

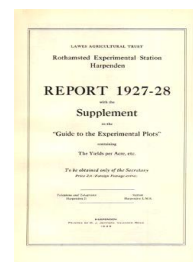
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Report for 1927-28

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The Classical Experiments

Rothamsted Research

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DATES OF SOWING AND HARVESTING (HARVEST 1927).

Field.	Crop.	Variety.	Sowing began.	Sowing finished.	Cutting began.	Carting began.*	Carting finished.*	Yield † per acre.
Gt. Knott, East ...	Wheat ...	{ Bountiful Cambridge Million III ... }	Oct. 12, '26	Oct. 14, '26	Aug. 17, '27	Aug. 29, '27	Aug. 30, '27	22 cwt.
Gt. Knott, West ...	Wheat ...	...	Oct. 7, '26	Oct. 7, '26	Aug. 23, '27	Sept. 5, '27	Sept. 5, '27	25 cwt.
Little Knott ...	{ Fallow Grass ... }	—	—	—	July 21, '27	July 26, '27	July 29, '27	—
Fosters, East ...	{ Winter Oats Spring Oats ... }	Grey, Black ... Swedish King ...	Oct. 11, '26	Oct. 12, '26	Aug. 4, '27	Aug. 24, '27	Aug. 27, '27	20 cwt.
Fosters, West ...	Lucerne ...	Provence ...	Feb. 18, '27	Feb. 18, '27	Sept. 1, '27	Sept. 7, '27	Sept. 7, '27	22 cwt.
West Barnfield ...	Clover ...	Late Flowering Red ...	Apr. 10, '26	Apr. 10, '26	July 19, '27	—	—	—
Long Hoos, East...	{ Potatoes ... }	Arran Comrade ...	Mar. 30, '26	Mar. 30, '26	June 14, '27	June 27, '27	June 28, '27	7 tons
Long Hoos, West ...	Swedes ...	Dreadnought ...	May 24, '27	May 25, '27	—	Oct. 7, '27	Nov. 1, '27	19 tons
New Zealand ...	Sugar Beet ...	Dutch Seed ...	June 14, '27	July 4, '27	—	Oct. 27, '27	Jan. 19, '28	3½ tons
Stackyard ...	Clover ...	Late Flowering Red ...	June 11, '27	June 13, '27	—	Nov. 21, '27	Jan. 18, '28	35 cwt.
Gt. Harpenden ...	{ Wheat ... }	Little Joss ...	Apr. 1, '26	Nov. 1, '26	June 21, '27	July 6, '27	July 11, '27	17 cwt.
Sawpit ...	{ Barley ... }	Spratt Archer ...	Oct. 28, '26	Nov. 5, '27	Aug. 22, '27	Aug. 31, '27	Aug. 31, '27	9 cwt.
Sawyers ...	{ Spring Wheat ... }	Little Joss ...	Apr. 4, '27	Apr. 5, '27	Sept. 6, '27	Sept. 20, '27	Oct. 5, '27	16 cwt.
Broadbalk ...	{ Fallow ... }	—	Mar. 9, '27	Mar. 9, '27	Sept. 5, '27	Sept. 12, '27	Sept. 13, '27	—
Little Hoos ...	{ Wheat ... }	Million III ...	Oct. 6, '26	Oct. 6, '26	Aug. 15, '27	Aug. 26, '27	Aug. 29, '27	22 cwt.
Hoos ...	{ Spring Oats ... }	Victory ...	Feb. 18, '27	Feb. 19, '27	Aug. 22, '27	Aug. 30, '27	Sept. 1, '27	22 cwt.
Barnfield ...	{ Wheat ... }	Red Standard ...	Oct. 8, '26	Oct. 8, '26	Aug. 26, '27	Sept. 2, '27	Sept. 3, '27	See p. 129.
Agdell ...	Barley ...	Plumage Archer ...	Apr. 16, '27	Apr. 19, '27	Sept. 2, '27	Sept. 8, '27	Sept. 13, '27	15 cwt.
Greatfield ...	Barley ...	Spratt Archer ...	Mar. 25, '27	Mar. 25, '27	Sept. 1, '27	Sept. 8, '27	Sept. 21, '27	See p. 130.
Park ...	Swedes ...	Purple Top ...	June 22, '27	June 22, '27	—	Nov. 4, '27	Nov. 19, '27	See p. 125.
	Wheat ...	Red Standard ...	Oct. 8, '26	Oct. 8, '26	Aug. 15, '27	Aug. 26, '27	Aug. 26, '27	See p. 124.
	Grazing ...	—	—	—	—	—	—	—
	Hay ...	—	—	—	July 5, '27	July 18, '27	July 19, '27	See p. 126.

* In the case of roots, the dates given are those on which lifting began and finished. † Estimated yields.

DATES OF SOWING AND HARVESTING (HARVEST 1928).

Field.	Crop.	Variety.	Sowing began.	Sowing finished.	Cutting began.	*Carting began.	*Carting finished.	Yield † per acre.
Gt. Knott	Wheat	Million III	Nov. 4, '27	Nov. 5, '27	Aug. 15, '28	Aug. 29, '28	Aug. 30, '28	9 cwt.
Gt. Knott	Spring Oats	Swedish King	Feb. 28, '28	Feb. 29, '28	Aug. 14, '28	Aug. 30, '28	Aug. 30, '28	9 cwt.
Gt. Knott	Rape	—	May 22, '28	June 18, '28	—	—	—	—
Little Knott	Grazing	—	—	—	—	—	—	—
Fosters	Wheat	Little Joss	Nov. 7, '27	Nov. 14, '27	Aug. 16, '28	Aug. 28, '28	Aug. 29, '28	15½ cwt.
West Barnfield	Wheat	Million III	Oct. 19, '27	Oct. 20, '27	Aug. 11, '28	Aug. 21, '28	Aug. 24, '28	16½ cwt.
Long Hoos, East...	Barley	(Standwell Plumage Archer	Feb. 19, '28	Feb. 29, '28	Aug. 9, '28	Aug. 18, '28	Sept. 5, '28	14 cwt.
Long Hoos, West	Wheat	Million III	Nov. 2, '27	Nov. 4, '27	Aug. 20, '28	Aug. 31, '28	Aug. 31, '28	16 cwt.
New Zealand	Winter Oats	Grey	Oct. 7, '27	Oct. 8, '27	July 28, '28	Aug. 9, '28	Aug. 9, '28	22 cwt.
Stackyard	Sugar Beet	Dippe	May 5, '28	May 5, '28	—	Oct. 26, '28	Nov. 3, '28	9 tons
Gt. Harpenden	Potatoes	Eclipse, Ally and Majestic	April 17, '28	April 20, '28	—	Oct. 10, '28	Oct. 16, '28	Ec. 6 tons Al. 8½ tons
Gt. Harpenden	Swedes	Buffalo, and Picton	May 9, '28	May 9, '28	—	Nov. 21, '28	Dec. 19, '28	Ma. 8 tons Pi. 18 tons Bu. 21 tons
Pastures	Wheat	(Swedish Iron Squareheads Master Yeoman II and Million III	Oct. 20, '27	Oct. 21, '27	Aug. 13, '28	Aug. 29, '28	Aug. 30, '28	24 cwt. See p. 136.
Sawyers	Barley	(Standwell and Plumage Archer	April 10, '28	April 10, '28	Aug. 21, '28	Sept. 3, '28	Sept. 5, '28	14 cwt.
Broadbalk	Wheat	Red Standard	Oct. 18, '27	Oct. 18, '27	Aug. 6, '28	Aug. 16, '28	Aug. 16, '28	See p. 129.
Broadbalk	Fallow	—	—	—	—	—	—	—
Little Hoos	Clover	Broad Red (Hay Seed	April 19, '27	April 19, '27	June 22, '28	June 28, '28	June 29, '28	28 cwt.
Hoos	Barley	Plumage Archer	April 19, '27	April 19, '27	Sept. 19, '28	Oct. 2, '28	Oct. 3, '28	3½ cwt.
Barnfield	Mangolds	Prize-winner	April 27, '28	April 27, '28	Oct. 1, '28	Oct. 22, '28	Oct. 22, '28	See p. 130.
Agdell	Swedes	Dreadnought	May 2, '28	May 2, '28	—	Nov. 5, '28	Nov. 14, '28	See p. 125.
Greatfield	Grazing	—	May 25, '28	May 25, '28	—	Nov. 14, '28	Nov. 20, '28	See p. 124.
Park	Hay	—	—	—	June 25, '28	July 2, '28	July 2, '28	See p. 126.

