

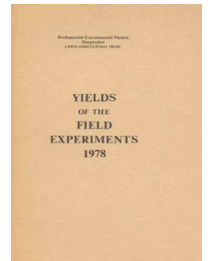
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1978

[Full Table of Content](#)



78/R/BE/6 Comparison of Sprayers - Beans

Rothamsted Research

Rothamsted Research (1979) *78/R/BE/6 Comparison of Sprayers - Beans* ; Yields Of The Field Experiments 1978, pp 415 - 416 - DOI: <https://doi.org/10.23637/ERADOC-1-30>

78/R/BE/6

SPRING BEANS

COMPARISON OF SPRAYERS

Object: To study the performance of an electrostatic spraying system on distribution of spray material and on yield of beans - Gt. Harpenden II.

Sponsor: A.J. Arnold.

Design: 3 randomised blocks of 6 plots.

Whole plot dimensions: 2.67 x 9.14.

Treatments:

SPRAYER	Sprayer used to apply permethrin:
NONE	None (duplicated)
E C C	Electrostatic sprayer, spraying charged particles with controlled current
E C N	Electrostatic sprayer, spraying charged particles with normal current
E U	Electrostatic sprayer, spraying uncharged particles
F U	Standard farm sprayer, spraying uncharged particles

NOTES: (1) Electrostatic sprayer applied permethrin at 84 g in 34 l.
(2) Farm sprayer applied permethrin at 84 g in 340 l.
(3) Permethrin was applied as a water-based spray. A planned comparison of oil and water-based sprays was not achieved.
(4) Sprays were applied on 11 July, 1978.

Basal applications: Manures: Chalk at 7.5 t.

Seed: Minden, sown at 200 kg.

Cultivations, etc.: Chalk applied: 12 Oct, 1977. Ploughed: 11 Nov. Spring-tine cultivated: 9 Mar, 1978. Heavy spring-tine cultivated, seed sown: 11 Mar. Tractor hoed: 19 May and 8 June. Combine harvested: 25 Sept. Previous crops: Barley 1976 and 1977.

78/R/BE/6

GRAIN TONNES/HECTARE

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

SPRAYER	NONE	E C C	E C N	E U	F U	MEAN
	5.69	5.72	5.97	5.74	6.04	5.81

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

TABLE	SPRAYER
SED	0.541 MIN REP 0.468 MAX-MIN

SPRAYER
MAX-MIN NONE V ANY OF REMAINDER
MIN REP ANY OF REMAINDER

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

STRATUM	DF	SE	CV%
BLOCK.WP	11	0.662	11.4

GRAIN MEAN DM% 83.9

PLOT AREA HARVESTED 0.00244