine (as 'Aventox' at 2.4 l) in 250 l. Insecticide: Pirimicarb at 0.14 kg in 250 l.

Seed: Minden, sown at 280 kg.

Cultivations, etc.:- Chalk applied: 16 Sept, 1982. Glyphosate applied: 19 Oct. Ploughed: 25 Nov. Spring-tine cultivated twice: 8 Mar, 1983. Broadcast phorate treatments applied, rotary harrowed: 9 Mar. Combine drilled phorate treatments applied, seed sown: 10 Mar. 'Aventox' applied: 12 Mar. Insecticide applied: 16 June. Combine harvested: 12 Aug. Previous crops: S. barley 1981, w. wheat 1982.

NOTE: Leaf damage by Sitona was assessed in May; larval and pupal counts were made in July. Yellowing was assessed in July. Soil animals were assessed from soil in June and from pitfall traps at weekly intervals. Soil cores were taken for chemical analyses in May.

83/R/BE/12

GRAIN TONNES/HECTARE

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

| ROW SPAC | 18 CM | 53 CM | MEAN |
|----------|-------|-------|------|
| PHORATE  |       |       |      |
| NONE     | 3.16  | 3.16  | 3.16 |
| B CAST   | 3.40  | 3.39  | 3.40 |
| C DRILL  | 3.65  | 3.81  | 3.73 |
| MEAN     | 3.40  | 3.45  | 3.43 |

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

| TABLE | PHORATE | ROW SPAC | PHORATE<br>ROW SPAC |
|-------|---------|----------|---------------------|
| SED   | 0.131   | 0.107    | 0.185               |

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

| STRATUM  | DF | SE    | CV% |
|----------|----|-------|-----|
| BLOCK.WP | 15 | 0.262 | 7.6 |

GRAIN MEAN DM% 86.1

PLOT AREA HARVESTED 0.00293