

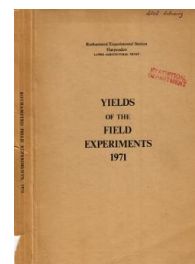
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1971

[Full Table of Content](#)



71/R/BE/1 Chemical Control of Soil-borne Pathogens - Beans

Rothamsted Research

Rothamsted Research (1972) *71/R/BE/1 Chemical Control of Soil-borne Pathogens - Beans* ; Yields Of The Field Experiments 1971, pp 298 - 299 - DOI: <https://doi.org/10.23637/ERADOC-1-97>

71/R/BE/1

SPRING BEANS

CHEMICAL CONTROL OF SOIL-BORNE PATHOGENS

Object: To study the effects of a range of chemicals on wilting and yield of beans grown continuously for five years - Barnfield Section I Plot 3 (unmanured).

Design: 4 blocks of 6 plots.

Whole plot dimensions: 3.73 x 2.29. Area harvested: 0.00039.

Treatments: Chemicals applied as dusts, except formalin:-

| | |
|--|------|
| None | (O) |
| Fungicide, 70% 'Dexon' at 78.5 kg a.i. | (F) |
| Insecticide, 25% gamma BHC at 4.5 kg a.i. | (I) |
| Nematicide, 10% aldicarb ('Temik') at 11.2 kg a.i. | (N) |
| Biocide, formalin at 3000 l of a 38% solution of formaldehyde in 54400 l | (B) |
| Aldicarb and formalin together at the rates shown above | (NB) |

The plots which received dusts were rotary cultivated immediately after the application.

Basal applications: Manures-none. Weedkillers: Paraquat at 0.84 kg ion in 225 l. Simazine at 1.12 kg in 225 l. Insecticide: Demeton-s-methyl at 245 g in 438 l.

Cultivations, etc.: Paraquat applied: 11 Sept, 1970. Ploughed: 19 Oct. Formalin applied: 25 Nov. Chemical dusts applied and rotary cultivated in: 26 Feb, 1971. Seed drilled at 224 kg: 4 Mar. Simazine applied: 10 Mar. Insecticide applied: 1 July. Harvested by hand: 25 Aug. Variety: Maris Bead.

NOTE: Wilted and virus infected plants were counted during the season. Crop samples were taken for root disease assessment. Counts were made of stem eelworm (*Ditylenchus dipsaci*).

Standard error per plot.

Grain, tonnes/hectare: 0.219 or 13.0% (15 d.f.)

71/R/BE/1

SUMMARY OF RESULTS

GRAIN: TONNES/HECTARE

| O | F | I | N | B | NB | Mean |
|----------|------|------|------|------|------|------|
| (±0.110) | | | | | | |
| 1.07 | 1.96 | 1.51 | 2.43 | 1.23 | 1.89 | 1.68 |

Mean D.M. %: 78.2