

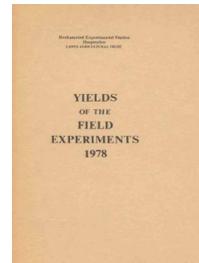
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# Yields of the Field Experiments 1978

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## 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 \*\*\*\*\*

FUNGICIDE SOW DATE	NONE	ETHIRIMO	MEAN
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) SOW DATE	NONE	PHORATE	MEAN
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) FUNGICIDE	NONE	PHORATE	MEAN
NONE	5.18	5.33	5.25
ETHIRIMO	5.39	5.57	5.48
MEAN	5.28	5.45	5.37
APHICIDE(2) SOW DATE	NONE	DIMETH	MEAN
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) FUNGICIDE	NONE	DIMETH	MEAN
NONE	5.28	5.23	5.25
ETHIRIMO	5.44	5.52	5.48
MEAN	5.36	5.37	5.37
APHICIDE(2) APHICIDE(1)	NONE	DIMETH	MEAN
NONE	5.35	5.22	5.28
PHORATE	5.37	5.53	5.45
MEAN	5.36	5.37	5.37
FUNGICIDE APHICIDE(1) SOW DATE	NONE	ETHIRIMO	
8 MAR	5.53	5.47	5.98
24 APR	4.84	5.18	4.79
			6.30
			4.85
FUNGICIDE APHICIDE(2) SOW DATE	NONE	ETHIRIMO	
8 MAR	5.51	5.49	6.24
24 APR	5.06	4.96	4.63
			6.04
			5.01

78/R/B/10

GRAIN TONNES/HECTARE

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

APHICIDE(1)	NONE	DIMETH	PHORATE	
APHICIDE(2)	NONE		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	DIMETH	PHORATE	
APHICIDE(2)	NONE		NONE	DIMETH
FUNGCIDE				
NONE	5.27	5.10	5.30	5.36
ETHIRIMO	5.44	5.33	5.44	5.71
APHICIDE(1)	NONE	DIMETH	PHORATE	
APHICIDE(2)	NONE		NONE	DIMETH
SOW DATE FUNGCIDE				
8 MAR	NONE	5.65	5.41	5.37
	ETHIRIMO	6.14	5.82	6.34
24 APR	NONE	4.89	4.79	5.22
	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	SOW DATE	FUNGCIDE	SOW DATE
	FUNGCIDE	APHICIDE(1)	APHICIDE(1)	APHICIDE(2)
		APHICIDE(2)	APHICIDE(2)	APHICIDE(1)
TABLE	FUNGCIDE	APHICIDE(1)	SOW DATE	SOW DATE
	APHICIDE(2)	APHICIDE(2)	FUNGCIDE	FUNGCIDE
			APHICIDE(1)	APHICIDE(2)
SED	0.147	0.147	0.147	0.147
TABLE	SOW DATE	FUNGCIDE		
	APHICIDE(1)	APHICIDE(1)		
	APHICIDE(2)	APHICIDE(2)		
SED	0.147	0.147	0.207	0.207
TABLE	SOW DATE	FUNGCIDE		
	APHICIDE(1)	APHICIDE(1)		
	APHICIDE(2)	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		