

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/CS/133 Control of Pathogens - Maize

Rothamsted Research

Rothamsted Research (1979) *78/R/CS/133 Control of Pathogens - Maize* ; Yields Of The Field Experiments 1978, pp 174 - 175 - DOI: <https://doi.org/10.23637/ERADOC-1-30>

78/R/CS/133

CONTROL OF PATHOGENS

Object: To study the effects of a range of chemicals on incidence of pathogens and yield of continuous maize - Long Hoos VI/VII 6.

Sponsors: A.J. Barnard, K.E. Fletcher, D.J. Hooper, D. Hornby, R.T. Plumb, T.D. Williams, J.C. Wilson.

The fifth year, forage maize.

For previous years see 74-77/R/CS/133.

Design: 3 randomised blocks of 9 plots split into 3.

Whole plot dimensions: 2.13 x 18.3.

Treatments: All combinations of:-

Whole plots

- | | |
|-------------|--|
| 1. CHEMICAL | Chemicals applied annually except where stated: |
| NONE | None (4 plots per block) |
| ALDICARB | Aldicarb, 4.5 kg as granules to seedbed |
| BENOMYL | Benomyl, 11.2 kg as dust to seedbed |
| DAZOMET | Dazomet, 450 kg as granules in early spring (not applied 1975) |
| PHORATE | Phorate, 1.68 kg as granules to seedbed |
| BE/DA/PH | Benomyl + dazomet (not applied 1975) + phorate, at above rates and times |

Sub plots

- | | |
|------|---|
| 2. N | Nitrogen fertiliser (kg N as 'Nitra-Shell 34'): |
|------|---|

50
100
150

Basal applications: Manures: Chalk at 2.9 t. (0:14:28) at 630 kg. Weedkillers: Atrazine at 1.7 kg in 220 l.

Seed: Fronica, sown at 100,000 seeds per hectare.

Cultivations, etc.: PK applied: 23 Nov, 1977. Chalk applied: 25 Nov. Ploughed: 7 Dec. Dazomet applied and these plots only rotary cultivated: 7 Apr, 1978. All other treatments applied, power harrowed: 18 May. Seed sown: 19 May. Weedkiller applied: 22 May. N applied: 14 June. Harvested by hand: 2 Oct.

NOTES: (1) Germination was assessed in June.
(2) Frit fly (*Oscinella frit*) damage was assessed.
(3) Nitrogen percentages in harvest produce were determined.

78/R/CS/133

FORAGE MAIZE TONNES/HECTARE

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

	N	50	100	150	MEAN
CHEMICAL					
NONE		9.81	11.84	12.49	11.38
ALDICARB		10.39	12.54	14.04	12.32
BENOMYL		9.78	12.71	12.49	11.66
DAZOMET		11.29	12.72	12.71	12.24
PHORATE		9.56	12.18	12.16	11.30
BE/DA/PH		11.87	12.92	13.56	12.78
MEAN		10.24	12.27	12.77	11.76

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

TABLE	CHEMICAL	N	CHEMICAL	N
SED	0.418		0.744	MIN REP
	0.330	0.252	0.589	MAX-MIN
EXCEPT WHEN COMPARING MEANS WITH SAME LEVEL(S) OF:				
CHEMICAL			0.755	MIN REP
			0.377	MAX REP

CHEMICAL
MAX REP WITHIN NONE
MAX-MIN NONE V REMAINDER
MIN REP REMAINDER

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

STRATUM	DF	SE	CV%
BLOCK.WP	19	0.512	4.4
BLOCK.WP.SP	42	0.924	7.9

GRAIN MEAN DM% 26.0

SUB PLOT AREA HARVESTED 0.00059