

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 1972

[Full Table of Content](#)



## 72/R/BN/7 Barnfield - Beans, S. Wheat, Barley

### Rothamsted Research

Rothamsted Research (1973) *72/R/BN/7 Barnfield - Beans, S. Wheat, Barley* ; Yields Of The Field Experiments 1972, pp 34 - 39 - DOI: <https://doi.org/10.23637/ERADOC-1-62>

72/R/BN/7

BARNFIELD

Object: Originally studied the effects of organic and inorganic manures on continuous roots. The experiment has been modified to study effects on a four-course rotation and continuous beans.

The fifth year of the new scheme, beans, spring wheat, barley.

For previous years see 'Details' 1967, 68/A/5(t), 69/R/BN/7, 70/R/BN/7(t) and 71/R/BN/7(t).

Plot dimensions and areas harvested:

Wheat and barley (quarter plot): 5.33 x 28.5.

(Strip 1: 3.56 x 28.5). Area harvested: 0.00780.

Beans, Section 1 (half plot): 10.7 x 27.4.

(Strips 1 and 8: 70.1 x 27.4). Area harvested: 0.00878.

Continuous spring beans: Fresh simazine was applied only to those half plots on Sections 1 and 2 which received simazine in 1967 but not subsequently.

Standard applications:

Spring beans: Weedkiller: Paraquat at 0.56 kg ion in 220 l.

Insecticide: Phorate at 1.1 kg applied as granules.

Spring wheat and barley: MCPA, mecoprop and dicamba ('Banlene Plus' at 5.6 l in 220 l).

Seed: Beans: Maris Bead sown at 220 kg.

Spring wheat: Kolibri sown at 190 kg,

Barley: Julia dressed with ethirimol, sown at 160 kg.

Cultivations, etc.: P, K, Na and Mg applied: Strip 2 only -

15 Nov, 1971, remainder 30 Nov. FYM applied: 16 Nov.

FYM ploughed in: 17 Nov. Remaining plots ploughed: 9 - 15 Dec.

Spring beans: Paraquat applied: 10 Sept, 1971. Seed drilled:

22 Mar, 1972. Simazine applied to appropriate half plots

at 1.1 kg in 220 l: 2 May. Insecticide applied: 17 June.

Combine harvested: 27 Sept.

Spring wheat: N applied: 21 Mar, 1972. Seed drilled: 22 Mar.

Weedkiller applied: 17 May. Combine harvested: 6 Sept.

Barley: N applied: 21 Mar, 1972. Seed drilled: 22 Mar.

Weedkiller applied: 17 May. Combine harvested: 22 Aug.

72/R/BN/7

TABLES OF MEANS

BARLEY

GRAIN: TONNES/HECTARE

SERIES

Strip	N	N	A	AC	C
1	0	5.65	-	-	4.94
	1	-	7.02	7.24	-
	2	6.17	-	-	6.37
	3	-	6.97	6.55	-
2	0	-	3.77	3.83	-
	1	6.90	-	-	6.32
	2	-	6.92	6.47	-
	3	5.63	-	-	6.80
4	0	2.18	-	-	1.84
	1	-	4.31	4.77	-
	2	6.53	-	-	6.29
	3	-	6.80	6.93	-
5	0	1.97	-	-	2.25
	1	-	5.63	5.57	-
	2	5.38	-	-	6.87
	3	-	6.13	7.16	-
6	0	-	1.71	1.93	-
	1	4.28	-	-	5.10
	2	-	5.87	7.09	-
	3	6.55	-	-	6.07
7	0	-	1.76	2.28	-
	1	5.25	-	-	5.48
	2	-	6.33	6.77	-
	3	5.59	-	-	6.96
8	0	-	1.67	2.82	-
	1	3.82	-	-	5.13
	2	-	6.23	7.07	-
	3	6.21	-	-	6.90
9	0		1.44		
	1		4.50		
	2		5.04		
	3		6.78		