* In the case of roots, the dates given are those on which lifting began and finished. † Estimated yields.

CROP YIELDS ON THE EXPERIMENTAL PLOTS.

NOTES.—In each case the year refers to the harvest, *e.g.*, Wheat 1928 means wheat harvested in 1928. In the tables, total straw includes straw, cavings and chaff. These were weighed separately prior to 1928. In 1928 the figure given as total straw was arrived at as the difference: total sheaf weight—weight of grain.

CONVERSION TABLE.

1 acre =	0.405 Hectare	0.963 Feddan.
1 bushel (Imperial) =	0.364 Hectolitre (36.364 litres) ...	0.184 Ardeb.
1 lb. (pound avoirdupois) =	0.453 Kilogramme	1.009 Rotls.
1 cwt. (hundredweight, 112 lb.) =	50.8 Kilogrammes	{ 113.0 Rotls. 1.366 Maunds.
1 ton (20 cwt. or 2240 lb.) =	1016 Kilogrammes	
1 metric quintal or Doppel Zentner (dz) =	{ 100.0 Kilogrammes. 220.46 lbs.	
1 bushel per acre ... =	0.9 Hectolitre per Hectare ...	0.191 Ardeb per Feddan
1 lb. per acre ... =	1.12 Kilogramme per Hectare ...	1.049 Rotls per Feddan
1 cwt. per acre ... =	1.256 metric Quintals per Hectare	117.4 Rotls per Feddan
1 ton per acre ... =	25.12 metric Quintals per Hectare (dz/ha).	

In America the Winchester bushel is used = 35.236 litres. 1 English bushel = 1.032 American bushels.

CONVERSION TABLE.—CWTS. TO BUSHELS.

CROP.	Cwts.									
	1	2	3	4	5	10	15	20	25	30
Wheat (60 lb.) bushels	1.87	3.73	5.60	7.47	9.33	18.67	28.00	37.33	46.67	56.00
Barley (52 lb.) "	2.15	4.31	6.46	8.62	10.77	21.54	32.31	43.08	53.85	64.62
Oats (42 lb.) "	2.67	5.33	8.00	10.67	13.33	26.67	40.00	53.33	66.67	80.00

The yields of Grain in the 1925-26 Report were given for the Replicated Experiments in standard bushels of 60, 52 and 42 lb. respectively.

Average Wheat Yield of Various Countries.

Country.				Mean yield per acre, 1919-27. Cwts.	Country.				Mean yield per acre, 1919-27. Cwts.
Great Britain	...	...	...	17.4	Denmark	...	...	...	22.5
England	...	...	...	17.3	Argentina	...	...	...	6.6
Hertfordshire	...	...	...	16.3	Australia	...	...	...	6.6
France	...	...	...	10.8	Canada	...	...	...	8.6
Germany	...	...	...	14.1	United States	...	...	...	7.5
Belgium	...	...	...	20.0	U.R.S.S. (Europe and Asia)*	...	...	...	5.7

NOTE.—Figures for Great Britain, England and Hertfordshire are taken from the Ministry of Agriculture's "Agricultural Statistics," Vol. 62. Other figures from "International Year Book of Agricultural Statistics," 1922-28.

* 1924-27.

CROP YIELDS ON THE EXPERIMENTAL PLOTS. Notes.—In each case the yield refers to the harvest of 1928. Wheat 1928 means wheat harvested in 1928. Corn 1928 means corn harvested in 1928. Soybeans 1928 means soybeans harvested in 1928. Oats 1928 means oats harvested in 1928. Barley 1928 means barley harvested in 1928. Rye 1928 means rye harvested in 1928. Buckwheat 1928 means buckwheat harvested in 1928. Potatoes 1928 means potatoes harvested in 1928. Sugar beets 1928 means sugar beets harvested in 1928. Cabbage 1928 means cabbage harvested in 1928. Cauliflower 1928 means cauliflower harvested in 1928. Broccoli 1928 means broccoli harvested in 1928. Asparagus 1928 means asparagus harvested in 1928. Beans 1928 means beans harvested in 1928. Peas 1928 means peas harvested in 1928. Lentils 1928 means lentils harvested in 1928. Chickpeas 1928 means chickpeas harvested in 1928. Mung beans 1928 means mung beans harvested in 1928. Pigeon peas 1928 means pigeon peas harvested in 1928. Soybeans 1928 means soybeans harvested in 1928. Black beans 1928 means black beans harvested in 1928. Kidney beans 1928 means kidney beans harvested in 1928. Lima beans 1928 means lima beans harvested in 1928. Pinto beans 1928 means pinto beans harvested in 1928. Navy beans 1928 means navy beans harvested in 1928. Great Northern beans 1928 means great northern beans harvested in 1928. Cranberry beans 1928 means cranberry beans harvested in 1928. Butter beans 1928 means butter beans harvested in 1928. Black-eyed peas 1928 means black-eyed peas harvested in 1928. Chickpeas 1928 means chickpeas harvested in 1928. Lentils 1928 means lentils harvested in 1928. Mung beans 1928 means mung beans harvested in 1928. Pigeon peas 1928 means pigeon peas harvested in 1928. Soybeans 1928 means soybeans harvested in 1928. Black beans 1928 means black beans harvested in 1928. Kidney beans 1928 means kidney beans harvested in 1928. Lima beans 1928 means lima beans harvested in 1928. Pinto beans 1928 means pinto beans harvested in 1928. Navy beans 1928 means navy beans harvested in 1928. Great Northern beans 1928 means great northern beans harvested in 1928. Cranberry beans 1928 means cranberry beans harvested in 1928. Butter beans 1928 means butter beans harvested in 1928. Black-eyed peas 1928 means black-eyed peas harvested in 1928.

