

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 1972

[Full Table of Content](#)



72/R/CS/82 Chemical Control of Soil-borne Pathogens - S. Beans

Rothamsted Research

Rothamsted Research (1973) *72/R/CS/82 Chemical Control of Soil-borne Pathogens - S. Beans ; Yields Of The Field Experiments 1972*, pp 233 - 234 - DOI:
<https://doi.org/10.23637/ERADOC-1-62>

72/R/CS/82

CHEMICAL CONTROL OF SOIL-BORNE PATHOGENS

Object: To study the effects of a range of chemicals on pathogens and yield of beans grown continuously for six years - Barnfield Section I Plot 3.

Sponsors: D. Hornby, G.A. Salt.

The second year, spring beans.

For previous year see 71/R/BE/1(t).

Design: 4 blocks of 6 plots.

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

Treatments (applied cumulatively to treatments in 1971) (T):-

None

(O)

Fungicide, 70% dexion (powder) at 78.5 kg a.i.

(F)

Insecticide, BHC (emulsion) at 4.48 kg a.i.

(I)

Nematicide, 10% aldicarb (granules) at 11.2 kg a.i.

(N)

Biocide, formalin at 3000 l of a 38% solution of formaldehyde in 64000 l

(B)

Dexion, aldicarb and formalin together at rates shown above (NBF)

(NBF)

Treatments F, I, N, B and NBF were rotary cultivated in, immediately after the final application. Treatment NBF received only treatments N and B in 1971.

Basal applications: Manures: PK Na Mg rates as on Barnfield Strip 4, Weedkillers: Paraquat at 0.56 kg ion in 220 l. Insecticide: Phorate at 1.12 kg applied as granules.

Seed: Maris Bead sown at 220 kg.

Cultivations, etc.: Paraquat applied: 10 Sept, 1971. Ploughed: 9 Dec. Formalin applied: 15 Dec. Remaining chemicals applied and rotary cultivated in: 17 Mar, 1972. Seed drilled: 22 Mar. Insecticide applied: 17 June. Harvested by hand: 20 Sept.

NOTE: Development of wilt was recorded during July and August.

Crop samples were taken for root disease assessment. Counts were made of stem eelworm.

Standard error per plot.

Grain, tonnes/hectare: 0.429 or 12.0% (15 d.f.)

72/R/CS/82

TABLES OF MEANS

GRAIN: TONNES/HECTARE

T						Mean
O	F	I	N	B	NBF	
2.98	3.31	3.51	3.84	3.46	4.37	3.58

STANDARD ERROR OF DIFFERENCES

T 0.303

Mean D.M. %: 83.2