

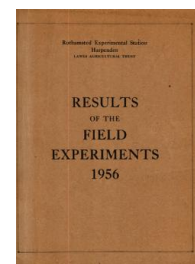
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1956

[Full Table of Content](#)



56/R/CA/1 Winter Wheat - Eyespot Rotation, Varieties, Seed Rates and N - 3rd Year

Rothamsted Research

Rothamsted Research (1957) *56/R/CA/1 Winter Wheat - Eyespot Rotation, Varieties, Seed Rates and N - 3rd Year* ; Yields Of The Field Experiments 1956, pp 70 - 71 - DOI:

<https://doi.org/10.23637/ERADOC-1-176>

56/Ca/1.1

WINTER WHEAT

The effects of crop sequences, varieties, seed rates, nitrogen and sulphuric acid spray on the incidence of Eyespot (Cercospora herpotrichoides) - Long Hoos I, II and III, 1956. The 3rd (final) year.

Details of treatments and crop sequences etc., are as stated in "Results of the Field Experiments" 1954, Section 54/Ca/2.1, modified as follows:

1. Seed rates in 1955 and 1956,
Holdfast: $1\frac{1}{2}$, 3 bushels per acre
Cappelle: 2, 4 bushels per acre.
2. In 1956 only, 8 of the 16 blocks were sprayed with sulphuric acid ($12\frac{1}{2}\%$ BOV in 80 gallons per acre).

Area of each plot: 0.0146 acres. Area harvested: 0.0095 acres.

Basal dressing in spring: 1 cwt per acre of compound granular fertilizer (12% N, 12% P_2O_5 , 15% K_2O) combine drilled with seed.

Note: In 1956 each plot was reduced in length to allow the growing of a small area of winter oats but these failed and were abandoned.

Cultivations, etc.: Ploughed: Oct 5, 1955. Seed combine drilled: Oct 26. Acid spray applied: Mar 14, 1956. Nitrochalk applied: Mar 16, May 10. Sprayed with MCPA, 3 pints in 40 gallons per acre: May 15. Combine harvested: Sept 1.

Standard errors per plot: Grain (at 85% dry matter): cwt per acre.

Block: 1.27 cwt per acre or 4.0% (6 d.f.)

Plot: 1.83 cwt per acre or 5.8% (23 d.f.)

- Note
- (1) Germination on the Holdfast plots was very uneven.
 - (2) Records of incidence of disease (Eyespot and Take-All), estimates of % area lodged, and counts of plant, shoot and straw numbers were made.
 - (3) In 1955 the potatoes (Majestic) received 10 tons dung and 12 cwt compound fertilizer (7% N, 7% P_2O_5 , $10\frac{1}{2}\%$ K_2O) per acre.

Summary of Results
Grain (at 85% dry matter): cwt per acre

Previous rotation 1954	Spray Sulphuric acid		Seed Rate Single Double	Diff.	N:		Diff.	Mean
	None	(±1.10)			cwt per acre 0.46	0.93		
<u>Holdfast</u>								
Wheat	18.8	18.6	18.5	(± 1.29) +0.4	(±1.01)* 16.0	21.4	(± 1.29) +5.4	(± 0.78) 18.7
Potatoes	24.2	23.3	21.6	+4.2	21.2	26.2	+5.0	23.7
Wheat	29.6	25.7	23.8	+7.8	26.0	29.4	+3.4	27.7
Beans	37.0	32.7	31.6	+6.6	34.6	35.2	+0.6	34.9
Mean	27.4	25.1	23.9	+4.7 (± 0.65)	24.4	28.0	+3.6 (± 0.65)	26.2 (± 0.32)
			Seed rate		(±0.65)**			
			Single		22.4	25.3	(± 1.10)	
			Double		26.5	30.8	+2.9 +4.3	
			Difference	(±1.10)	+4.1	+5.5	+1.4	(± 1.56)
<u>Cappelle</u>								
Wheat	24.2	20.8	23.6	(± 1.29) -2.2	(±1.01)* 20.4	24.7	(± 1.29) +4.3	(± 0.78) 22.5
Potatoes	35.6	36.0	34.7	+2.2	31.2	40.4	+9.2	35.8
Wheat	39.6	39.3	36.6	+5.7	37.6	41.3	+3.7	39.5
Beans	49.3	49.8	47.0	+5.1	48.4	50.7	+2.3	49.6
Mean	37.2	36.5	35.5	+2.7 (± 0.65)	34.4	39.3	+4.9 (± 0.65)	36.8 (± 0.32)
			Seed rate		(±0.65)**			
			Single		33.0	38.0	(± 1.10)	
			Double		35.8	40.6	+5.0 +4.8	
			Difference	(±1.10)	+2.8	+2.6	-0.2	(± 1.56)

Mean dry matter % as harvested: 73.8
* for use in comparisons other than horizontal
** for use in diagonal comparisons only

Note. The standard errors are for use only in comparisons within the same variety.