	Rain.		Drainage through soil.			Bright Sun- shine.	Temperature (Mean).				
	Total Fall $\frac{1}{1000}$ th Acre Gauge.	No. of Rainy Days. (0.01 inch or more) $\frac{1}{1000}$ th Acre Gauge.	20 ins. deep.	40 ins. deep.	60 ins. deep.		Max.	Min.	1 ft. in ground.	Solar Max.	Grass Min.
1927.	Inches.	No.	Inches.	Inches.	Inches.	Hours.	°F.	°F.	°F.	°F.	°F.
Jan. ...	2.408	18	1.865	1.995	1.842	62.9	43.9	33.5	38.3	72.3	29.4
Feb. ...	3.982	15	3.435	3.630	3.496	46.0	43.1	33.1	37.8	73.9	29.8
Mar. ...	2.384	18	0.960	1.113	1.038	124.9	50.5	38.8	42.6	101.4	33.2
April ...	1.855	12	1.205	1.588	1.484	165.6	53.0	38.6	46.0	114.9	33.3
May ...	1.187	11	0.000	0.019	0.019	226.4	61.6	42.9	52.7	121.5	37.6
June ...	3.564	19	0.745	0.739	0.723	183.7	62.5	46.8	56.3	127.8	42.1
July ...	3.112	20	1.651	2.073	1.889	130.4	65.4	53.6	59.4	121.8	49.5
Aug. ...	4.348	19	1.852	2.100	1.967	178.4	66.8	53.2	60.4	129.6	48.2
Sept. ...	5.451	17	3.704	3.899	3.823	111.3	59.7	48.1	56.2	111.5	43.8
Oct. ...	2.197	17	1.268	1.413	1.342	97.5	56.4	44.0	50.6	97.4	38.7
Nov. ...	3.008	18	2.338	2.682	2.366	54.6	46.4	36.5	44.7	72.1	33.2
Dec. ...	3.013	12	2.464	2.853	2.761	31.5	37.0	30.5	38.5	51.2	28.8
Total or Mean ...	36.509	196	21.487	24.104	22.750	1413.2	53.9	41.6	48.6	99.6	37.3
1928.											
Jan. ...	4.109	21	4.413	5.662	4.571	64.9	45.9	33.3	37.6	73.1	29.2
Feb. ...	2.075	10	1.447	1.832	1.710	100.2	48.0	35.0	39.5	88.2	29.7
Mar. ...	2.404	17	1.093	1.318	1.283	92.8	48.1	36.1	41.3	94.0	31.7
April ...	0.905	13	0.351	0.646	0.589	127.3	52.9	38.1	45.1	103.3*	32.7†
May ...	1.448	12	0.066	0.170	0.136	169.8	59.2	42.2	50.9	112.8	37.3
June ...	2.204	14	0.160	0.279	0.246	230.0	63.5	47.3	56.8	124.0	42.6
July ...	2.511	6	0.457	0.439	0.434	276.3	71.9	52.9	62.9	129.8	47.3
Aug. ...	2.216	12	0.496	0.734	0.672	193.0	66.5	52.1	60.3	121.9	47.7
Sept. ...	0.785	4	0.000	0.039	0.017	212.0	63.7	46.3	56.2	116.1	38.8
Oct. ...	3.867	19	2.287	2.458	2.284	126.5	56.4	43.1	49.8	98.2	38.0
Nov. ...	3.161	16	2.217	2.647	2.447	72.1	50.4	39.7	45.2	80.4	36.3
Dec. ...	2.773	17	2.045	2.485	2.341	48.9	41.7	32.1	38.5	61.7	28.4
Total or Mean ...	28.458	161	15.032	18.709	16.730	1713.8	55.7	41.5	48.7	100.3	36.6

* Mean of 21 observations only.

† Mean of 29 observations only.

RAIN AND DRAINAGE.
MONTHLY MEAN FOR 58 HARVEST YEARS, 1870-1—1927-8.

	Rainfall.	Drainage.			Drainage % of Rainfall.			Evaporation.		
		20-in. Gauge.	40-in. Gauge.	60-in. Gauge.	20-in. Gauge.	40-in. Gauge.	60-in. Gauge.	20-in. Gauge.	40-in. Gauge.	60-in. Gauge.
	Ins.	Ins.	Ins.	Ins.	%	%	%	Ins.	Ins.	Ins.
September	2.426	0.832	0.805	0.742	34.3	33.2	30.6	1.594	1.621	1.684
October ...	3.135	1.808	1.772	1.647	57.7	56.5	52.5	1.327	1.363	1.488
November	2.774	2.102	2.149	2.024	75.8	77.5	73.0	0.672	0.625	0.750
December	2.819	2.403	2.496	2.383	85.2	88.5	84.5	0.416	0.323	0.436
January	2.419	1.984	2.182	2.083	82.0	90.2	86.1	0.435	0.237	0.336
February	2.073	1.547	1.656	1.581	74.6	79.9	76.3	0.526	0.417	0.492
March ...	2.040	1.088	1.221	1.154	53.3	59.9	56.6	0.952	0.819	0.886
April ...	2.030	0.664	0.743	0.708	32.7	36.6	34.9	1.366	1.287	1.322
May ...	2.029	0.469	0.534	0.501	23.1	26.3	24.7	1.560	1.495	1.528
June ...	2.267	0.557	0.586	0.564	24.6	25.8	24.9	1.710	1.681	1.703
July ...	2.748	0.737	0.766	0.712	26.8	27.9	25.9	2.011	1.982	2.036
August ...	2.683	0.715	0.728	0.683	26.6	27.1	25.5	1.968	1.955	2.000
Year ...	29.443	14.906	15.638	14.782	50.6	53.1	50.2	14.557	13.805	14.661

Area of each gauge $\frac{1}{1000}$ th acre.

