

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 1977

[Full Table of Content](#)



77/R/B/6 Sowing Dates and Pathogen Control - Barley

Rothamsted Research

Rothamsted Research (1978) *77/R/B/6 Sowing Dates and Pathogen Control - Barley* ; Yields Of The Field Experiments 1977, pp 356 - 358 - DOI: <https://doi.org/10.23637/ERADOC-1-29>

77/R/B/6

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 - Summerdells II.

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

Design: 3 blocks of 2 x 2 x 2 x 2, randomisation restricted.

Whole plot dimensions: 6.40 x 18.3.

Treatments: All combinations of:-

1. SOW DATE Dates of sowing:

8 MAR	8 March, 1977
25 APR	25 April

2. FUNGICIDE Fungicide:

NONE	None
E+T	Ethirimol seed dressing; tridemorph spray

3. APHICIDE(1) Aphicide to seedbed:

NONE	None
PHORATE	Phorate at 5 kg as granules

4. APHICIDE(2) Aphicide on 29 June:

NONE	None
MENAZON	Menazon ('Saphi-col' at 0.7 in 340 l)

NOTE: Tridemorph applied at 0.53 kg in 340 l on 22 June.

Basal applications: Manures: (20:14:14) at 440 kg, combine drilled to SOW DATE 8 MAR. (20:14:14) at 188 kg, combine drilled plus (20:14:14) at 235 kg broadcast after sowing to SOW DATE 25 APR. Weedkillers: Dicamba with mecoprop and MCPA ('Banlene Plus' at 4.9 l in 220 l).

Seed: Julia, sown at 160 kg.

Cultivations, etc.: Ploughed: 15 Oct, 1976. Spring-tine cultivated: 7 Mar, 1977. Power harrowed for early sowing: 8 Mar. Power harrowed for late sowing: 25 Apr. Weedkillers applied: 26 May. Combine harvested: 27 Aug. Previous crops: Winter oats 1975 and 1976.

NOTE: Emergence counts were made for both sowings. Mildew was assessed on two occasions. Aphid counts were made on seven occasions and virus scores twice. Tiller counts were made once and grains per ear counted at harvest.

77/R/B/6

GRAIN TONNES/HECTARE

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

FUNGCIDE	NONE	E+T	MEAN	
SOW DATE				
8 MAR	5.84	5.87	5.86	
25 APR	5.79	6.59	6.19	
MEAN	5.81	6.23	6.02	
APHICIDE(1)	NONE	PHORATE	MEAN	
SOW DATE				
8 MAR	5.76	5.95	5.86	
25 APR	5.88	6.49	6.19	
MEAN	5.82	6.22	6.02	
APHICIDE(1)	NONE	PHORATE	MEAN	
FUNGCIDE				
NONE	5.60	6.02	5.81	
E+T	6.04	6.42	6.23	
MEAN	5.82	6.22	6.02	
APHICIDE(2)	NONE	MENAZON	MEAN	
SOW DATE				
8 MAR	5.80	5.91	5.86	
25 APR	6.21	6.16	6.19	
MEAN	6.01	6.03	6.02	
APHICIDE(2)	NONE	MENAZON	MEAN	
FUNGCIDE				
NONE	5.80	5.83	5.81	
E+T	6.22	6.24	6.23	
MEAN	6.01	6.03	6.02	
APHICIDE(2)	NONE	MENAZON	MEAN	
APHICIDE(1)				
NONE	5.83	5.81	5.82	
PHORATE	6.18	6.26	6.22	
MEAN	6.01	6.03	6.02	
FUNGCIDE	NONE		E+T	
APHICIDE(1)	NONE	PHORATE	NONE	PHORATE
SOW DATE				
8 MAR	5.73	5.94	5.79	5.95
25 APR	5.47	6.10	6.28	6.89
FUNGCIDE	NONE		E+T	
APHICIDE(2)	NONE	MENAZON	NONE	MENAZON
SOW DATE				
8 MAR	5.80	5.88	5.81	5.94
25 APR	5.80	5.77	6.62	6.55

77/R/B/6

GRAIN TONNES/HECTARE

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

APHICIDE(1)	NONE		PHORATE	
APHICIDE(2)	NONE	MENAZON	NONE	MENAZON
SOW DATE				
8 MAR	5.79	5.74	5.82	6.08
25 APR	5.87	5.89	6.55	6.44

APHICIDE(1)	NONE		PHORATE	
APHICIDE(2)	NONE	MENAZON	NONE	MENAZON
FUNGICIDE				
NONE	5.59	5.62	6.01	6.03
E+T	6.07	6.00	6.36	6.48

APHICIDE(1)	NONE		PHORATE	
APHICIDE(2)	NONE	MENAZON	NONE	MENAZON
SOW DATE FUNGICIDE				
8 MAR	NONE	5.76	5.70	5.83
	E+T	5.81	5.77	5.81
25 APR	NONE	5.41	5.54	6.19
	E+T	6.33	6.23	6.91

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

TABLE	SOW DATE	FUNGICIDE	APHICIDE(1)	APHICIDE(2)
SED	0.086	0.086	0.086	0.086

TABLE	SOW DATE FUNGICIDE	SOW DATE APHICIDE(1)	FUNGICIDE APHICIDE(1)	SOW DATE APHICIDE(2)
SED	0.122	0.122	0.122	0.122

TABLE	FUNGICIDE APHICIDE(2)	APHICIDE(1) APHICIDE(2)	SOW DATE FUNGICIDE APHICIDE(1)	SOW DATE FUNGICIDE APHICIDE(2)
SED	0.122	0.122	0.173	0.173

TABLE	SOW DATE APHICIDE(1) APHICIDE(2)	FUNGICIDE APHICIDE(1) APHICIDE(2)	SOW DATE FUNGICIDE APHICIDE(1) APHICIDE(2)
SED	0.173	0.173	0.244

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

STRATUM	DF	SE	CV%
BLOCK.WP	30	0.299	5.0
GRAIN MEAN DM%	79.3		
PLOT AREA HARVESTED	0.00260		