

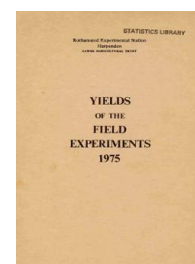
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1975

[Full Table of Content](#)



75/ R/M/2 - Maize & Sweet Corn Insect & Virus Control - Grass

Rothamsted Research

Rothamsted Research (1976) *75/ R/M/2 - Maize & Sweet Corn Insect & Virus Control - Grass* ; Yields Of The Field Experiments 1975, pp 403 - 405 - DOI: <https://doi.org/10.23637/ERADOC-1-141>

75/R/M/2

MAIZE AND SWEET CORN

INSECT AND VIRUS CONTROL

Object: To study the effects of several insecticides applied at different times on control of insects and on yield of maize and sweet corn - Long Hoos V 7.

Sponsors: J.C. Wilson, K.E. Fletcher, R.T. Plumb.

Design: 3 randomised blocks of 2 plots split into 8.

Whole plot dimensions: 3.20 x 18.3.

Treatments: All combinations of:-

Whole plots: 1. Crop:

Grain maize, Cargill Primeur 170
Sweet corn, Early King

CROP

MAIZE
SWEET CORN

Sub plots: 2. Chemicals and times of application:

CHEMICAL

None (duplicated, for maize only)

NONE

Aldicarb in seedbed (sweet corn only)

AL

Phorate granules in seedbed (duplicated, for maize only)

PH

Phorate granules in seedbed plus second-early spray of dimethoate (sweet corn only)

PH/DI/E2

Chlorfenvinphos, first-early spray (25 June)

CH/E1

Chlorfenvinphos, second-early spray (18 July)

CH/E2

Dimethoate, first-early spray (25 June)

DI/E1

Dimethoate, second-early spray (18 July)

DI/E2

NOTE: Aldicarb applied at 4.48 kg.

Dimethoate applied at 0.67 kg in 340 l.

Phorate applied at 1.68 kg.

Chlorfenvinphos applied at 0.55 kg in 340 l.

Basal applications: Manures: (20:14:14) at 730 kg. Weedkiller: Atrazine ('Vectal' at 3.4 kg in 340 l).

Seed: Grain maize: Cargill Primcur sown at 123,000 seeds/ha.

Sweetcorn: Early King sown at 123,000 seeds/ha.

Cultivations: Ploughed: 10 Jan, 1975. NPK applied: 28 Apr. Spring-tine cultivated: 12 May. Aldicarb applied, power harrowed: 15 May.

Phorate applied and seed sown: 21 May. Weedkiller applied: 23 May.

Sweet corn harvested: 8 Sept. Grain maize harvested: 10 Nov.

Previous crops: Spring wheat 1973, potatoes 1974.

- NOTES: (1) Assessments of the numbers of plants and of shoots attacked by frit fly (*Oscinella frit*) were made: sweet corn: 9, 29 July, grain maize: 15 July.
(2) Aphid counts and virus assessments were made on 18 June, 10 July and 15 September.

75/R/M/2

CROP MAIZE

*** TABLES OF MEANS ***

GRAIN TONNES/HECTARE

CHEMICAL	NONE	PH	CH/E1	CH/E2	D1/E1	D1/E2	MEAN
	2.96	2.90	2.76	2.76	3.26	3.18	2.97

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

TABLE	CHEMICAL
SED	0.306 (1) 0.375 (2) 0.433 (3)

(1) NON V PH

(2) NONE OR PH V ANY OF REMAINDER

(3) ANY OF REMAINDER

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

STRATUM	DF	SE	CV%
BLOCK.WP	16	0.531	17.9

GRAIN MEAN DM% 65.0

PLOT AREA HARVESTED 0.00130

75/R/M/2

CROP SWEETCRN

*** TABLES OF MEANS ***

WEIGHT OF SALEABLE COBS (OVER 10.16 CM) TONNES/HECTARE

CHEMICAL	NONE	AL	PH	PH/D1/E2	CH/E1	CH/E2	D1/E1	D1/E2	MEAN
	1.26	1.97	3.11	2.11	1.29	1.90	0.87	1.46	1.75

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

TABLE	CHEMICAL
SED	0.364

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

STRATUM	DF	SE	CV%
BLOCK.WP	14	0.446	25.5

NUMBER OF SALEABLE COBS (OVER 10.16 CM) TONNES/HECTARE

CHEMICAL	NONE	AL	PH	PH/D1/E2	CH/E1	CH/E2	D1/E1	D1/E2	MEAN
	9.4	14.8	20.0	15.5	10.8	13.9	7.0	11.9	12.9

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

TABLE	CHEMICAL
SED	2.81

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

STRATUM	DF	SE	CV%
BLOCK.WP	14	3.44	26.7

PLOT AREA HARVESTED 0.00149