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 readible, or you suspect there are some problems, please let us know and we will correct that.



## **Experiments on Wheat; Broadbalk Field**

## **Rothamsted Research**

Rothamsted Research (1882) *Experiments on Wheat; Broadbalk Field ;* Memoranda Of The Field Experiments At Rothamsted: May 1881, pp 11 - 11 - **DOI:** https://doi.org/10.23637/ERADOC-1-245

BROADBALK FIELD.

Experimental When Cropping -1839, Turnips, with Faurward Manure, 1840, Barley ; 1841, Peas; 1842, Wheat ; 1843, Oats; the last four Crops Unmanured. First Experimental Wheat Orop in 1844. Wheat every year since; and, with some exceptions nearly the same description of Manure Plots each year-especially during the last 30 years (1852 and nines). The Crop in 1844. Wheat every year since; and, with some exceptions nearly the same description of Manure Plots each year-especially during the last 30 years (1852 and nines). The Crop in 1844. Wheat every year since; and, with some exceptions nearly the same description of Manure Plots each year-especially during the last 30 years (1852 and nines). The Crop of the present year, 1831, it, heavier, the soft wheat Crop in succession. From the commencement of the experiments in 1843-4 up to 1876-7 inclusive, the and four the scoping in 1845, when when, when some and and wind; all the manures were spring-sown; and for the crops

