

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/B/17 Mildew Control in a Serially Balanced Design - Barley

Rothamsted Research

Rothamsted Research (1979) *78/R/B/17 Mildew Control in a Serially Balanced Design - Barley* ;
Yields Of The Field Experiments 1978, pp 402 - 403 - DOI:
<https://doi.org/10.23637/ERADOC-1-30>

78/R/B/17

SPRING BARLEY

MILDEW CONTROL IN A SERIALY BALANCED DESIGN

Object: To study the effects of two fungicides and the effects of interference between plots on the incidence of mildew and on yield - Webbs.

Sponsors: J.F. Jenkyn, G.V. Dyke.

Design: 8 'blocks' of 3 plots (+ flanking plots).

Whole plot dimensions: 4.27 x 9.14.

Treatments:

FUNGICIDE	Fungicides
NONE	None
TRIADIME	Triadimefon
TRIDEMOR	Tridemorph

- NOTES: (1) Treatments were applied to 26 plots in one line in an order such that each of the possible sets of 3 adjacent treatments occurred exactly twice, (omitting sets with the same treatments on 2 successive plots). The effects of treatments to neighbouring plots (left-hand neighbour LHN, right-hand neighbour RHN) are estimated in the analysis. In this experiment 'left' was east and 'right' was west.
- (2) Fungicide treatments were applied on 7 June, 1978. Tridemorph was applied at 0.53 kg in 340 l, triadimefon at 0.13 kg in 340 l.
- (3) The experiment had an 18 m surround sown to barley variety Wing, seed dressed ethirimol, sprayed tridemorph at 0.53 kg in 340 l on 14 June.

Basal applications: Manures: (20:14:14) at 440 kg combine drilled. Weedkillers: Dicamba with mecoprop and MCPA ('Banlene Plus' at 4.9 kg) in 220 l.

Seed: Julia, sown at 160 kg.

Cultivations, etc.: Ploughed: 21 Dec, 1977. Spring-tine cultivated twice: 7 Mar, 1978, 25 Mar. Seed sown: 25 Mar. Weedkillers applied: 18 May. Combine harvested: 21 Aug. Previous crops: Potatoes 1976, barley 1977.

NOTE: Seedling emergence counts were made. Mildew was assessed on two occasions.

78/R/B/17

GRAIN TONNES/HECTARE

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

VARIATE: GRAIN (AT 85% DM) TONNES/HECTARE

GRAND MEAN	6.76		
FUNGCIDE	NONE	TRIADIME	TRIDEMOR
	6.13	7.21	6.95
LHN	NONE	TRIADIME	TRIDEMOR
FUNGCIDE			
NONE		6.00	6.25
TRIADIME	7.29		7.13
TRIDEMOR	6.99	6.90	
RHN	NONE	TRIADIME	TRIDEMOR
FUNGCIDE			
NONE		6.08	6.17
TRIADIME	7.26		7.16
TRIDEMOR	7.09	6.80	

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

TABLE	FUNGCIDE	FUNGCIDE LHN	FUNGCIDE RHN
REP	8	4	4
SED	0.237	0.335	0.335

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

STRATUM	DF	SE	CV%
WP	11	0.473	7.0

GRAIN MEAN DM% 84.3

PLOT AREA HARVESTED 0.00172