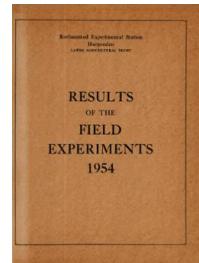


Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



# Yields of the Field Experiments 1954

[Full Table of Content](#)



## 54/W/CA/7 Wheat - Varieties, Seed Rates, Levels and Time of N

**Rothamsted Research**

Rothamsted Research (1955) *54/W/CA/7 Wheat - Varieties, Seed Rates, Levels and Time of N* ; Yields Of The Field Experiments 1954, pp 72 - 74 - DOI: <https://doi.org/10.23637/ERADOC-1-184>

54/Ca/7.1

WHEAT

Varieties, seed rates, levels and time of N - Woburn, Roadpiece 1954.

System of replication: 4 randomized blocks of 8 plots each, certain high order interactions being confounded with block differences. In addition each block contained 2 plots with no nitrogen, the variety x seed rate interaction being confounded.

Area of each plot: 0.0159 acre.

Treatments: All combinations of:-

Varieties: Holdfast; Cappelle.

Seed rates:  $1\frac{1}{2}$ ; 3 bushels per acre.

Nitrogen: 0.5; 1.0 cwt N per acre as nitrochalk.

Time of application of N: In seed bed; in early March; early April; mid-May.

Basal dressing: None

Cultivations, etc.: Cultivated after potatoes: Oct 21, 1953. Seed-bed nitrogen applied: Oct 26. Seed drilled: Nov 6. March top dressing applied: March 2, 1954. April top dressing applied: April 6. All plots sprayed with D.N.O.C. at 6 lb per acre in 100 gallons, May top dressing applied: May 11. Harvested: Sept 15. Varieties: Holdfast and Cappelle. Previous crop: Potatoes.

Standard error per plot:

Grain: 4.10 cwt per acre or 14.9% (12 d.f.)

Note: Records of incidence of disease (Take-all and Eyespot) and counts of plants, shoots and ear numbers were made.

54/Ca/7.2

Summary of Results

Grain: cwt per acre

	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>	T <sub>4</sub>	Mean
Mean ( $\pm 1.45$ )	21.6	30.2	35.6	30.1	29.4
			( $\pm 2.05$ )		( $\pm 1.02$ )
V <sub>1</sub>	21.4	25.7	33.7	28.1	27.2
V <sub>2</sub>	21.8	34.7	37.6	32.1	31.5
Difference ( $\pm 2.90$ )	+0.4	+9.0	+3.9	+4.0	+4.3 ( $\pm 1.45$ )
R <sub>1</sub>	19.8	29.4	33.0	28.2	27.6
R <sub>2</sub>	23.4	31.0	38.3	32.0	31.1
Difference ( $\pm 2.90$ )	+3.6	+1.6	+5.3	+3.8	+3.5 ( $\pm 1.45$ )
N <sub>1</sub>	22.8	25.3	29.2	26.5	26.0
N <sub>2</sub>	20.4	35.1	42.1	33.6	32.8
Difference ( $\pm 2.90$ )	-2.4	+9.8	+12.9	+7.1	+6.8 ( $\pm 1.45$ )

	R <sub>1</sub>	R <sub>2</sub>	Diff.	N <sub>0</sub>	N <sub>1</sub>	N <sub>2</sub>	Mean
Mean ( $\pm 1.02$ )				19.7 (2)	26.0	32.8	27.4
	( $\pm 1.45$ )	( $\pm 2.05$ )	( $\pm 2.05$ )	( $\pm 2.05$ )	( $\pm 1.45$ )	( $\pm 1.45$ )	( $\pm 0.92$ )
V <sub>1</sub>	26.0	28.4	+2.4	20.5	24.2	30.2	25.9
V <sub>2</sub>	29.2	33.9	+4.7	18.9	27.7	35.4	29.0
Diff. ( $\pm 2.05$ )	+3.2	+5.5	+2.3	-1.6 (1)	+3.5	+5.2	+3.1
				( $\pm 2.05$ )	( $\pm 1.45$ )	( $\pm 1.45$ )	( $\pm 0.92$ )
R <sub>1</sub>				18.9	23.6	31.6	25.9
R <sub>2</sub>				20.5	28.3	34.0	29.0
Diff. ( $\pm 2.05$ )				+1.6 (1)	+4.7	+2.4	+3.1

(1)  $\pm 2.90$       (2)  $\pm 1.45$

Treatments

V <sub>1</sub> Holdfast	R <sub>1</sub> 1½ bushels per acre	N <sub>0</sub> No N
V <sub>2</sub> Cappelle	R <sub>2</sub> 3 bushels per acre	N <sub>1</sub> 0.5 cwt N per acre
		N <sub>2</sub> 1.0 cwt N per acre

- T<sub>1</sub> Nitrochalk in seedbed
- T<sub>2</sub> Nitrochalk in early March
- T<sub>3</sub> Nitrochalk 5 weeks after T<sub>2</sub>
- T<sub>4</sub> Nitrochalk 5 weeks after T<sub>3</sub>

The V × R table does not include the plots receiving no nitrogen.

54/Ca/7.3

	Straw: cwt per acre				
	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>	T <sub>4</sub>	Mean
Mean	23.7	37.1	40.2	32.3	33.3
V <sub>1</sub>	25.5	35.2	43.2	34.3	34.5
V <sub>2</sub>	22.0	38.9	37.2	30.3	32.1
Difference	-3.5	+3.7	-6.0	-4.0	-2.4
R <sub>1</sub>	20.4	36.2	36.1	29.4	30.5
R <sub>2</sub>	27.1	37.9	44.2	35.2	36.1
Difference	+6.7	+1.7	+8.1	+5.8	+5.6
N <sub>1</sub>	25.7	29.7	32.9	28.7	29.2
N <sub>2</sub>	21.8	44.4	47.5	35.9	37.4
Difference	-3.9	+14.7	+14.6	+7.2	+8.2

	R <sub>1</sub>	R <sub>2</sub>	Diff.	N <sub>0</sub>	N <sub>1</sub>	N <sub>2</sub>	Mean
Mean				21.0	29.2	37.4	30.9
V <sub>1</sub>	32.2	36.9	+4.7	22.6	30.6	38.5	32.2
V <sub>2</sub>	28.9	35.3	+6.4	19.5	27.9	36.3	29.6
Difference	-3.3	-1.6	+1.7	-3.1	-2.7	-2.2	-2.6
R <sub>1</sub>				20.8	26.1	34.9	28.6
R <sub>2</sub>				21.3	32.4	39.9	33.2
Difference				+0.5	+6.3	+5.0	+4.6

#### Treatments

V <sub>1</sub>	Holdfast	R <sub>1</sub>	1½ bushels per acre	N <sub>0</sub>	No N
V <sub>2</sub>	Cappelle	R <sub>2</sub>	3 bushels per acre	N <sub>1</sub>	0.5 cwt N per acre

N<sub>2</sub> 1.0 cwt N per acre

- T<sub>1</sub> Nitrochalk in seedbed
- T<sub>2</sub> Nitrochalk in early March
- T<sub>3</sub> Nitrochalk 5 weeks after T<sub>2</sub>
- T<sub>4</sub> Nitrochalk 5 weeks after T<sub>3</sub>

The V × R table does not include the plots receiving no nitrogen.