				-							-	
about) 0.40 Hectare	- arti-	- free			PRODUCE	PER ACRE.	ЗЕ.		11	111		
OF OF	-		A	Average per Annum.	Annum.		1		Thirty-S.	Thirty-Seventlı Season, 1880.	đ	
about) 0.9 Hectolitre per Hectare or		D	Dressed Corn.			-	Total Straw.		Dressed (	Corn.	1	PLOT8.
about) 1.12 Kilogramme per Hectar about) 125.5 Kilogrammes per Hectar	Qua	Quantity.		Weight per	Bushel.	1			-		Total	
Manures, per acre, per annum,	14 Years, 14 Y 1852-65, 186	14 Years, 28 Years, 1852-79.	-79, 14 Years, 1852-65.	13, 14 Years, 65, 1866-79.	<ol> <li>28 Years,</li> <li>1852-79.</li> </ol>	14 Years, 1852-65.	14 Years, 1866-79.	28 Years, 1852-79.	Quantity.	Bushel, Str	aw.	
	Bushels, Bus 18	Bushels, Bushels. 142 163	els. 1bs. 58	1bs. 585	1bs. 584	Cwts. 152	Cwts. 112	Qwts. 1 137	Bushels.	1bs. Cwts.	7t8.	
ug Plots)				-	58	15	91 91	-	11			
		100		-	60	34 <u>1</u>	30 <sup>8</sup>	324	383		-	5
Unmanured continuously	-		-	1	574	144	98 98 10	118	112	-	-	<b>.</b> .
Unmanured for Crop of 1852, and since; previously Superphosphate (made with Muriatic Acid), and Sulphate Ammonia 2001 to m sciences betwee 1001 the @Scienchote Sola -100 fbe Science Ammonia 33 cortes Smarrheenhete of Line @	164 I.	11 <sup>4</sup> 14 <sup>8</sup> 15 <sup>4</sup> 15 <sup>4</sup>	583 583	00 00 00 00 00 00	58§	163	104	133	172	594 154 594 154	-	4 5 (a and b)
	- 4.0	-		-	293 293	26 <u>1</u>	183	223	262		-	6 (a and b)
200 lbs. (3) Sulphate Potass, 100 lbs. (2) Sulphate Solia, 100 lbs. Sulphate Mag., 34 owts. Superphos., 400 lbs. Ammouia-salts	-	-	58 <sup>2</sup>	-	593	373	294	33 ±	341	-	-	T (a and b)
200 lbs. (4) Sulphate Potass, 100 lbs. (9) Sulphate Soda, 100 lbs. Sulphate Mag., 32 cwts, Superphos., 600 lbs. Ammonia-salts	-	-	00 00 00 10 00	-	591	428 40s	38	403	354	-	T	8 (a and b)
200 lbs. (0) Sulphate Potass, 100 lbs. (2) Sulphate Soda, 100 lbs. Sulphate Mag., 34 cvts. Superphos., 550 lbs. Nitrate Soda (2) 550 lbs. Nitrate of Soda (2). (The Nitrate for both 9a and 9b always sown in the Spring.)	268 268 268	24 24	568 568	598 508	00 00 00 00 00 00	408 2818	23428	418 253	34 <del>8</del> 10 <u>4</u>	574 394 532 128		$9 \left\{ \begin{matrix} a \\ b \end{matrix} \right\}$
	231 188 972 198	21 238 238	-	57	568	231	163 173	193	105 134	542 111 534 146	-	$10$ $\frac{a}{b}$
·· ·· ·· ·· ··	-		-	-	573	* 82 80 70	213	25	25 <u>8</u>			11 (a and b)
and 366% lbs. (6) Sulphate of Soda	352 262	-	583	291	281	35	258	303	29 <u>3</u>	59 29 <sup>1</sup> / <sub>8</sub>		12 (a and b)
		-	. 59 <u>1</u>	603	594	355	285	32 <mark>8</mark>	33	59 <del>3</del> 33 <u>4</u>	-	and
ia	35 <u>7</u> 8 278	8 315 8	583	595	294	354	27	318	31	582 298		14 (a and b)
; 400 lbs. Ammsalts, in Autm. <sup>(9)</sup> ; 400 lbs. Ammsalts, in Autm. <sup>(9)</sup>	338 271 351 284	102 102 102 102 102 102 102 102 102 102	59 594	09 99	59 <u>8</u> 596	335 358 358	262 272	301 313	367 35 <u>4</u>	60 <sup>2</sup> 37 <sup>2</sup> 60 <sup>2</sup> 34 <sup>1</sup> 34 <sup>1</sup>	-	$15\binom{a}{b}$
1852-64, 13 years, 200 lbs. Sulph. Potass, 100 lbs. Sulph. Soda, 100 lbs. Sulph. Mag., 32 evts. Superphos., and 800 lbs.	1 03	1961	K 03	201	801	441	191	285	143	501 103	-	(a and b)
Ammonia-suits; average produce 394 puten, Corn, 495 evrts, Straw			8000	800	tor				Bri			(a nme n) or
15	185 13 322 264	$\frac{153(12)}{294(13)}$	12) 58 <u>4</u> 13) 59	58 <b>3</b> 60	$58_{2}^{1(12)}$ $59_{2}^{13)}$	174	115 262	148 (m)	32 <u>4</u> 15	601 294 577 12	$\begin{array}{c} 29\frac{2}{4} \begin{pmatrix} 14 \\ 12 \end{pmatrix} \\ 12 \begin{pmatrix} 16 \\ 16 \end{pmatrix} \\ 11 \end{array}$	17 (a and b) 18 (a and b)
tape-cake; 1852-78, 3½ ovts. Superp. Lime <sup>(11)</sup> , 300 lbs. Sulp. Am., and 500 lbs. Rape-cake, in Autm.			583	584	583	31	-	265	-			
-	-			573	$57_8^5(^{16})$		-	$12\frac{1}{2}(1)$	-	-	-	
-			584	283	583	203		173	-	574 142	-	
200 lbs, (1) Sulph. Potass, 100 lbs, (2) Sulph. Soda, 100 lbs. Sulph. Mag., 52 ewts. Superphos., 100 lbs. Sulphate Ammonia	213 18	192	584	583	581	20	158	173	264	574 22	22	
<ol> <li>(i) 3000 [bs. per anuum for Corp of 1858, and previously.</li> <li>(i) 3000 [bs. per anuum for Corp of 1858, and previously.</li> <li>(i) " Supprisologishts of Linne"—in all cases, excepting for Plot 19, made from 200 [bs. Bone-ash, 150 lfs.</li> <li>(i) " Supprisologishts of Linne"—in all cases, excepting for Plot 19, made from 200 [bs. Bone-ash, 150 lfs.</li> <li>(i) " Supprisol, or Superplosphate of Linne"—in all cases, excepting for Plot 19, made from 200 [bs. Bone-ash, 150 lfs.</li> <li>(i) The "Ammonie-state," in all cases, equal parts Suphate and Muriate of Ammonia of Commerce.</li> <li>(i) For "ATS thes. Nitrate Sodia in 1853, 275 bis. Nitrate in 1893, 450 lbs.</li> <li>(i) Sont states. 550 lbs. Nitrate is reduced to continue the same amount of Nitrogen as 400 lbs. "Ammonia-states".</li> <li>(i) For 1872 and previously, and with Muriation frame, and Muriate of Ammonia of Commerce.</li> <li>(i) For 1872 and previously, and with Muriation frame, and Muriate of Muriate of Suphate of the same amount of Nitrogen as 400 lbs. "Ammonia-states".