

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 1959

[Full Table of Content](#)



59/R/A/2 Hoosfield - Barley

Rothamsted Research

Rothamsted Research (1960) *59/R/A/2 Hoosfield - Barley*; Yields Of The Field Experiments 1959, pp 7 - 8 - DOI: <https://doi.org/10.23637/ERADOC-1-179>

59/A/3

WHEAT AFTER FALLOW - HOOSFIELD 1959

Without manure 1851 and since

For history, treatments etc., see "Details of the Classical and Long Term Experiments" 1956. In 1957 the original plots were reduced in size to 0.0628* acres to provide additional land for the study of Wheat Bulb Fly.

Area harvested: 0.0334 acres.

Cultivations, etc.:

Cropped plots. Ploughed: Oct 21, 1958. Seed sown at 3 bushels per acre: Nov 21. Combine harvested: Aug 20, 1959. Variety: Squarehead's Master 13/4.

Fallowed plots. Ploughed: Oct 21, 1958 and June 2, 1959.

*Note: This is the full area; the area given in previous reports is the area harvested before allowing for sampling.

Note: Counts of plant shoot and ear number and estimates of incidence of Eyespot (*Cercospora herpotrichoides*) and Take-All (*Ophiobolus graminis*) were made. There was no lodging.

Summary of Results

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

Plot	B ₁	B ₂	B ₃	Mean
No. of years of fallow	1	1	3	
	9.1	8.2	9.4	8.9

Mean dry matter % as harvested: 86.2

59/1/4.1

GRASS AND MULTIPLE CROPPING X P

AGDELL 1959

For history, treatments, etc., see "Details of the Classical and Long Term Experiments" 1956.

In 1959 a system of multiple cropping designed to measure crop responses to phosphate was added to the 1958 scheme, the fallow half of each main plot carrying potatoes, sugar beet and barley in 3 strips, each divided into 4 blocks of 3 sub-plots each.

Area of each sub-plot: 0.0034 acres. Area of grass harvested: 0.0023 acres.

Treatments applied to sub-plots: none; 0.25; 1.00 cwt P_2O_5 per acre as superphosphate.

Basal dressings:

To grass: 0.80 cwt N applied in spring and after each silage cut.
To potatoes and sugar beet: 1.00 cwt N per acre as sulphate of ammonia and 1.20 cwt K_2O per acre as sulphate of potash.
To barley: 0.50 cwt N per acre as sulphate of ammonia and 0.60 cwt K_2O per acre as sulphate of potash.

Cultivations, etc.: Ground chalk applied to plots 1 and 2 at 36 cwt per acre: February 10th, 1959. Fallow halves ploughed: February 12th.

Grass. "Nitra-Shell" applied: April 10th. Cut 3 times for silage: May 27th, July 7th and August 24th. "Nitra-Shell" applied after 1st and 2nd cuts, "Nitro-Chalk" 21 after the last.
Variety: Italian Ryegrass S22.

Barley. Fertilizers broadcast, seed drilled at $2\frac{1}{2}$ bushels per acre: April 2nd. Harvested: August 12th. Variety: Proctor.

Potatoes. Ridged, fertilizers applied, potatoes planted: May 11th. Sprayed with copper fungicide at 5lb. in 40 gallons per acre: August 24th. Lifted: October 9th. Variety: Majestic (chitted).

Sugar beet: Fertilizers applied, seed drilled at 19 lb. per acre: May 5th. Hand sprayed with miscible DDT at 3 pints in 8 gallons per acre against mangold fly: May 26th. Singled: June 19th-27th. Hand sprayed with demeton methyl at 16 fluid oz. in 8 gallons per acre against aphids: July 3rd. Lifted: November 18th.
Variety: Klein E.