

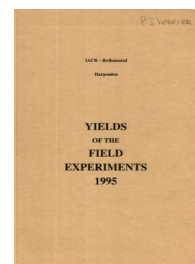
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED  
RESEARCH

## Yields of the Field Experiments 1995

[Full Table of Content](#)



---

### 95/R/CS/302 Eyespot Resistance to Mbc - W. Wheat

#### Rothamsted Research

Rothamsted Research (1996) *95/R/CS/302 Eyespot Resistance to Mbc - W. Wheat* ; Yields Of The Field Experiments 1995, pp 62 - 63 - DOI: <https://doi.org/10.23637/ERADOC-1-50>

95/R/CS/302

EYESPOT RESISTANCE TO MBC

**Object:** To study the development of resistance to MBC fungicides in eyespot and the ability of resistant strains to survive, spread and infect - Meadow.

**Sponsor:** G.L. Bateman.

The eleventh year, w. wheat after set-aside.

For previous years see 85-93/R/CS/302

**Design:** 2 randomised blocks of 4 plots split into 6 sub-plots.

**Whole plot dimensions:** 12.0 x 24.0.

**Sub-plot dimensions:** 4.5 x 6.0.

**Treatments:** All combinations of:-

Whole plots

- |                     |  |
|---------------------|--|
| 1. <b>FUNGICIDE</b> | Fungicide applied cumulatively 1985-93 and 1995:                             |
| NONE                | None   |
| CARB                | Carbendazim at 0.25 kg   |
| PRO                 | Prochloraz at 0.40 kg (0.50 kg in 1993 and 1995)                             |
| CARB+PRO            | Carbendazim at 0.25 kg with prochloraz at 0.40 kg (0.50 kg in 1993 and 1995) |

Sub-plots

- |                    |   |
|--------------------|---|
| 2. <b>EYE INOC</b> | Eyespot inoculum, applied in first year only:                             |
| NATURAL            | Natural background population (duplicated)                                |
| W 19R 1S           | Inoculated with wheat strains in proportion 19 resistant to one sensitive |
| W 1R 19S           | As above but one resistant to 19 sensitive                                |
| R 19R 1S           | Inoculated with rye strains, 19 resistant to one sensitive                |
| R 1R 19S           | As above but one resistant to 19 sensitive                                |

**NOTE:** The inoculum was colonized on oat seed and broadcast in October, 1984.

**Experimental diary:**

- 19-Jul-94 : B : PK as (0:20:32) at 1406 kg.  
05-Aug-94 : B : Barclay Gallup at 2.0 l with Frigate at 1.0 l in 200 l.  
15-Aug-94 : B : Ploughed.  
27-Sep-94 : B : Rotary harrowed, Mercia, dressed Cerevax, drilled at 380 seeds per m<sup>2</sup>.  
28-Sep-94 : B : Rolled.  
21-Nov-94 : B : Auger at 2.5 l with Stomp 400 at 2.5 l and Decis at 200 ml in 200 l.  
13-Mar-95 : B : 34.5% N at 118 kg.

95/R/CS/302

**Experimental diary:**

14-Mar-95 : T : **FUNGCIDE** CARB: Tripart Defensor FL at 0.5 l in 200 l.  
 : T : **FUNGCIDE** PRO: Sportak 45 at 1.1 l in 200 l.  
 : T : **FUNGCIDE** CARB+PRO: Sportak 45 at 1.1 l with Tripart  
 Defensor FL at 0.5 l in 200 l.  
 11-Apr-95 : T : **FUNGCIDE** CARB: Tripart Defensor FL at 0.5 l in 200 l.  
 : T : **FUNGCIDE** PRO: Barclay Eyetak at 1.1 l in 200 l.  
 : T : **FUNGCIDE** CARB+PRO: Barclay Eyetak at 1.1 l with Tripart  
 Defensor FL at 0.5 l in 200 l.  
 12-Apr-95 : B : 34.5% N at 463 kg.  
 10-May-95 : B : Calixin at 0.35 l with Halo at 2.0 l in 200 l.  
 16-Jun-95 : B : Halo at 2.0 l with Patrol at 0.5 l in 300 l.  
 02-Aug-95 : B : Combine harvested.

**NOTE:** Samples were taken in July to assess eyespot.

**GRAIN TONNES/HECTARE**

\*\*\*\*\* Tables of means \*\*\*\*\*

<b>EYE INOC FUNGCIDE</b>	NATURAL	W 19R 1S	W 1R 19S	R 19R 1S	R 1R 19S	Mean
NONE	9.78	9.40	8.70	9.22	10.01	9.48
CARB	9.09	9.29	9.45	8.97	9.50	9.23
PRO	9.13	8.72	9.36	9.26	8.93	9.09
CARB+PRO	9.79	8.87	9.78	9.70	10.01	9.66
Mean	9.45	9.07	9.32	9.29	9.61	9.36

\*\*\* Standard errors of differences of means \*\*\*

<b>EYE INOC</b>	<b>FUNGCIDE*</b>	<b>EYE INOC</b>
0.243	0.485	min.rep
0.210	0.420	max-min

\* Within the same level of **FUNGCIDE** only.

\*\*\*\*\* Stratum standard errors and coefficients of variation \*\*\*\*\*

Stratum	d.f.	s.e.	cv%
BLOCK.WP.SP	24	0.485	5.2

GRAIN MEAN DM% 91.7

SUB-PLOT AREA HARVESTED 0.00137