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Yields of the Field Experiments 1948

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Classicals

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Rothamsted Research (1949) *Classicals* ; Yields Of The Field Experiments 1948, pp 4 - 9

48/A/1.1

WHEAT - BROADBALK 1948

The 105th year

Treatments as listed in 1938 Report p.p. 115-6, except that since the year 1940-41 rape cake has been replaced by castor bean meal, at the same rate of application.

Cultivations, etc.:

Cropped sections. Dung applied: Sept. 24. Ploughed: Sept 22-
Sept. 24. Artificial's applied: Oct. 13-15. Rolled and
springtine harrowed: Oct. 22. Tooth harrowed: Oct. 23.
Seed drilled: Oct. 24-25. Harrowed in: Oct. 25. Harrowed:
Apr. 12. Ring rolled: Apr. 20. Nitrogeous fertilizers
applied: Apr. 27-28. Second dressing of nitrate of soda
applied to plot 16: May 7. Wild oats hand pulled: various
days June 15 - July 30. Harvested: Aug. 19-20. Variety:
Squareheads Master (13/4).
Fallow section. Ploughed: Sept. 22-24. Rolled and springtine
harrowed: Oct. 22. Tooth harrowed: Oct. 23 and 25.
Springtine harrowed: Apr. 12. Thistles cut: Apr. 20.
Ploughed: May 25-27. Ring rolled: June 9. Thistles cut:
July 1. Ploughed: July 14-15. Rolled and springtine
harrowed: Aug. 6.

Section Years after Fallow	Total Grain: cwt. per acre					Total straw: % cwt. per acre				
	II	I	III	IV	Mean	II	I	III	IV	Mean
	1	2	3	4		1	2	3	4	
Plot 2A	32.4	23.5	20.0	23.1	24.8	62.0	47.5	29.5	50.0	47.2
2B	36.0	30.4	23.8	25.3	28.9	68.9	58.5	47.8	51.8	56.8
3	17.3	17.2	10.9	9.8	13.8	31.3	27.5	19.5	19.1	24.5
5	20.9	14.9	9.8	10.4	14.0	38.2	28.5	21.8	22.4	27.7
6	21.6	20.5	14.3	14.5	17.7	42.0	37.3	26.8	31.9	34.5
7	26.1	27.9	20.2	20.4	23.6	47.8	48.3	41.7	44.0	45.4
8	28.4	31.8	25.6	27.5	28.3	55.2	67.5	52.2	52.6	56.9
9	22.2	22.3	15.4	16.6	19.1	40.1	40.8	31.2	29.6	35.4
10	14.2	24.2	17.6	12.8	17.2	32.2	40.8	28.1	24.9	31.5
11	16.3	21.8	17.8	14.7	17.6	28.8	38.1	30.7	26.8	31.1
12	20.2	24.4	19.7	19.7	21.0	33.2	38.6	32.6	34.0	34.6
13	26.2	26.4	18.7	17.7	22.2	43.8	46.2	33.5	35.1	39.6
14	19.4	28.3	20.2	20.6	22.1	34.7	44.7	33.8	37.7	37.7
15	21.6	18.4	16.8	15.0	18.0	41.6	41.5	31.1	33.1	36.8
16	28.1	26.6	22.6	23.1	25.1	49.5	39.9	46.6	46.3	45.6
17	20.5	22.5	17.6	16.6	19.3	42.6	39.2	33.0	34.6	37.4
18	17.3	12.9	8.8	8.2	11.8	30.9	20.7	17.8	17.5	21.7
19	19.6	26.5	18.3	17.8	20.6	38.8	43.6	34.1	36.8	38.3
20	14.0	25.1	-	-	19.6	29.4	45.1	-	-	37.2

48/A/1.2

* Incl des straw, cavings and chaff

48/A/2

BARLEY - HOOSFIELD 1948

Treatments as listed in 1938 Report, p. 117, except that since 1940-41 rape cake has been replaced by castor bean meal at the same rate of application.

Cultivations, etc.: Ploughed (shallow): Sept. 18-20. Springtime harrowed: Sept 30. Dung applied: Nov 24. Ploughed: Nov 22-28. Springtime harrowed: Mar 1-5. Artificials applied: Mar 10-11. Thistles cleared: Mar 27. Harrowed: Mar 30. Seed drilled: Mar. 31 Harrowed in: Apr 6. Rolled: Apr 10. Wild oats hand pulled: July 5-15 and July 30 - Aug 10, and scythed: Aug 9. Harvested: Aug 30.

Note: On plots 50, 5A and 3C, sections badly infected with wild oats were scythed out and discarded. On all other plots the full area was harvested.