**CHEMICAL ANALYSES OF FERTILISERS USED IN
 REPLICATED EXPERIMENTS, 1927-8.**

Fertiliser.	% N	% water-sol. P_2O_5	% K_2O
Sulphate of Ammonia ...	20.67-21.20	—	—
Muriate of Ammonia ...	25.54-26.08	—	—
Nitrate of Soda ...	15.37	—	—
Urea ...	46.48	—	—
Cyanamide ...	19.39-19.75	—	—
Nitrochalk ...	10.00	—	—
Ammonium Phosphate ...	12.15	61.6	—
Superphosphate ...	—	16.79-16.94	—
Potassium Phosphate (K_2HPO_4) ...	—	40.80	54.03
Sulphate of Potash ...	—	—	49.48-49.58
Muriate of Potash ...	—	—	51.00-51.83
Potash Manure Salts (30%)	—	—	32.60
Nitrophoska ...	10.3 as NH_4 : 5.3 as NO_3	12.86	25.9
Compound Fertiliser "B" ...	10.09	9.90	18.25

FIRST SERIES : CLASSICAL EXPERIMENTS OF
LAWES AND GILBERT.

CROPS GROWN IN ROTATION.

AGDELL FIELD.

PRODUCE PER ACRE.

Year.	CROP.	O. Unmanured since 1848.		M. Mineral Manure. No Nitrogen. †		C. Complete Mineral & Nitrogenous Manure. ‡	
		5. Fallow.	6. Clover or Beans.	3. Fallow.	4. Clover or Beans.	1. Fallow.	2. Clover or Beans.

Average of First Twenty Courses, 1848-1927.

	Roots (Swedes)	cwt.*	32.7	11.2	175.7	195.9	355.3	302.1
	Barley—							
	Dressed Grain	bush.	22.2	20.2	23.1	27.4	31.1	35.4
	Total Straw†	cwt.	13.6	13.4	13.7	15.7	18.8	21.8
	Beans—							
	Dressed Grain	bush.	—	13.1	—	18.2	—	22.3
	Total Straw	cwt.	—	9.2	—	13.2	—	15.3
	Clover Hay	cwt.	—	27.1	—	52.3	—	52.6
	Wheat—							
	Dressed Grain	bush.	24.0	22.3	28.1	30.6	28.9	30.4
	Total Straw†	cwt.	23.4	21.6	28.6	29.8	30.8	29.8

Twentieth Course, 1924-27.

1924	Roots (Turnips)	cwt.	2.9	0.7	42.8	31.5	127.4	104.7
1925	Barley—							
	Dressed Grain	bush.	10.86	7.35	10.09	16.70	10.35	8.60
	Offal Grain	lb.	42.0	49.0	94.0	38.0	53.0	59.0
	Straw	lb.	633.0	678.0	602.0	866.0	626.0	541.0
	Total Straw†	cwt.	7.2	7.5	7.4	9.3	7.0	6.5
	Wt. of Dressed } Grain per bushel }	lb.	52.7	51.6	52.5	53.6	53.3	54.3
	Proportion of Total } Grain to 100 of }		76.3	50.7	75.5	89.2	77.0	72.4
	Total Straw }							
1926	Clover Hay	cwt.	—	14.2	—	32.2	—	26.3
1927	Wheat—							
	Dressed Grain	bush.	20.15	12.86	19.07	19.01	16.28	15.77
	Offal Grain	lb.	57.0	66.0	73.0	72.0	47.0	53.0
	Straw	lb.	1859.0	1846.0	2111.0	1932.0	1878.0	1693.0
	Total Straw†	cwt.	18.6	19.6	21.8	20.5	19.1	17.4
	Wt. of Dressed } Grain per bush. }	lb.	60.1	61.2	59.6	60.6	59.5	59.8
	Proportion of Total } Grain to 100 of }		60.9	38.9	49.6	53.3	47.5	51.2
	Total Straw }							

Present Course (21st), 1928.

1928	Roots (Swedes)	cwt.	19.7	11.7	143.8	163.6	293.2	223.2
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* Plots 1, 3 and 5 based upon 18 years. Plots 2, 4 and 6 based upon 17 years.

† Includes straw, cavings and chaff.

Manures applied once every four years, prior to sowing of swedes.

‡ Mineral Manure: 528 lb. superphosphate (35%); 500 lb. Sulphate of Potash; 100 lb. Sulphate of Soda; 200 lb. Sulphate of Magnesia. All per acre.

Nitrogenous Manure. 206 lb. Sulphate of Ammonia and 2,000 lb. Rape cake per acre.

MANGOLDS—BARNFIELD, 1927 and 1928.

Roots each year since 1856. Mangolds each year since 1876.

PRODUCE PER ACRE.