</li> <li>(j) For 1872 and previously, and the Suphate Ammonia, sown in the Autumn; for 1873, 4, 5, and 7, and 1873, and 1873, and 1873, and 1873, and 1873, and 7, and 7,</li></ol>	(9) The Manures of Plots 17 and 18 are, year by year, transposed, (1) Made with Murnies instead of Subhurie Add. (1) Made with Murnies instead of Subhurie Add. (1) Averages of Mineral Manures, alternated with Amnonia-satus, (1) Plots 17 had the Manures, alternated with Manures, (1) Plots 17 had the Mineral Manures, for the Grop of 1880. (2) Plots 15 had the Mineral Manures for the Grop of 1880. (2) Plots 17 had the Mineral Manures for the Grop of 1880. (3) Plots 17 had the Mineral Manures for the Grop of 1880. (3) Plots 18 had the Mineral Manures for the Grop of 1880. (4) Plots 18 had the Mineral Manures for the Grop of 1880. (5) Plots 18 had the Mineral Manures for the Grop of 1880. (5) Plots 18 had the Mineral Manures for the Grop of 1880. (5) Plots 18 had the Mineral Manures for the Grop of 1880. (5) Plots 18 had the Mineral Manures for the Grop of 1880. (5) Flots 18 had the Mineral Manures for the Grop of 1880. (6) Blot Newson of 1880 had 1890 had 1890 had had the fact (6) Had for the arcys of 1880 had 1890 had had the Miner (1) for the arcys of 1880 had 1890 had had the provi- (1) for the arcys of 1880 had 1890 had 1890 had had the provi- (1) for the arcys of 1880 had 1890 had 1900 s, 5, 4, 7, 8, 11, 12, 13, 1874, and call had the 150. For the orops of 1880, 418 hav, the prov- (1) for the order of 1800 had 1890 had 1800 had 1800 has proved (1) for the order of 1800 had 150. For the orops of 1880 had 1800, the prov- 1874, and call had the 150. For the orops of 1880, had had the prov- (1) for the order of 1800 had 150. For the orops of 1880, had had the prov- tation of Plot 150. For the orops of 1880, had had the provide (1) Plots 150. For the orops of 1880, had had the provide (1) Plots 150. For the orops of 1880, had had the provide (1) Plots 150. For the orops of 1880, had had the provide (1) Plots 150. For the orops of 1880, had had the provide (1) Plot 150. For the orops of 1880, had had the provide (1) Plot 150. For the orops of 1880 had 1800 had	anres of P ith Murian s of Miners s of Miners s of Miner s of Amm bad the A had the A	ots 17 and tic instead al Manure minesalts, moninesalts, medianal Ma ears, 13 med. ) med. ) med. ) med. ) med. ) med. ) med. ) med. ) median instead a for the for the	(18 are, y of Sulphur alternated alternated alternated alternated alternated are are a are divide ears, and are divide erops of 1800 9 inclusiv 9 inclusiv 9 of 1880V	The Manures of Plots 17 and 18 are, year by year, transposed, Made with Murinic instand of Shupurio foid, Averages of Minemi Manures, alternated with Annouls-salts. Averages of Annoniv-salts, alternated with Mineau Manures. Plots 17 had the Annonit-salts for the Cop of 1880. Plots 17 had the Annonit-salts for the Cop of 1880. Plots 17 had the Annonit-salts for the Cop of 1880. Plots 17 had the Annonit-salts for the Cop of 1880. Plots 17 had the Annonit-salts for the Cop of 1880. Plots 17 had the Annonit-salts for the Cop of 1880. Plots 17 had the Annonit-salts for the Cop of 1880. Plots 17 had the Annonit-salts for the Cop of 1880. In the second 14 years, 13 years, and 27 years only; 13, 3h and not be assortind. For the corps of 1865 to 1879 inclusive, out straw (that pro- f Silitet acal not the Silicites of the the provi- sivel a mixture of soluble Silicites of the traw of the provi- sivel a mixture of solub to 1870 inclusive, out straw of the provi- sion of Plot 15. For the corps of 1880, and since, the return of the provi- tion of Plot 15.	r, transport annonia-sal aral Manur 880. 1380. only; as, plicate por plicate por plicate por the other raw (that 8, 11, 12, 8, 11, 12, the other raw (the port the	sed, ts, es, in 1868, c tions, " a a " portion Manures, produced i 13, 14, an revious see n of the st	wing to a ' and ' $b_j$ ' and ' $b_j$ ' or 1 but, hither in the prev of 17 (or 1 are son was converted by the prev has been was converted by the prev prev has been was converted by the prev prev prev prev prev prev prev pre	mistake i "respective", 7, 8, 5, 6, 7, 8, 7, 8, 7, 8, 170, without four sensor	<ul> <li>(9) The Manures of Plots 17 and 18 are, year by year, transpood.</li> <li>(9) Made with Muriatie instead of Subjunts Add.</li> <li>(1) Made with Muriatie instead of Subjunts Add.</li> <li>(1) Avorages of Ammonie-subs, alternated with Ammonih-satis.</li> <li>(1) Avorages of Ammonite-subs, alternated with Ammonih-satis.</li> <li>(1) Avorages of Ammonite-subs, alternated with Ammonih-satis.</li> <li>(2) Avorages of Ammonite-subs, alternated with Ammonih-satis.</li> <li>(3) Avorages of Ammonih-subs, alternated with Ammonih-satis.</li> <li>(4) Plots 18 and the Minner Manures for 1880.</li> <li>(4) Plots 18 and the Minner Manures for 1880.</li> <li>(5) Avorages of 14 years, and 27 years and 27 years and 17 war, and 40, "and 40," angle and 17 produce of the couple of 1880.</li> <li>(9) Avorages of 14 years, and 27 years and 27 years and 17 daw." and 40," angle an antitrate plots are couple of blots 51, 56, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50</li></ul>	he h	