

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/10 Sowing Dates and Pathogen Control - Barley

Rothamsted Research

Rothamsted Research (1979) *78/R/B/10 Sowing Dates and Pathogen Control - Barley* ; Yields Of The Field Experiments 1978, pp 399 - 401 - DOI: <https://doi.org/10.23637/ERADOC-1-30>

78/R/B/10

SPRING BARLEY

SOWING DATES AND PATHOGEN CONTROL

Object: To study the effects of aphid, virus and fungus control on pathogens and yield of barley sown on two dates - Webbs.

Sponsors: R.T. Plumb, J.F. Jenkyn.

Design: 2 replicates of 2 x 2 x 2 x 2 in blocks of 8 plots.

Whole plot dimensions: 6.40 x 18.3.

Treatments: All combinations of:-

1. SOW DATE Dates of sowing:
 8 MAR 8 March, 1978
 24 APR 24 April
2. FUNGCIDE Fungicide:
 NONE None
 ETHIRIMO Ethirimol seed dressing
3. APHICIDE(1) Aphicide to seedbed:
 NONE None
 PHORATE Phorate at 5 kg as granules
4. APHICIDE(2) Aphicide on 10 July:
 NONE NONE
 DIMETH Dimethoate at 0.34 kg in 220 l

NOTE: Tridemorph applied to surrounds 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 (as 'Banlene Plus' at 4.9 l in 220 l).

Seed: Wing, sown at 160 kg.

Cultivations, etc.:- Ploughed: 21 Dec, 1977. Spring-tine cultivated all plots: 7 Mar, 1978. Power harrowed for early sowing: 8 Mar. Power harrowed for late sowing: 24 Apr. Weedkillers applied to early sowing: 18 May. Weedkillers applied to late sowing: 26 May. Early-sown plots combine harvested: 21 Aug. Late-sown plots combine harvested: 25 Aug. Previous crops: Potatoes 1976, barley 1977.

NOTE: Emergence counts were made for both sowings. Aphid counts were made on seven occasions and virus scores six times. Tiller counts were made once, and counts of grains per ear were made at harvest.

78/R/B/10

GRAIN TONNES/HECTARE

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

FUNGCIDE	NONE	ETHIRIMO	MEAN	
SOW DATE				
8 MAR	5.50	6.14	5.82	
24 APR	5.01	4.82	4.91	
MEAN	5.25	5.48	5.37	
APHICIDE(1)	NONE	PHORATE	MEAN	
SOW DATE				
8 MAR	5.75	5.89	5.82	
24 APR	4.81	5.01	4.91	
MEAN	5.28	5.45	5.37	
APHICIDE(1)	NONE	PHORATE	MEAN	
FUNGCIDE				
NONE	5.18	5.33	5.25	
ETHIRIMO	5.39	5.57	5.48	
MEAN	5.28	5.45	5.37	
APHICIDE(2)	NONE	DIMETH	MEAN	
SOW DATE				
8 MAR	5.87	5.77	5.82	
24 APR	4.84	4.98	4.91	
MEAN	5.36	5.37	5.37	
APHICIDE(2)	NONE	DIMETH	MEAN	
FUNGCIDE				
NONE	5.28	5.23	5.25	
ETHIRIMO	5.44	5.52	5.48	
MEAN	5.36	5.37	5.37	
APHICIDE(2)	NONE	DIMETH	MEAN	
APHICIDE(1)				
NONE	5.35	5.22	5.28	
PHORATE	5.37	5.53	5.45	
MEAN	5.36	5.37	5.37	
FUNGCIDE	NONE	ETHIRIMO		
APHICIDE(1)	NONE	PHORATE	NONE	PHORATE
SOW DATE				
8 MAR	5.53	5.47	5.98	6.30
24 APR	4.84	5.18	4.79	4.85
FUNGCIDE	NONE	ETHIRIMO		
APHICIDE(2)	NONE	DIMETH	NONE	DIMETH
SOW DATE				
8 MAR	5.51	5.49	6.24	6.04
24 APR	5.06	4.96	4.63	5.01

78/R/B/10

GRAIN TONNES/HECTARE

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

APHICIDE(1)	NONE		PHORATE	
APHICIDE(2)	NONE	DIMETH	NONE	DIMETH
SOW DATE				
8 MAR	5.89	5.61	5.86	5.92
24 APR	4.81	4.82	4.88	5.15

APHICIDE(1)	NONE		PHORATE	
APHICIDE(2)	NONE	DIMETH	NONE	DIMETH
FUNGCIDE				
NONE	5.27	5.10	5.30	5.36
ETHIRIMO	5.44	5.33	5.44	5.71

APHICIDE(1)	NONE		PHORATE		
APHICIDE(2)	NONE	DIMETH	NONE	DIMETH	
SOW DATE FUNGCIDE					
8 MAR NONE	5.65	5.41	5.37	5.58	
ETHIRIMO	6.14	5.82	6.34	6.26	
24 APR NONE	4.89	4.79	5.22	5.13	
ETHIRIMO	4.73	4.85	4.53	5.17	

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

TABLE	SOW DATE	FUNGCIDE	APHICIDE(1)	APHICIDE(2)
SED	0.104	0.104	0.104	0.104

TABLE	SOW DATE FUNGCIDE	SOW DATE APHICIDE(1)	FUNGCIDE APHICIDE(1)	SOW DATE APHICIDE(2)
SED	0.147	0.147	0.147	0.147

TABLE	FUNGCIDE APHICIDE(2)	APHICIDE(1) APHICIDE(2)	SOW DATE FUNGCIDE APHICIDE(1)	SOW DATE FUNGCIDE APHICIDE(2)
SED	0.147	0.147	0.207	0.207

TABLE	SOW DATE APHICIDE(1) APHICIDE(2)	FUNGCIDE APHICIDE(1) APHICIDE(2)
SED	0.207	0.207

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

STRATUM	DF	SE	CV%
BLOCK.WP	14	0.293	5.5
GRAIN MEAN DM%	84.6		
PLOT AREA HARVESTED	0.00260		