Plot	Total Grain cwt./acre	Total Straw [*] cwt./acre
1 O	7.6	10.9
2 O	10.3	11.9
3 O	8.9	11.5
4 O	14.2	18.3
5 O	16.3	21.2
1 A	10.6	16.5
2 A	16.0	21.1
3 A	12.2	20.2
4 A	21.6	27.5
5 A	19.3	23.2
1 AA	13.3	25.9
2 AA	20.5	27.1
3 AA	15.3	23.2
4 AA	22.4	27.1
1 AAS	17.5	27.8
2 AAS	21.8	31.5
3 AAS	22.4	30.0
4 AAS	24.6	30.1
1 C	15.2	21.6
2 C	17.7	23.2
3 C	17.3	26.4
4 C	23.3	18.9
7 - 1	12.6	15.6
7 - 2	28.2	40.2
6 - 1	6.6	10.1
6 - 2	8.7	11.4
1 N	12.8	22.8
2 N	16.9	27.4

* Includes straw, cavings and chaff.

48/A/3

WHEAT AFTER FALLOW - HOOSFIELD 1948

Without manure 1851 and since.

For details of treatments see 1938 Report p.109.

Cultivations, etc.:

Cropped sections: Ploughed: Sept.15-16. Rolled, springtime harrowed and harrowed: Oct.24. Seed drilled and harrowed in: Oct.25. Ring rolled: Mar.31. Weeds hand pulled: July 29. Harvested: Aug.23.

Fallow sections: Ploughed: Sept.15-16. Rolled, springtime harrowed and harrowed: Sept.24. Springtime harrowed: Mar.10. Thistles cut: Apr.22. Ploughed: May 21. Ring rolled: June 9.

No. of years of Fallow Section	Produce: cwt. per acre			Mean
	1 A2	1 A3	3 A4	
Total Grain	9.3	11.1	10.6	10.3
Total Straw	16.6	19.6	17.5	17.9

Note "CROPS IN ROTATION - AGDELL FIELD 1948"

Manures were applied as usual, but turnips were sown on plots 1 and 2 only. The crop was badly infected with "finger and toe", and was discarded.

MANGOLDS - BARNFIELD 1948.

48/A/4.1

Treatments as listed in 1938 Report, p.110, except that on cross dressings AC and C, rape cake has been replaced by castor bean meal at the same rate of application.

Note. Both the Mangold and Sugar Beet crops were almost destroyed by flea beetle, and only Mangolds were resown.

Cultivations, etc.: Dung applied: Nov.25. Ploughed various days: Nov. 26-Dec. 16. Cultivated: Mar. 25. Artificials applied: Apr.20 - 23. Thistles cut: Apr.24. Harrowed: Apr. 26. Rolled: Apr. 27. Seed drilled: Apr. 28. Dusted with flea beetle dust: May 14, 19 and 22. Plant almost destroyed by flea beetle by May 29, so decision made to resow mangolds only. Thistles cut: May 29. Springtine harrowed: June 8. Harrowed, rolled and seed redrilled June 9. Top dressings applied: June 10. Harrowed in seed and artificials: June 11. Dusted: June 19-22. Dung plot hoed: July 8. Hoed: July 12-15. Singled: July 12-21. Hoed: July 26-27, Aug. 16-25, Sept. 9-11, Sept 24-27 and Oct. 11. Lifted: Nov. 3-18. Variety: Yellow Globe.

Note: For leaf weights, two random rows were chosen from each plot. The weight of each of these samples was recorded separately.

		Cross Dressings				48/A/4.2
Strip	O	N	A	AC	C	
Roots: tons per acre						
1	9.52	18.19	15.49	18.35	12.61	
2	10.84	18.90	18.31	22.52	17.12	
4	2.19	(a) 12.15	14.45	19.80	10.01	
		(b) 12.88				
5	1.54	9.27	6.34	8.38	3.90	
6	1.85	10.78	13.32	16.84	6.91	
7	1.47	8.28	11.12	12.83	5.57	
8	1.35	6.53	5.58	7.44	4.78	
9	11.73					
Leaves: tons per acre						
1	3.34	4.82	4.16	5.75	6.02	
2	4.94	6.29	5.82	6.63	6.43	
4	1.96	(a) 5.43	5.65	7.68	5.99	
		(b) 6.14				
5	1.10	4.21	2.94	3.84	2.76	
6	1.20	4.31	5.02	5.31	4.33	
7	0.91	4.62	5.46	7.68	4.65	
8	1.13	3.72	3.06	3.38	3.16	
9	5.19					