

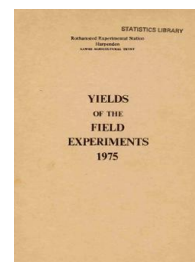
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1975

[Full Table of Content](#)



75/ R/B/11 - Fungicides & Grain Microflora - Barley

Rothamsted Research

Rothamsted Research (1976) 75/ R/B/11 - *Fungicides & Grain Microflora - Barley* ; Yields Of The Field Experiments 1975, pp 327 - 330 - DOI: <https://doi.org/10.23637/ERADOC-1-141>

75/R/B/11

SPRING BARLEY

FUNGICIDES AND GRAIN MICROFLORA

Object: To study the effects of a broad spectrum fungicide, applied at a range of times, on barley crops with or without additional specific fungicides against rust and mildew. Effects on yield, quality and grain-surface microorganisms before harvest and in storage are studied - Long Hoos IV 3.

Sponsor: R.A. Hill.

Design: 2 blocks of 16 plots, randomisation restricted.

Whole plot dimensions: 2.41 x 6.10.

Treatments: All combinations of:-

- | | |
|---|------------|
| 1. Specific fungicides for foliar pathogen control: | SPECFUNG |
| None | NONE |
| Ethirimol seed dressing + tridemorph spray at
0.53 kg in 340 l on 10 May | ALL |
| 2. Benomyl on 16 July: | BENOMYL(1) |
| None | NONE |
| Sprayed | SPRAYED |
| 3. Benomyl on 28 July: | BENOMYL(2) |
| None | NONE |
| Sprayed | SPRAYED |
| 4. Benomyl on 11 Aug: | BENOMYL(3) |
| None | NONE |
| Sprayed | SPRAYED |

NOTE: Benomyl was applied at 1.12 kg in 340 l.

Basal applications: Weedkillers: Dicamba with mecoprop and MCPA ('Tetrallex Plus' at 7.0 l in 340 l).

Seed: Julia, sown at 160 kg.

75/R/B/11

Cultivations, etc.:— Ploughed: 16 Jan, 1975. Spring-tine cultivated: 26 Mar. Spring-tine cultivated and seed sown: 21 Apr. Weedkiller applied: 6 June. Combine harvested: 22 Aug. Previous crops: Barley 1973, potatoes 1974.

- NOTES: (1) Leaf microflora were assessed soon after each application of benomyl.
(2) Microflora, 1000 grain weight and germination were assessed on samples of grain taken at harvest.

GRAIN TONNES/HECTARE

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

STRATUM	DF	SE	CV%
BLOCK.WP	15	0.523	16.2

GRAIN MEAN DM% 81.0

PLOT AREA HARVESTED 0.00075

75/R/B/11

GRAIN TONNES/HECTARE

*** TABLES OF MEANS ***

BENOMYL(1) SPECFUNG	NONE	SPRAYED	MEAN
NONE	3.29	3.12	3.20
ALL	3.34	3.15	3.25
MEAN	3.31	3.14	3.23

BENOMYL(2) SPECFUNG	NONE	SPRAYED	MEAN
NONE	3.25	3.16	3.20
ALL	3.14	3.35	3.25
MEAN	3.20	3.25	3.23

BENOMYL(2) BENOMYL(1)	NONE	SPRAYED	MEAN
NONE	3.25	3.38	3.31
SPRAYED	3.14	3.13	3.14
MEAN	3.20	3.25	3.23

BENOMYL(3) SPECFUNG	NONE	SPRAYED	MEAN
NONE	3.30	3.11	3.20
ALL	3.30	3.19	3.25
MEAN	3.30	3.15	3.23

BENOMYL(3) BENOMYL(1)	NONE	SPRAYED	MEAN
NONE	3.34	3.29	3.31
SPRAYED	3.26	3.01	3.14
MEAN	3.30	3.15	3.23

BENOMYL(3) BENOMYL(2)	NONE	SPRAYED	MEAN
NONE	3.27	3.12	3.20
SPRAYED	3.33	3.17	3.25
MEAN	3.30	3.15	3.23

75/R/B/11

GRAIN TONNES/HECTARE

BENOMYL(1)	NONE		SPRAYED	
BENOMYL(2)	NONE	SPRAYED	NONE	SPRAYED
SPECFUNG				
NONE	3.35	3.23	3.16	3.09
ALL	3.16	3.52	3.13	3.18

BENOMYL(1)	NONE		SPRAYED	
BENOMYL(3)	NONE	SPRAYED	NONE	SPRAYED
SPECFUNG				
NONE	3.33	3.24	3.27	2.97
ALL	3.34	3.34	3.26	3.05

BENOMYL(2)	NONE		SPRAYED	
BENOMYL(3)	NONE	SPRAYED	NONE	SPRAYED
SPECFUNG				
NONE	3.40	3.10	3.20	3.12
ALL	3.13	3.15	3.47	3.23

BENOMYL(2)	NONE		SPRAYED	
BENOMYL(3)	NONE	SPRAYED	NONE	SPRAYED
BENOMYL(1)				
NONE	3.29	3.21	3.38	3.37
SPRAYED	3.24	3.04	3.29	2.98

BENOMYL(2)	NONE		SPRAYED	
BENOMYL(3)	NONE	SPRAYED	NONE	SPRAYED
SPECFUNG BENOMYL(1)				
NONE	NONE	3.49	3.20	3.17
	SPRAYED	3.32	2.99	3.22
ALL	NONE	3.10	3.21	3.58
	SPRAYED	3.16	3.09	3.35

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

TABLE	SPECFUNG	BENOMYL(1)	BENOMYL(2)	BENOMYL(3)
SED	0.185	0.185	0.185	0.185

TABLE	SPECFUNG BENOMYL(1)	SPECFUNG BENOMYL(2)	BENOMYL(1) BENOMYL(2)	SPECFUNG BENOMYL(3)
SED	0.261	0.261	0.261	0.261

TABLE	BENOMYL(1) BENOMYL(3)	BENOMYL(2) BENOMYL(3)	SPECFUNG BENOMYL(1) BENOMYL(2)	SPECFUNG BENOMYL(1) BENOMYL(3)
SED	0.261	0.261	0.370	0.370

TABLE	SPECFUNG BENOMYL(2) BENOMYL(3)	BENOMYL(1) BENOMYL(2) BENOMYL(3)	SPECFUNG BENOMYL(1) BENOMYL(2) BENOMYL(3)
REP	4	4	2
SED	0.370	0.370	0.523