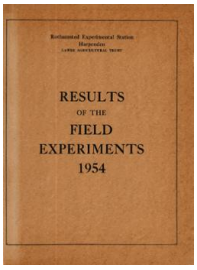
ROTHAMSTED RESEARCH

Yields of the Field Experiments 1954

Full Table of Content



54/R/CA/1 Wheat - Eyespot Rotation 5th Year

Rothamsted Research

Rothamsted Research (1955) *54/R/CA/1 Wheat - Eyespot Rotation 5th Year ;* Yields Of The Field Experiments 1954, pp 63 - 64 **- DOI: https://doi.org/10.23637/ERADOC-1-184**

WHEAT

The effects of various crop sequences on the incidence of Eyespot (Cercosporella herpotrichoides) - Little Knott 1954, the 5th year.

Arrangement of previous treatment crops: 4 longitudinal and 8 cross strips, each plot being split into 2 for seed rates.

Area of each sub plot: In 3 longitudinal strips - 0.0249, in the other 0.0174. Area harvested: 0.0156 and 0.0108 acre, respectively.

Preparatory crops 1950-52:-

1950 North and South, strips of Fallow, Ryegrass, Wheat, Potatoes
1951 East and West, strips of Ryegrass, Wheat, Fallow, Potatoes
1952 East and West, strips ½ width Ryegrass, Wheat, Oats, Beans
Wheat, Oats, Barley, Wheat

giving 32 crop sequences in all.

In 1949 the field carried a crop of wheat heavily infested with Eyespot, Take-all (Ophiobolous graminis) and weeds. Wheat was grown on all plots in 1953.

Seed rates: 1½; 3 bushels per acre.

Basal dressing per acre: 1 cwt compound granular fertilizer (12% N, 12% P_2O_5, 12% K_2O) combine drilled with seed. 6 cwt nitrochalk in two equal applications in March and May.

Cultivations, etc: Ploughed: Sept 17, 1953. Seed combine drilled: Nov 6. 1st application of nitrochalk: Mar 13, 1954. 2nd application: May 10. Combine harvested: Sept 13. Variety: Cappelle. Previous crop: Wheat.

Note: Disease surveys were made and the results are available.

https://doi.org/10.23637/ERADOC-1-184

Summary of Results

Grain (at 85% D.M.): cwt per acre

Previous crop 1950	1951	1952	1953	Seed rate: bushels per acre 1½	3	1½ Mean	3 Mean
W	W	W	W	22.3	30.9	22.3	30.9
H	W	W	W	31.0	38.6		
P	W	W	W	36.3	39.9	31.3	38.3
F	W	W	W	26.6	36.3		
W	H	W	W	24.6	36.8		
W	P	W	W	30.9	38.9	27.1	35.7
W	F	B	W	25.8	31.4		
H	H	W	W	34.1	37.2		
P	H	W	W	35.1	38.6		
F	H	W	W	32.6	39.2		
H	P	W	W	31.9	39.0		
P	P	W	W	36.8	43.8	32.5	35.3
F	P	W	W	26.2	31.8		
H	F	B	W	31.7	27.6		
P	F	B	W	34.2	32.2		
F	F	B	W	30.2	28.3		
W	W	O	W	26.0	32.0	26.0	32.0
H	W	O	W	34.6	37.9		
P	W	O	W	43.1	46.1	37.1	38.3
F	W	O	W	33.8	30.8		
W	H	H	W	32.5	36.2		
W	F	O	W	32.0	38.3	32.7	37.0
W	P	Be	W	33.7	36.4		
H	F	O	W	43.0	42.8		
F	F	O	W	38.4	40.1		
P	F	O	W	42.7	45.2		
F	H	H	W	39.2	41.4		
F	P	Be	W	35.6	34.3	38.6	39.5
H	H	H	W	31.0	34.8		
P	H	H	W	36.3	39.1		
H	P	Be	W	40.9	39.6		
P	P	Be	W	40.7	38.5		
Mean						31.0	35.9

Mean dry matter % as harvested: 72.3

The plots are classified according to the occurrence in previous years of the more susceptible crops, wheat and barley.

Crop symbols: B - Barley. Be - Beans. F - Fallow. H - Ryegrass
O - Oats. P - Potatoes. W - Wheat.

https://doi.org/10.23637/ERADOC-1-184