Strip.	Strip Manures. (Amounts stated as per acre).	1927.†					1928.					50-year Average 1876-1928.††				
		Cross Dressings.					Cross Dressings.					Cross Dressings.				
		O	N	A	AC	C	O	N	A	AC	C	O	N	A	AC	C
	None.	None.	Nitrate of Soda (550 lbs.)	Sulphate of Amm'nia (412 lbs.)	Sulphate of Amm'nia (412 lbs.) & Rape Cake	Rape Cake (2,000 lbs.)	None.	Nitrate of Soda (550 lbs.)	Sulphate of Amm'nia (412 lbs.)	Sulphate of Amm'nia (412 lbs.) & Rape Cake	Rape Cake (2,000 lbs.)	None.	Nitrate of Soda (550 lbs.)	Sulphate of Amm'nia (412 lbs.)	Sulphate of Amm'nia (412 lbs.) & Rape Cake	Rape Cake (2,000 lbs.)
		Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons
1	Dung only (14 tons) ... (3½ cwt.)	12.22	15.02	15.66	16.92	14.39	12.11	27.07	20.33	18.30	16.21	17.47	26.16	21.70	23.58	23.53
2	Dung, Superphosphate Sulphate of Potash (500 lbs.) ...	10.01	14.77	15.41	17.34	15.37	16.53	29.25	26.98	29.15	24.68	18.94	26.68	24.71	27.57	26.50
4	Complete Minerals : Super and Potash as 2, Salt (200 lb.) Sulphate of Magnesia (200 lb.) ...	1.07	(a) 7.90* (b) 6.69	6.59	13.42	9.50	4.25	(a) 23.30* (b) 21.84	19.80	29.22	23.67	4.80	(a) 18.11 (b) 17.81	14.37	26.06	20.96
5	Superphosphate only (3½ cwt.) ...	1.77	6.90	8.08	12.79	10.89	3.47	18.44	9.39	9.55	10.68	4.47	14.63	6.70	9.49	10.16
6	Super (3½ cwt.) Sulphate of Potash (500 lbs.) ...	0.98	4.04	4.39	10.96	7.51	4.03	19.15	18.26	24.73	19.76	4.03	15.12	13.50	22.55	18.14
7	Super (3½ cwt.) Sulphate of Magnesia (200 lbs.) and Sodium Chloride (200 lbs.) ...	1.20	5.37	4.97	12.20	8.65	4.17	20.12	18.93	24.62	21.40	4.86	16.04	14.70	22.31	19.10
8	No Minerals ...	1.17	3.36	4.35	10.54	9.07	2.35	11.65	6.05	8.89	9.24	3.34	9.61	5.32	8.52	8.89
9	Sodium Chloride (200 lbs.), Nit. Soda (550 lb.), Sulph. Potash (500 lbs.) and Sulph. Mag. (200 lbs.) ...	6.05	—	—	—	—	21.27	—	—	—	—	—	—	—	—	—
1	Dung only (14 tons) ...	3.14	3.17	3.63	4.51	4.01	2.97	4.47	3.79	3.22	2.60	3.04	4.65	4.93	5.25	4.54
2	Dung, Superphosphate Sulphate of Potash (500 lbs.) ...	2.35	3.43	3.73	4.79	4.08	2.82	4.50	4.52	6.07	4.66	3.16	5.15	5.49	6.29	4.80
4	Complete Minerals : Super and Potash as 2, Salt (200 lbs.), Sulphate of Magnesia (200 lbs.) ...	0.23	(a) 1.50* (b) 1.37	1.60	3.89	2.35	0.85	(a) 3.47* (b) 3.73	2.41	5.01	3.40	1.04	(a) 4.05** (b) 4.09	2.88	5.33	3.37
5	Superphosphate only (3½ cwt.) ...	0.41	1.17	1.70	3.59	2.67	0.99	2.60	2.58	2.83	2.75	1.05	3.19	2.61	3.29	2.84
6	Super (3½ cwt.), Sulphate of Potash (500 lbs.) ...	0.25	0.66	0.72	2.44	1.31	0.87	2.05	2.31	4.60	2.61	0.93	3.04	2.81	5.20	2.87
7	Super (3½ cwt.), Sulphate of Magnesia (200 lbs.) and Sodium Chloride (200 lbs.) ...	0.28	0.62	0.63	2.52	1.21	0.92	3.08	3.13	5.05	3.47	1.10	3.31	3.01	5.23	3.31
8	No Minerals ...	0.30	0.54	0.92	2.90	1.92	0.86	3.76	2.75	3.27	2.99	0.98	3.19	2.52	3.30	2.84
9	Sodium Chloride (200 lbs.), Nit. Soda (550 lbs.), Sulph. Potash (500 lbs.) and Sulph. Mag. (200 lbs.) ...	0.91	—	—	—	—	3.78	—	—	—	—	—	—	—	—	—

* From 1904 onwards plot 4 N has been divided, 4 (a) receiving Sulphate of Potash, Sulphate of Magnesia, Sodium Chloride and Nitrate of Soda, amounts as above; 4 (b) receiving Calcium Chloride (190 lbs.), Potassium Nitrate (570 lbs.), and Calcium Nitrate (100 lbs.). Nitrogenous manures are applied as to one-third at time of sowing and two-thirds as top dressing at a later date, except with Rape Cake which all goes on with seed.

† In 1927 Mangolds failed and the whole field was re-sown with Swedes. In this year only one-third of the nitrogen was supplied, this being given at time of sowing of mangolds.

†† Excluding 1885, when nitrogenous fertilisers were not applied, owing to poor crop, and 1908 and 1927 when the crop was swedes.

** 23 years only, 1904-1928.

HAY—THE PARK GRASS PLOTS, 1927-1928.

Plot.	Manuring (amounts stated are per acre).	1927				1928				Plot.				
		Yield of Hay per acre.		Dry Matter per acre.		Yield of Hay per acre.		Dry Matter per acre.						
		1st Crop.	2nd Crop.	Total.	lb.	1st Crop.	2nd Crop.	Total.	lb.					
1	Single dressing (206 lb.) Sulphate of Ammonia (=43 lb. N.); (with Dung also 8 years 1856-63)	cwt. 5.0	cwt. 11.8	cwt. 16.8	lb. 427	lb. 1057	lb. 1484	cwt. 8.0	cwt. 3.2	cwt. 11.2	lb. 286	lb. 938	1	
2	Unmanured (after Dung 8 years, 1856-63)	9.8	8.1	17.9	805	729	1534	14.8	4.2	19.0	380	1618	2	
3	Unmanured	5.3	8.6	13.9	432	769	1201	11.2	3.3	14.5	299	1203	3	
4-1	Superphosphate of Lime (3½ cwt.)	4.4	6.1	10.5	336	543	879	12.0	1.7	13.7	948	152	1100	4-1
4-2	Superphosphate of Lime (3½ cwt.) and double dressing (412 lb.) Sulphate of Ammonia (=86 lb. N.)	4.5	5.5	10.0	346	492	838	9.3	2.1	11.4	742	188	930	4-2
5-1	(N. half) Unmanured following double dressing Amm. Salts (=86 lb. N.) 1856-97... ..	2.8	5.6	8.4	203	499	702	7.8	1.6	9.4	634	144	778	5-1
5-2	(S. half) Superphosphate (3½ cwt.); Sulphate of Potash (500 lb.); following double dressing Amm. Salts (=86 lb. N.) 1856-97	6.0	8.0	14.0	434	714	1148	16.0	3.1	19.1	1236	275	1511	5-2
6	Complete Mineral Manure as Plot 7; following double dressing Amm. Salts (=86 lb. N.) 1856-68	3.1	7.4	10.5	221	659	880	8.5	2.0	10.5	649	179	828	6
7	Complete Mineral Manure: Super. (3½ cwt.); Sulphate of Potash (500 lb.); Sulphate of Soda (100 lb.); Sulphate of Magnesia (100 lb.)	4.9	12.6	17.5	368	1133	1501	11.6	2.0	13.6	1039	183	1222	7
8	Mineral Manure without Potash	15.6	14.8	30.4	1430	1324	2754	32.2	7.3	39.5	2931	652	3583	8
9	Complete Mineral Manure and double dressing (412 lb.) Sulphate of Ammonia (=86 lb. N.)	5.5	5.8	11.3	433	519	952	6.0	3.7	9.7	492	327	819	9
10	Mineral Manure (without Potash) and double dressing Amm. Salts (=86 lb. N.)	10.2	13.0	23.2	787	1169	1956	14.8	6.6	21.4	1267	593	1860	10
		17.7	12.1	29.8	1330	1084	2414	20.9	7.1	28.0	1796	639	2435	
		19.9	13.5	33.4	1320	1208	2528	21.7	13.1	34.8	1837	1177	3014	
		14.8	12.8	27.6	1142	1149	2291	36.2	15.1	51.3	3117	1351	4468	
		10.8	11.3	22.1	633	1016	1649	14.4	7.4	21.8	1149	658	1807	
		7.2	7.9	15.1	488	704	1192	12.2	3.7	15.9	1096	328	1424	
		30.8	20.4	51.2	2203	1826	4029	31.0	7.2	38.2	2646	645	3291	
		42.6	21.0	63.6	3138	1881	5019	50.6	8.1	58.7	4628	723	5351	
		10.5	14.5	25.0	759	1301	2060	22.3	5.0	27.3	1933	451	2384	
		27.9	19.7	47.6	2276	1762	4038	39.0	10.9	49.9	3531	974	4505	

