

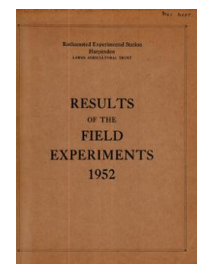
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1952

[Full Table of Content](#)



52/CA/2 Wheat - Control of Eyespot - Rothamsted

Rothamsted Research

Rothamsted Research (1953) *52/CA/2 Wheat - Control of Eyespot - Rothamsted* ; Yields Of The Field Experiments 1952, pp 70 - 72 - DOI: <https://doi.org/10.23637/ERADOC-1-178>

52/Ca/2.1

WHEAT

Control of Eyespot (*Cercospora Herpotrichoides*) - Great Field I 1952.

System of replication: 8 randomized blocks of 8 plots each, certain high order interactions and the effect of spraying being confounded with block differences. In addition each block contained two extra plots with no nitrogen. The variety x seed rate interaction being confounded.

Area of each plot: 0.0197 acre.

Treatments: All combinations of

Variety: Squareheads Master 13/4; Bersee (V_1 ; V_2).

Seedrate: $1\frac{1}{2}$; 3 bushels per acre (R_1 ; R_2).

Nitrogen: 0.4; 0.8 cwt per acre applied as sulphate of ammonia (N_1 ; N_2).

Time of application of N: At time of sowing; early March; mid-April; 3rd week May (T_1 ; T_2 ; T_3 ; T_4).

Spraying: 4 blocks sprayed with 12 $\frac{1}{2}$ % sulphuric acid at 100 gallons per acre.

Basal manuring: None.

Cultivations, etc.: Ploughed: Oct 8. Seed drilled, T_1 applied: Oct 25. T_2 applied: Mar 13. Sprayed 4 blocks: Mar 14. T_3 applied: Apr 16. Sprayed all plots with D.N.O.C.: Apr 18. T_4 applied: May 22. Harvested: Aug 19. Previous crop: Linseed.

Standard error per plot:

Grain: 2.92 cwt per acre or 10.9% (24 d.f.)

- NB. (1) Counts of incidence of Eyespot were made and are available.
(2) In the Summary of Results:-
(a) The standard errors given are not valid for testing the effects of spraying for any particular treatment level; the interactions of spraying with treatments may however be tested.
(b) The V x R tables do not include the plots receiving no nitrogen.

Summary of Results

Grain: cwt per acre

	Unsprayed					Sprayed					
	T ₁	T ₂	T ₃	T ₄	Mean	T ₁	T ₂	T ₃	T ₄	Mean	
	(±1.46)						(±1.46)				
V ₁	23.6	20.0	21.7	24.5	22.5	32.7	31.0	33.7	33.4	32.7	
V ₂	37.9	33.0	31.7	31.7	33.6	46.4	45.5	45.7	42.9	45.1	
Diff. (±2.06)	14.3	13.0	10.0	7.2	11.1 (±1.03)	13.7	14.5	12.0	9.5	12.4 (±1.03)	
R ₁	34.1	28.2	28.6	30.2	30.3	39.4	36.8	40.9	41.3	39.6	
R ₂	27.4	24.8	24.7	26.1	25.8	39.7	39.7	38.5	34.9	38.2	
Diff. (±2.06)	-6.7	-3.4	-3.9	-4.1	-4.5 (±1.03)	+0.3	+2.9	-2.4	-6.4	-1.4 (±1.03)	
N ₁	32.1	25.5	25.8	27.8	27.8	37.9	38.7	38.0	38.3	38.2	
N ₂	29.4	27.5	27.5	28.4	28.2	41.2	37.8	41.4	38.0	39.6	
Diff. (±2.06)	-2.7	+2.0	+1.7	+0.6	+0.4 (±1.03)	+3.3	-0.9	+3.4	-0.3	+1.4 (±1.03)	
Mean (±1.03)	30.7	26.5	26.7	28.1	28.0	39.6	38.2	39.7	38.1	38.9	

