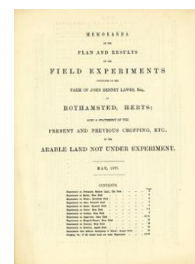


Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Memoranda of the Field Experiments at Rothamsted: May 1877



[Full Table of Content](#)

Experiments on Wheat; Broadbalk Field

Rothamsted Research

Rothamsted Research (1878) *Experiments on Wheat; Broadbalk Field* ; Memoranda Of The Field Experiments At Rothamsted: May 1877, pp 4 - 4 - DOI: <https://doi.org/10.23637/ERADOC-1-241>

BROADBALK FIELD.

EXPERIMENTS ON THE GROWTH OF WHEAT YEAR AFTER YEAR ON THE SAME LAND; WITHOUT MANURE, AND WITH DIFFERENT KINDS OF MANURE. Previous Cropping—1839, Turnips, with Farmyard Manure; 1840, Barley; 1841, Peas; 1842, Wheat; 1843, Oats; the last four Crops Unmanured. First Experimental Wheat Crop in 1844. Wheat every year since; and, with some exceptions, nearly the same description of Manure on the same Plots each year—especially during the last 26 years (1852 and since). Unless otherwise stated, the Manures are sown in the Autumn before the seed.

(Area under experiment, about 13 acres.)

PLOTS.	PRODUCE PER ACRE.												THIRTY-THIRD SEASON, 1876.		PLOTS.				
	AVERAGE PER ANNUM.												Quantity.	Total Straw.					
	DRESSED CORN.																		
	WEIGHT PER BUSHEL.																		
0	18 1/2	16 1/2	15 1/2	14 1/2	13 1/2	12 1/2	11 1/2	10 1/2	9 1/2	8 1/2	7 1/2	6 1/2	5 1/2	4 1/2	3 1/2	2 1/2	1 1/2	0 1/2	0
1	16 1/2	14 1/2	13 1/2	12 1/2	11 1/2	10 1/2	9 1/2	8 1/2	7 1/2	6 1/2	5 1/2	4 1/2	3 1/2	2 1/2	1 1/2	0 1/2	0	1	1
2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	2
3	15 1/2	14 1/2	13 1/2	12 1/2	11 1/2	10 1/2	9 1/2	8 1/2	7 1/2	6 1/2	5 1/2	4 1/2	3 1/2	2 1/2	1 1/2	0 1/2	0	3	3
4	17 1/2	16 1/2	15 1/2	14 1/2	13 1/2	12 1/2	11 1/2	10 1/2	9 1/2	8 1/2	7 1/2	6 1/2	5 1/2	4 1/2	3 1/2	2 1/2	1 1/2	0 1/2	4
5 (a and b)	18 1/2	16 1/2	15 1/2	14 1/2	13 1/2	12 1/2	11 1/2	10 1/2	9 1/2	8 1/2	7 1/2	6 1/2	5 1/2	4 1/2	3 1/2	2 1/2	1 1/2	0 1/2	5 (a and b)
6 (a and b)	28 1/2	22 1/2	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2	25 1/2	6 (a and b)
7 (a and b)	36 1/2	32 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	7 (a and b)
8 (a and b)	34 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	8 (a and b)
9 { a } { b }	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	94 1/2 39 1/2	9 { a } { b }
10 { a } { b }	22 1/2 27 1/2	21 1/2 25 1/2	21 1/2 25 1/2	21 1/2 25 1/2	21 1/2 25 1/2	21 1/2 25 1/2	21 1/2 25 1/2	21 1/2 25 1/2	21 1/2 25 1/2	21 1/2 25 1/2	21 1/2 25 1/2	21 1/2 25 1/2	21 1/2 25 1/2	21 1/2 25 1/2	21 1/2 25 1/2	21 1/2 25 1/2	21 1/2 25 1/2	21 1/2 25 1/2	10 { a } { b }
11 (a and b)	29 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	11 (a and b)
12 (a and b)	35 1/2	31 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	12 (a and b)
13 (a and b)	35 1/2	31 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	13 (a and b)
14 (a and b)	33 1/2	31 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	33 1/2	14 (a and b)
15 { a } { b }	33 1/2 34 1/2	31 1/2 32 1/2	33 1/2 32 1/2	33 1/2 32 1/2	33 1/2 32 1/2	33 1/2 32 1/2	33 1/2 32 1/2	33 1/2 32 1/2	33 1/2 32 1/2	33 1/2 32 1/2	33 1/2 32 1/2	33 1/2 32 1/2	33 1/2 32 1/2	33 1/2 32 1/2	33 1/2 32 1/2	33 1/2 32 1/2	33 1/2 32 1/2	33 1/2 32 1/2	15 { a } { b }
16 (a and b)	38 1/2	19 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	16 (a and b)
17 (a and b)	18 1/2	14 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	16 1/2	17 (a and b)
18 (a and b)	32 1/2	26 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	18 (a and b)
19	31 1/2	28 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	19
20	15 1/2	12 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	20
21	22 1/2	19 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	21
22	21 1/2	19 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	22

(1) 300 lbs. per annum for Crop of 1858, and previously.
 (2) 200 lbs. per annum for Crop of 1855, and previously.
 (3) "Superphosphate of Lime" in all cases, excepting for Plot 19, made from 200 lbs. Bone-ash, 150 lbs. Sulphuric acid sp. gr. 1.7 (and water).
 (4) The "Ammonia-salts," in all cases, equal parts Sulphate and Muriate of Ammonia of Commerce.
 (5) 30 lbs. Nitrate of Soda in 1852, 1853, and 1854. 30, 47 1/2 lbs. Nitrate in 1852, 350 lbs. each year since. 350 lbs. Nitrate is used to contain the same amount of Nitrogen as 400 lbs. "Ammonia-salts."
 (6) For 1858, and previously, made with Muriate instead of Sulphuric Acid.
 (7) For 1872, and previously, 400 lbs. Sulphate Ammonia, sown in the Autumn.
 (8) For 1872 and previously, 300 lbs. Sulphate Ammonia and 500 lbs. Rape-cake, sown in the Autumn.
 (9) The Manures of Plots 17 and 18 are, year by year, transposed.
 (10) Made with Muriate instead of Sulphuric Acid.
 (11) Averages of Mineral Manures, alternated with Ammonia-salts.
 (12) Averages of Ammonia-salts, alternated with Mineral Manures.
 (13) Plots 17 had the Ammonia-salts for the Crop of 1876.
 (14) Plots 18 had the Mineral Manures for the Crop of 1876.
 (15) Averages of 12 years, 11 years, and 23 years only; as, in 1868, owing to a mistake in carting, the produce did not get ascertained.
 (16) "a and b" are divided into duplicates, "a" and "b," respectively, which are named alike, but marked "a" and "b" for the crops of 1864-65 and 7, the "a" portions of Plots 5, 6, 7, 8, 9, 16, and 17 (or 18), received a mixture of soluble Silicates in addition to the other Manures, but without any material effect; and for the crops of 1868, and since, cut straw (that produced in the previous season) has been applied (instead of Silicates) on the "a" portions of plots 5, 6, 7, 8, 11, 12, 13, 14, and 17 (or 18); also for the crop of 1874, and since, the straw of the previous season has been cut up and applied to the "a" portion of plot 15.