11-1	Complete Mineral Manure and treble dressing (618 lb.) Sulphate Ammonia (129 lb. N.)	(not limed)	41.4	28.6	70.0	2849	2565	5414	52.9	13.7	66.6	3985	1223	5208	11-1
11-2	As Plot 11-1 and Silicate of Soda	(limed ...)	32.9	23.8	56.7	2501	2132	4633	63.1	10.1	73.2	5574	906	6480	11-2
12	Unmanured	(not limed)	50.4	15.1	65.5	3257	1351	4608	61.9	14.5	76.4	4741	1302	6043	
13	Dung (14 tons) in 1905, and every fourth year since (omitted 1917), Fish Guano (6 cwt.) in 1907 and every fourth year since	(limed ...)	43.1	16.3	59.4	3110	1458	4568	59.7	16.2	75.9	5252	1449	6701	12
14	Complete Mineral Manure and double dressing (550 lb.) Nitrate of Soda (=86 lb. N.)	(not limed)	7.4	8.3	15.7	591	739	1330	10.9	6.9	17.8	812	621	1433	13
15	Complete Mineral Manure as Plot 7; following double dressing Nitrate of Soda (=86 lb. N., 1858-1875)	(not limed)	39.4	14.8	54.2	2689	1326	4015	46.6	11.8	58.4	3615	1056	4671	14
16	Complete Mineral Manure and single dressing (275 lb.) Nitrate of Soda (=43 lb. N.)	(limed ...)	35.5	14.8	50.3	2748	1329	4077	38.8	9.5	48.3	3178	855	4033	15
17	Single dressing (275 lb.) Nitrate of Soda (=43 lb. N.)	(not limed)	48.1	16.7	64.8	3273	1492	4765	50.3	12.8	63.1	4534	1149	5683	16
18	Mineral Manure (without Super.), and double dressing Sulphate of Amm. (=86 lb. N.), 1905 and since; following Minerals and Amm. Salts supplying the constituents of 1 ton of Hay, 1865-1904	(limed (sun))	37.1	11.1	48.2	2709	997	3706	50.6	7.1	57.7	4304	632	4936	17
19	Farmyard Dung (14 tons) in 1905 and every fourth year since (omitted in 1917), following Nitrate of Soda (=43 lb. N.) and Minerals, 1872-1904.	(limd.(shade))	40.2	15.4	55.6	2590	1379	3969	39.2	7.7	46.9	3260	691	3951	18
20	Farmyard Dung (14 tons) in 1905 and every fourth year since (omitted in 1917), following Nitrate of Soda (=43 lb. N.) and Minerals, 1872-1904.	(not limed)	19.9	11.9	31.8	1554	1062	2616	25.7	7.9	33.6	2233	711	2944	19
		(limed)	12.4	9.0	21.4	1028	808	1836	27.0	3.5	30.5	2332	314	2646	20
		(not limed)	32.9	11.9	44.8	2458	1062	3520	38.0	10.0	48.0	3270	893	4163	
		(limed ...)	26.6	9.9	36.5	1947	884	2831	35.6	6.2	41.8	3074	555	3629	
		(not limed)	15.8	8.5	24.3	1031	765	1796	21.8	7.3	29.1	1690	652	2342	
		(limed ...)	12.7	9.6	22.3	1105	857	1962	24.7	4.1	28.8	2043	365	2408	
		(not limed)	14.3	23.5	37.8	987	2106	3093	13.9	8.8	22.7	1293	787	2080	
		(limed)	44.4	26.3	70.7	3222	2360	5582	48.2	11.2	59.4	4186	1002	5188	
		(not limed)	36.2	22.0	58.2	2370	1975	4345	31.5	6.9	38.4	2817	617	3434	
		(limed)	19.9	13.3	33.2	1545	1193	2738	22.3	11.4	33.7	2034	1021	3055	
		(not limed)	12.6	9.0	21.6	920	802	1722	18.4	6.6	25.0	1642	592	2234	
		(limed)	19.1	10.1	29.2	1450	904	2354	24.4	6.5	30.9	2165	584	2749	
		(not limed)	28.3	19.4	47.7	2217	1737	3954	37.3	10.3	47.6	3508	924	4432	
		(limed)	20.4	12.8	33.2	1647	1142	2789	34.7	6.2	40.9	3120	557	3677	
		(not limed)	25.5	12.2	37.7	1924	1093	3017	37.5	6.7	44.2	3337	600	3937	

Ground lime was applied to the southern portion (lined) of the plots at the rate of 2000 lb. to the acre in the winters of 1903-4, 1907-8, 1915-16, 1923-24, and at the rate of 2500 lb. to the acre in the winter of 1920-21, except where otherwise stated.

Up to 1914 the limed and unlimed plot results were not separately given in the Annual Report, but the mean of the two was given. From 1915 onwards the separate figures are given.

§ The second crop was carted green; the figures given are estimated hay yields, calculated from the dry matter.

The Park Grass Plots.
BOTANICAL COMPOSITION, PER CENT., 1925, 1st CROP.

