

Experimental Farms

EXPERIMENTS with Fertilizers on Plots of Wheat $\frac{1}{20}$ acre each.

No. of Plot.	Fertilizers applied each Year.	AVERAGE YIELD FOR EIGHT YEARS.		9TH SEASON, 1896. VARIETY, RED FIFE.		AVERAGE YIELD FOR NINE YEARS.	
		Yield of Grain.	Yield of Straw.	Yield of Grain.	Yield of Straw.	Yield of Grain.	Yield of Straw.
		Per acre.	Per acre.	Per acre.	Per acre.	Per acre.	Per acre.
		Bush. lbs.	Lbs.	Bush. lbs.	Lbs.	Bush. lbs.	Lbs.
1	Barn-yard manure (mixed horse and cow manure) well rotted, 12 tons per acre in 1888; 15 tons per acre each year since..	18 41 $\frac{3}{4}$	3,466	27 ..	3,650	19 36 $\frac{3}{4}$	3,486
2	Barn-yard manure (mixed horse and cow manure) fresh, 12 tons per acre in 1888; 15 tons per acre each year since	18 31 $\frac{3}{4}$	3,457	27 10	4,100	19 29	3,528
3	Unmanured.....	9 57 $\frac{3}{4}$	1,853	14 ..	1,870	10 24 $\frac{1}{2}$	1,855
4	Mineral phosphate, untreated, finely ground, 500 lbs. per acre.....	10 4 $\frac{3}{4}$	1,789	13 ..	2,140	10 23 $\frac{3}{4}$	1,828
5	Mineral phosphate, untreated, finely ground, 500 lbs.; nitrate of soda, 200 lbs. per acre.....	12 6 $\frac{3}{4}$	2,886	14 30	2,570	12 22 $\frac{3}{4}$	2,851
6	Barn-yard manure, partly rotted and actively fermenting, 6 tons per acre; mineral phosphate, untreated, finely ground, 500 lbs. per acre, composted together, intimately mixed, and allowed to heat for several days before using.....	16 1 $\frac{1}{2}$	2,954	26 30	3,430	17 11 $\frac{3}{4}$	3,007
7	Mineral phosphate, untreated, finely ground, 500 lbs.; nitrate of soda, 200 lbs.; wood ashes, unleached, 1,000 lbs. per acre.....	12 19 $\frac{3}{4}$	2,728	15 10	2,440	12 38 $\frac{3}{4}$	2,696
8	Mineral phosphate, untreated, finely ground, 500 lbs.; wood ashes, unleached, 1,500 lbs. per acre.....	10 11 $\frac{1}{2}$	1,714	12 20	1,720	10 37 $\frac{3}{4}$	1,715
9	Mineral superphosphate, No. 1, 500 lbs. per acre.....	11 26 $\frac{3}{4}$	1,690	14 20	1,770	11 46 $\frac{1}{2}$	1,699
10	Mineral superphosphate, No. 1, 350 lbs.; nitrate of soda, 200 lbs. per acre.....	12 21 $\frac{3}{4}$	2,956	17 10	2,700	12 53 $\frac{3}{4}$	2,928
11	Mineral superphosphate, No. 1, 350 lbs.; nitrate of soda, 200 lbs.; wood ashes, unleached, 1,500 lbs. per acre.....	12 27 $\frac{1}{4}$	2,500	18 50	3,430	13 10	2,603
12	Unmanured.....	9 27 $\frac{1}{2}$	1,575	14 30	2,260	10 11 $\frac{1}{2}$	1,651
13	Bone finely ground, 500 lbs. per acre.....	10 27 $\frac{3}{4}$	1,746	17 20	2,340	11 15 $\frac{3}{4}$	1,812
14	Bone finely ground, 500 lbs.; wood ashes, unleached, 1,500 lbs. per acre.....	13 23 $\frac{1}{2}$	2,098	23 20	2,690	14 29 $\frac{1}{2}$	2,182
15	Nitrate of soda, 200 lbs. per acre.....	13 13 $\frac{1}{2}$	2,339	16 ..	2,130	13 31 $\frac{3}{4}$	2,316
16	Muriate of potash, 150 lbs. per acre.....	14 33 $\frac{3}{4}$	1,899	21 40	2,300	15 20 $\frac{3}{4}$	1,944
17	Sulphate of ammonia, 300 lbs. per acre.....	11 2 $\frac{3}{4}$	2,480	16 ..	1,250	11 35 $\frac{3}{4}$	2,343
18	Sulphate of iron, 60 lbs. per acre.....	11 59 $\frac{3}{4}$	1,930	14 50	1,760	12 18 $\frac{3}{4}$	1,911
19	Common salt (Sodium chloride) 300 lbs. per acre.....	11 38 $\frac{3}{4}$	1,662	19 10	1,940	12 28 $\frac{3}{4}$	1,693
20	Land plaster or gypsum (Calcium sulphate) 300 lbs. per acre.....	12 13 $\frac{3}{4}$	1,931	15 40	1,880	12 36 $\frac{3}{4}$	1,925
21	Unmanured in 1889, mineral superphosphate, No. 2, 500 lbs. per acre, each year since.....	12 28 $\frac{1}{4}$	1,813	10 ..	2,110	12 12	1,846

BARLEY PLOTS.

The quantity of seed sown per acre on the barley plots was 2 bushels in 1889, 1890 and 1891, $1\frac{1}{2}$ bushels in 1892 and 1893, and 2 bushels in 1894, 1895 and 1896. Two-rowed barley has been used for seed throughout the whole period. The varieties used were as follows: 1889, 1890 and 1891, Saale; 1892, Goldthorpe; 1893, Duck-bill; and