

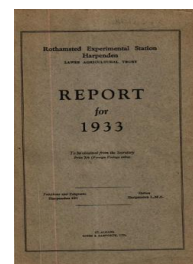
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED  
RESEARCH

## Report for 1933

[Full Table of Content](#)



---

### Chemical Analysis of Manures Used in Replicated Experiments, 1933

#### Rothamsted Research

Rothamsted Research (1934) *Chemical Analysis of Manures Used in Replicated Experiments, 1933* ; Report For 1933, pp 100 - 101 - DOI: <https://doi.org/10.23637/ERADOC-1-3>

### CHEMICAL ANALYSIS OF MANURES USED IN REPLICATED EXPERIMENTS, 1933.

Manures.	% N	% P <sub>2</sub> O <sub>5</sub>	% K <sub>2</sub> O
Sulphate of Amm. .. ..	20.8—21.1	—	—
Bicarbonate of Amm. .. ..	17.7	—	—
Nitrate of Soda .. ..	15.8—16.1	—	—
Nitrochalk .. ..	15.5	—	—
Poultry Manure (1) .. ..	3.85	3.22	1.67
Poultry Manure (2) .. ..	4.38	4.05	1.94
Poultry Manure (3) .. ..	3.58	2.89	1.63
Poultry Manure (4) .. ..	3.68	—	—
Poultry Manure (5) .. ..	4.37	—	—
Poultry Manure (fresh) .. ..	1.25	1.80	—
Guano .. ..	6.50	16.4	—
Dung .. ..	0.68	0.25	0.89
		% P <sub>2</sub> O <sub>5</sub>	
		Total.	Soluble in Water.
			Soluble in Cit. Acid.
Basic Slag High Sol. .. ..	14.9	—	14.4
Basic Slag Low Sol. .. ..	15.1	—	3.5
Mineral Phosphate— (90% through 12 mesh) .. ..	25.9	—	—
Superphosphate (6) .. ..	16.1	—	—
Superphosphate .. ..	17.5	16.4	—
Sulphate of Potash .. ..	49.2	} % K <sub>2</sub> O	
Potash Manure Salt 30% .. ..	30.9		
Muriate of Potash .. ..	52.3		

Poultry Manures Nos. 1-5 were obtain in a dried, ground form.

- (1) Used in all poultry manure experiments except at Rothamsted, Woburn, Portobello, Honeydon.
- (2) Used at Rothamsted.
- (3) Used at Woburn.
- (4) Used at Portobello.
- (5) Used at Honeydon.
- (6) Used only in experiments testing basic slags.

**Three Course Rotation, 1933**

Manures.	% Organic Matter.	% N	% P <sub>2</sub> O <sub>5</sub>	% K <sub>2</sub> O
Chaffed Straw .. .. .	77.3	0.301	0.097	1.053
Adco .. .. .	14.1	0.302	0.265	0.160
Superphosphate .. .. .	—	—	17.0 <sup>(1)</sup> 17.5 <sup>(2)</sup>	—
Sulphate of Ammonia .. .. .	—	21.2 <sup>(1)</sup> 21.2 <sup>(2)</sup>	—	—
Muriate of Potash .. .. .	—	—	—	52.1 <sup>(1)</sup> 52.3 <sup>(2)</sup>
Sulphate of Potash .. .. .	—	—	—	49.2
Nitrate of Soda .. .. .	—	15.8	—	—

<sup>1</sup> Applied in Autumn.    <sup>2</sup> Applied in Spring.

**Four Course Rotation, 1933**

Manures.	% Organic Matter.	% N	% P <sub>2</sub> O <sub>5</sub>	% K <sub>2</sub> O
Chaffed Straw .. .. .	77.3	0.301	0.097	1.053
Dung .. .. .	18.6	0.507	0.203	0.859
Adco .. .. .	14.1	0.302	0.265	0.160
Superphosphate .. .. .	—	—	17.0	—
Mineral Phosphate— 90% through 120 mesh .. .. .	—	—	26.7	—
Muriate of Potash .. .. .	—	—	—	52.1
Sulphate of Ammonia .. .. .	—	21.2	—	—

**Six Course Rotation, 1933**

Sulphate of Ammonia .. .. . 21.2% N.  
 Muriate of Potash .. .. . 52.1% K<sub>2</sub>O  
 Superphosphate .. .. . 17.0% P<sub>2</sub>O<sub>5</sub>

**AVERAGE WHEAT YIELDS OF VARIOUS COUNTRIES**

Country.	Mean yield per acre, 1923-32. cwt.	Country.	Mean yield per acre, 1923-32. cwt.
Great Britain .. .. .	17.5	Denmark .. .. .	22.5
England and Wales .. .. .	17.3	Argentina .. .. .	6.7
Hertfordshire .. .. .	16.1	Australia .. .. .	6.4
France .. .. .	11.4	Canada .. .. .	9.2
Germany .. .. .	15.8	United States .. .. .	7.7
Belgium .. .. .	20.4	U.S.S.R. (Europe and Asia)	5.6*

*Note.*—Figures for Great Britain, England and Hertfordshire are taken from the Ministry of Agriculture's "Agricultural Statistics," Vol. 67. Other figures from "International Year Book of Agricultural Statistics," 1925-33.

\*1924-32, excluding 1931.