35

Mean D.M. %: 84.8

72/R/BN/7

BARLEY

STRAW: TONNES/HECTARE

SERIES

Strip	N	N	A	AC	C
1	0	3.54	-	-	3.42
	1	-	6.38	5.79	-
	2	6.76	-	-	5.86
	3	-	6.73	6.56	-
2	0	-	2.03	2.66	-
	1	6.44	-	-	4.59
	2	-	7.09	5.74	-
	3	7.77	-	-	7.62
4	0	1.21	-	-	0.86
	1	-	3.11	2.94	-
	2	5.44	-	-	5.79
	3	-	5.62	5.77	-
5	0	1.07	-	-	0.89
	1	-	3.83	4.11	-
	2	5.06	-	-	5.14
	3	-	5.25	5.36	-
6	0	-	0.87	1.06	-
	1	3.19	-	-	4.23
	2	-	4.79	5.38	-
	3	5.16	-	-	5.90
7	0	-	0.65	0.87	-
	1	3.25	-	-	3.85
	2	-	5.04	5.72	-
	3	5.19	-	-	6.82
8	0	-	0.60	1.19	-
	1	2.62	-	-	3.03
	2	-	4.32	4.74	-
	3	4.68	-	-	5.45
9	0		0.81		
	1		3.11		
	2		4.47		
	3		5.57		

Mean D.M. %: 87.9

36

72/R/BN/7

SPRING WHEAT

GRAIN: TONNES/HECTARE

SERIES

Strip	N	SERIES			
		N	A	AC	C
1	0	-	3.22	2.68	-
	1	3.99	-	-	5.29
	2	-	6.51	5.54	-
	3	6.30	-	-	4.90
2	0	2.88	-	-	1.94
	1	-	5.91	5.04	-
	2	5.89	-	-	5.37
	3	-	6.21	5.99	-
4	0	-	0.91	0.68	-
	1	3.69	-	-	2.84
	2	-	2.96	3.20	-
	3	5.34	-	-	4.93
5	0	-	0.90	1.12	-
	1	2.89	-	-	3.23
	2	-	4.43	4.42	-
	3	4.65	-	-	5.17
6	0	1.29	-	-	0.97
	1	-	2.27	2.67	-
	2	3.74	-	-	4.21
	3	-	4.17	4.82	-
7	0	1.06	-	-	1.52
	1	-	3.08	3.59	-
	2	3.50	-	-	4.70
	3	-	5.22	5.48	-
8	0	0.92	-	-	1.41
	1	-	3.00	3.93	-
	2	3.69	-	-	4.49
	3	-	5.01	4.37	-

Mean D.M. %: 83.3

72/R/BN/7

SPRING WHEAT

STRAW: TONNES/HECTARE

SEROES

Strip	N	N	A	AC	C
1	0	-	4.03	3.19	-
	1	5.01	-	-	7.03
	2	-	8.53	7.18	-
	3	9.81	-	-	7.17
2	0	3.69	-	-	1.87
	1	-	7.13	5.87	-
	2	6.71	-	-	8.28
	3	-	7.64	7.71	-
4	0	-	1.23	0.79	-
	1	4.48	-	-	3.34
	2	-	3.37	3.34	-
	3	6.99	-	-	6.20
5	0	-	1.40	1.56	-
	1	3.02	-	-	3.92
	2	-	5.22	4.79	-
	3	5.38	-	-	6.17
6	0	1.19	-	-	1.40
	1	-	2.91	3.77	-
	2	5.09	-	-	4.28
	3	-	5.50	5.67	-
7	0	1.35	-	-	1.73
	1	-	3.52	4.15	-
	2	3.68	-	-	4.95
	3	-	5.62	5.91	-
8	0	0.81	-	-	1.33
	1	-	2.95	3.56	-
	2	4.11	-	-	4.68
	3	-	4.97	4.29	-

Mean D.M. %: 83.2

72/R/BN/7

BEANS

SIMAZINE

	1967-70	1967-69 & 1971	1967 & 1972	Mean
Strip	GRAIN: TONNES/HECTARE			
1	3.72	2.54	2.72	2.92
2	3.60	3.31	3.54	3.50
4	3.58	3.65	3.01	3.32
5	3.54	2.95	3.28	3.26
6	3.69	3.38	3.07	3.30
7	3.69	3.20	3.42	3.43
8	3.09	2.71	3.05	2.97
Mean	3.56	3.11	3.16	3.24
	STRAW: TONNES/HECTARE			
1	4.20	2.22	2.41	2.81
2	2.74	2.32	2.80	2.66
4	3.00	2.53	1.76	2.27
5	2.49	2.44	1.77	2.12
6	2.82	2.82	1.66	2.24
7	2.41	2.76	2.23	2.41
8	1.76	1.36	1.48	1.52
Mean	2.77	2.35	2.02	2.29

Mean D.M. %: Grain: 82.4  
Straw: 51.4