Plot.	Manuring.	Liming.	Gramineae.	Leguminosae.	Other Orders	"Other Orders" consist largely of	Plot.
3	Unmanured	{ Limed ... { Unlimed ...	73.4 ... 61.1 ...	5.4 ... 5.1 ...	21.2 ... 33.8 ...	Plantago lanceolata; Centaurea nigra	3
7	Complete Mineral Manure	{ Limed ... { Unlimed ...	75.2 ... 72.7 ...	1.2 ... 6.4 ...	23.6 ... 20.9 ...	Heracleum sphondylium; Rumex acetosa	7
9	Complete Mineral Manure and double Amm. Salts	{ Limed ... { Unlimed ...	99.5 ... 96.7 ...	0.0 ... 0.0 ...	0.5 ... 3.3 ...	Heracleum sphondylium; Rumex acetosa	9
14	Complete Mineral Manure and double Nitrate of Soda	{ Limed (sun) ... { " (shade) ... { Unlimed ...	83.6 ... 90.6 ... 86.3 ...	0.0 ... 5.7 ... 0.2 ...	16.4 ... 3.7 ... 13.5 ...	Anthriscus sylvestris; Taraxacum vulgare	14
15	As plot 7 following double Nitrate of Soda, 1858-75	{ Limed ... { Unlimed ...	66.1 ... 62.1 ...	14.8 ... 4.7 ...	19.1 ... 33.2 ...	Plantago lanceolata; Ranunculus spp.	15
17	Single Nitrate of Soda	{ Limed ... { Unlimed ...	78.1 ... 74.7 ...	0.5 ... 0.1 ...	21.4 ... 25.2 ...	Plantago lanceolata; Centaurea nigra	17
18	Mineral Manure (without Super.) and double Sulphate Amm. 1905 and since	{ L. 6,788 lb. { L. 3,951 lb. { Unlimed ...	92.0 ... 88.5 ... 87.0 ...	0.2 ... 0.0 ... 0.0 ...	7.8 ... 11.5 ... 13.0 ...	Rumex acetosa; Centaurea nigra	18
19	Farmyard Dung in 1905 and every 4th year since (omitted 1917)	{ L. 3,150 lb. { L. 570 lb. { Unlimed ...	84.8 ... 75.7 ... 82.6 ...	1.5 ... 3.2 ... 3.9 ...	13.7 ... 21.1 ... 13.5 ...	Ranunculus spp.; Anthriscus sylvestris	19
20	Farmyard Dung in 1905 and every 4th year since (omitted in 1917), each intervening year Sulphate of Potash, Super., and Nitrate of Soda	{ L. 2,772 lb. { L. 570 lb. { Unlimed ...	63.3 ... 76.9 ... 68.8 ...	4.3 ... 2.5 ... 10.4 ...	32.4 ... 20.6 ... 20.8 ...	Ranunculus spp.; Anthriscus sylvestris; Taraxacum vulgare	20

WHEAT—BROADBALK FIELD.

Plot.	Manurial Treatment (amounts stated are per acre).	1927 (lower part) 84th successive crop.						1928 (upper part) : after 2 years fallow.						77-year Average 1852-1928	
		Dressed Grain.			Total† Straw per acre.	Straw per acre.	Offal Grain per acre.	Dressed Grain.			Total† Straw per acre.	Straw per acre.	Offal Grain per acre.	Dressed Grain per acre.	Total Straw per acre.
		Yield per acre.	Weight per bushel.	Yield per bush.				Yield per bush.	Weight per bushel.	Yield per bush.					
2A	Farmyard Manure (14 tons)	19.5	58.1	10.1	24.0	2108	132	64.9	23.8	41.1	51.3	5225	75	26.3**	32.3**
2B	Farmyard Manure (14 tons)	24.2	57.9	12.5	30.7	2067	156	65.4	28.3	48.4	61.4	6283	89	33.2	34.5
3	Unmanured since 1889	6.9	59.2	3.7	6.9	593	39	63.9	15.9	27.9	27.8	2730	56	11.8	9.9
5	Complete Mineral Manure§§	6.5	59.2	3.4	6.7	590	28	64.5	20.3	35.2	34.8	3505	63	13.6	11.6
6	As 5, and 206 lb. Sulphate of Ammonia	12.5	58.6	6.5	13.9	1255	53	64.7	27.3	67.4*	57.8*	4970	77	21.7	20.5
7	As 5, and 412 lb. Sulphate of Ammonia	21.5	56.8	10.9	27.30	2730	174	60.6*	36.5*	67.4*	61.65*	6165*	116	30.5	32.2
8	As 5, and 618 lb. Sulphate of Ammonia	25.9	54.6	12.6	30.3	3105	193	61.2	33.4	67.4*	62.0	6105	116	34.3	40.0
9	As 5, and 275 lb. Nitrate of Soda	16.6	57.6	8.6	20.7	1838	122	61.6	30.6	56.1	50.3	5298	40	23.8††	24.9††
10	412 lb. Sulphate of Ammonia	12.0	56.9	6.1	16.5	1358	145	61.9	25.8	47.0	42.8	4375	44	18.8	18.1
11	As 10, and Super-phosphate (3½ cwt.)	8.9	52.4	4.2	18.8	1565	160	56.9	31.4	56.9	57.7	5838	62	21.4	21.8
12	As 10, and Super. (3½ cwt.) and Sulph. Soda (306 lb.)	13.5	55.0	6.6	22.5	1895	184	64.5	33.0	57.3	55.5	5585	95	27.0	27.1
13	As 10, and Super. (3½ cwt.) and Sulph. Potash (200 lb.)	17.4	56.5	8.8	25.2	2223	158	65.0	32.0	55.2	56.2	5755	98	29.2	30.8
14	As 10, and Super. (3½ cwt.) and Sulph. Magnesia (280 lb.)	16.3	56.1	8.1	22.8	2043	125	63.0	33.0	58.6	54.7	5658	67	26.7	27.0
15	As 5, and 412 lb. Sulphate of Ammonia, all applied in autumn	11.1	57.0	5.6	14.2	1208	90	64.3	30.0	52.3	56.6	5813	62	27.6	28.2
16	As 5, and 550 lb. Nitrate of Soda	18.1	55.5	8.9	26.2	2330	170	64.6	32.4	56.1	55.8	5615	92	29.7††	35.3††
17	Minerals alone as 5 or 412 lb. Sulphate of Ammonia alone in alternate years	M6.5	58.2	3.4	9.3	840	65	64.3	31.4	51.8	54.9	5580	88	A27.9	28.3
18	Rape Cake (1889 lb.)	A15.3	59.2	8.1	26.0	2280	189	64.6	22.4	M38.8	38.7	3908	70	M14.1	12.6
19	As 7, without Super.	10.1	58.3	5.2	26.3	2268	184	64.3	30.4	52.7	53.3	5385	94	20.9‡	22.9‡
20	As 7, without Super.	—	—	—	—	—	—	64.3	22.5	39.3	44.2	4332	76	17.7§	20.0§

† Includes Straw, savings and chaff. 1927, top portion fallowed; 1928, bottom portion fallowed.

** 29 years only, 1900-1928.

†† 44 years only, 1885-1928.

‡ 36 years only, 1906-1928.

§ 19 years only, 1906-1928 (no crop in 1912, 1914, 1926 and 1927).

|| In 1926 and 1927 the crop was confined to the lower part of the field, the upper part being completely fallowed for 2 years. This was the first complete fallow since the experiment began in 1843. In October, 1927, the upper part was sown with wheat, and the yields for 1928 are given above.

¶ Sulphate of Ammonia is applied as to one-third in autumn and two-thirds in spring, except for plot 15. Nitrate of Soda is all given in spring, there being two applications at an interval of a month on plot 16.