	Unsprayed			Diff. (±1.46)	Sprayed		
	R ₁	R ₂	Diff. (±1.03)		R ₁	R ₂	Diff. (±1.46)
V ₁	24.8	20.1	-4.7	33.3	32.1	-1.2	
V ₂	35.7	31.4	-4.3	45.9	44.4	-1.5	
Diff. (±1.46)	+10.9	+11.3	+0.4	+12.6	+12.3	-0.3	

	Unsprayed				Mean	Sprayed			
	N ₀	N ₁	N ₂	Mean (±1.46)		N ₀	N ₁	N ₂	Mean (±1.03)
V ₁	22.4	22.0	22.9	22.4	31.2	33.5	31.9	32.4	
V ₂	28.9	33.6	33.6	32.6	36.8	42.9	47.3	43.5	
Diff. (±1.46)	+6.5 ⁽¹⁾	+11.6	+10.7	+10.2 (±0.84)	+5.6 ⁽¹⁾	+9.4	+15.4	+11.1 (±0.84)	
R ₁	28.7	29.9	30.7	30.0	36.6	39.4	39.8	39.0	
R ₂	22.6	25.7	25.8	25.1	31.5	37.0	39.4	36.9	
Diff. (±1.46)	-6.1 ⁽¹⁾	-4.2	-4.9	-4.9 (±0.84)	-5.1 ⁽¹⁾	-2.4	-0.4	-2.1 (±0.84)	
Mean (±0.73)	25.7 ⁽²⁾	27.8	28.2	27.5	34.0 ⁽²⁾	38.2	39.6	37.9	

(1) ±2.06 (2) ±1.03

52/Ca/2.3

Straw: cwt per acre

	Unsprayed					Sprayed				
	T ₁	T ₂	T ₃	T ₄	Mean	T ₁	T ₂	T ₃	T ₄	Mean
V ₁	67.5	67.4	68.3	61.6	66.2	69.5	73.4	69.2	68.9	70.3
V ₂	59.4	61.0	59.4	48.5	57.1	57.0	61.3	56.2	49.8	56.1
Diff.	-8.1	-6.4	-8.9	-13.1	-9.1	-12.5	-12.1	-13.0	-19.1	-14.2
R ₁	62.7	62.9	62.7	55.9	61.0	61.0	66.1	62.9	57.7	61.9
R ₂	64.2	65.5	65.0	54.2	62.2	65.5	68.7	62.5	61.0	64.4
Diff.	+1.5	+2.6	+2.3	-1.7	+1.2	+4.5	+2.6	-0.4	+3.3	+2.5
N ₁	61.6	63.4	61.9	56.2	60.8	62.8	65.9	61.4	60.9	62.7
N ₂	65.3	65.0	65.7	53.9	62.5	63.7	68.9	64.0	57.8	63.6
Diff.	+3.7	+1.6	+3.8	-2.3	+1.7	+0.9	+3.0	+2.6	-3.1	+0.9
Mean	63.4	64.2	63.8	55.1	61.6	63.2	67.4	62.7	59.3	63.2

	R ₁	R ₂	Diff.	R ₁	R ₂	Diff.
V ₁	65.9	66.5	+0.6	68.7	71.8	+3.1
V ₂	56.2	58.0	+1.8	55.1	57.0	+1.9
Diff.	-9.7	-8.5	+1.2	-13.6	-14.8	-1.2

	N ₀	N ₁	N ₂	Mean	N ₀	N ₁	N ₂	Mean
V ₁	58.5	65.3	67.0	64.7	59.6	69.7	70.8	68.1
V ₂	46.0	56.2	57.9	54.9	47.3	55.8	56.4	54.3
Diff.	-12.5	-9.1	-9.1	-9.8	-12.3	-13.9	-14.4	-13.8
R ₁	53.5	60.7	61.4	59.5	52.3	61.0	62.8	60.0
R ₂	51.0	60.9	63.6	60.0	54.7	64.4	64.4	62.5
Diff.	-2.5	+0.2	+2.2	+0.5	+2.4	+3.4	+1.6	+2.5
Mean	52.3	60.8	62.5	59.8	53.5	62.7	63.6	61.2