§§ Complete Mineral Manure: 3½ cwt. Super, 200 lb. Sulph. Potash, 100 lb. Sulph. Soda, 100 lb. Sulph. Magnesia.

PERMANENT BARLEY PLOTS, Hoos Field, 1927 and 1928. PRODUCE PER ACRE.

Plot.	Manuring (amounts stated are per acre)	1927.						1928.						76 years' Average Yield 1852-1928.†			
		Dressed Grain.			Offal Grain per acre.	Straw per acre.	Total†† Straw per acre.	Proportion of Total Grain to 100 of Total Straw.*	Dressed Grain.			Offal Grain per acre.	Straw per acre.	Total†† Straw per acre.	Proportion of Total Grain to 100 of Total Straw.*	Dressed Grain per acre.	Total†† Straw per acre.
		Yield per acre.	Weight per bush.	Yield per acre.					Yield per acre.	Weight per bush.	Yield per acre.						
10	Unmanured	9.1	52.1	4.2	94.8	16	338	5.0	44.0	2.0	363	18	701	13.4	51.3	13.4	7.8
20	Superphosphate only (3½ cwt.)	11.9	49.9	5.3	76.5	27	506	11.9	46.0	4.9	701	31	701	19.0	63.9	19.0	9.8
30	Alkali Salts only (200 lb. Sulphate of Potash; 100 lb. Sulphate of Soda; 100 lb. Sulphate of Magnesia)	4.9	50.5	2.2	22.9	53	707	6.5	43.1	2.5	743	21	743	14.3	32.0	14.3	8.7
40	Complete Minerals; as 30 with Superphosphate (3½ cwt.)	5.3	50.8	2.4	16.2	139a	1507	10.6	45.5	4.3	1133	37	1133	19.0	35.2	19.0	11.2
50	Potash (200 lb.) and Superphosphate (3½ cwt.)	7.7	49.8	3.4	58.7	18	374	5.4	42.0	2.0	737	28	737	15.5	28.2	15.5	9.4
1A	Ammonium Salts only (206 lb. Sulphate of Ammonia)	23.2	50.8	10.5	97.3	29	902	7.4	42.8	2.8	520	25	520	23.7	47.8	23.7	13.7
2A	Superphosphate and Amm. Salts	16.2	49.8	7.2	78.9	40	723	11.8	44.3	4.7	781	28	781	35.8	52.8	35.8	20.4
3A	Alkali Salts and Amm. Salts	17.0	47.8	7.2	51.6	40	1059	11.2	43.8	4.4	1015	39	1015	25.8	38.5	25.8	16.0
4A	Complete Minerals and Amm. Salts	21.7	50.9	9.8	56.9	42	1304	11.4	45.8	4.7	1275	23	1275	39.3	33.1	39.3	23.6
5A	Potash, Super. and Amm. Salts	21.4	49.0	9.4	57.2	38	1249	3.0	42.0	1.1	891	8	891	33.8	12.2	33.8	21.7
1AA	Nitrate of Soda only (275 lb.)	29.6	51.5	13.6	82.6	44	1403	8.8	42.0	3.3	924	41	924	24.3*	34.1	24.3*	15.4*
2AA	Superphosphate and Nitrate of Soda	33.6	50.0	15.0	96.1	44	1337	13.8	44.8	5.5	1243	28	1243	38.8*	39.0	38.8*	23.1*
3AA	Alkali Salts and Nitrate of Soda	19.2	51.3	8.8	41.6	43	1507	9.1	41.5	3.4	1337	39	1337	24.5*	25.4	24.5*	16.6*
4AA	Complete Minerals and Nitrate of Soda	30.7	51.0	14.0	71.1	44	1540	11.1	44.5	4.4	1414	23	1414	37.7*	25.8	37.7*	23.6*
1AAS	As Plot 1AA and Silicate of Soda (400 lb.)	31.9	51.4	14.6	125.1	44	864	11.0	43.5	4.3	1007	34	1007	30.2*	40.3	30.2*	18.2*
2AAS	As Plot 2AA and Silicate of Soda (400 lb.)	33.8	50.4	15.2	86.5	49	1474	11.0	46.0	4.5	1018	19	1018	39.7*	37.2	39.7*	23.9*
3AAS	As Plot 3AA and Silicate of Soda (400 lb.)	24.1	50.6	10.9	78.9	29	1067	8.4	46.0	3.4	946	32	946	31.2*	30.8	31.2*	19.9*
4AAS	As Plot 4AA and Silicate of Soda (400 lb.)	29.8	51.3	13.6	68.7	45	1557	9.7	46.0	4.0	1243	20	1243	39.9*	25.5	39.9*	25.4*
1C	Rape Cake only (1000 lb.)	30.4	52.3	14.2	80.4	29	1485	10.1	42.8	3.8	1141	23	1141	35.5	29.8	35.5	20.6
2C	Superphosphate and Rape Cake	40.9	50.5	18.4	91.2	37	1672	12.9	44.7	5.2	1287	20	1287	38.1	34.3	38.1	22.0
3C	Alkali Salts and Rape Cake	21.1	48.5	9.2	71.8	65	982	7.0	43.5	2.7	908	20	908	33.7	25.7	33.7	20.4
4C	Complete Minerals and Rape Cake	30.9	50.6	14.0	74.5	39	1526	9.9	44.0	3.9	1419	20	1419	37.5	24.9	37.5	22.6
7-1	Unmanured (after dung (14 tons) for 20 years 1852-71)	12.9	50.4	5.8	66.1	31	636	7.6	41.5	3.7	913	34	913	22.5†	27.9	22.5†	13.5†
7-2	Farmyard Manure (14 tons)	40.4	50.5	18.2	66.5	63	2004	8.6	42.0	5.1	1166	37	1166	44.6	26.8	44.6	28.1
6-1	Unmanured since 1852	5.2	50.5	2.4	58.7	20	266	7.4	43.0	2.8	515	25	515	14.7	49.3	14.7	8.6
6-2	Ashes from Laboratory furnace	8.4	48.8	3.7	57.4	27	420	12.0	44.5	4.8	704	33	704	15.7	59.0	15.7	9.3
1N	Nitrate of Soda only (275 lb.)	25.3	49.4	11.2	74.4	43	1292	9.4	44.3	2.8	924	18	924	28.7§	36.8	28.7§	17.8§
2N	Nitrate of Soda only (275 lb.)	26.7	48.8	11.7	74.2	34	1205	12.7	44.8	3.2	2593	28	2593	31.7§§	18.4	31.7§§	20.0§§

† 1912, all plots were fallowed. * 60 years, 1868-1928. † 56 years, 1872-1928. † 75 years, 1853-1928. §§ 69 years, 1859-1928.

a A large amount of black medic seed in Offal Grain. †† Includes straw, cavings and chaff.