This work is licensed under a Creative Commons Attribution 4.0 International License.

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.

Yields of the Field Experiments 1983

Full Table of Content

83/R/EX/4 Exhaustion Land - S. Barley

Rothamsted Research

Rothamsted Research (1984) *83/R/EX/4 Exhaustion Land - S. Barley ;* Yields Of The Field Experiments 1983, pp 18 - 19 **- DOI: https://doi.org/10.23637/ERADOC-1-44**

This work is licensed under a Creative Commons Attribution 4.0 International License.

83/R/EX/4

EXHAUSTION LAND

Object: To study the residual effects of manures, applied 1856-1901, on the yield of continuous s. barley - Hoosfield.

The 128th year, s. barley.

For previous years see 'Details' 1967, 1973 and 74-82/R/EX/4.

Treatments: All combinations of:-

Whole plots

1. PLOTFERT(01) Plot numbers and manuring 1876-1901:

1-	Plot 1 None
2-	Plot 2 None
3D	Plot 3 D
4D	Plot 4 D
5N	Plot 5 N
6N*	Plot 6 N*
7NMIN	Plot 7 N P K Na Mg
8N*MIN	Plot 8 N* P K Na Mg
9P	Plot 9 P
10MIN	Plot 10 P K Na Mg

N - 96 kg N as ammonium salts
N* - 96 kg N as nitrate of soda
P - 34 kg P as superphosphate
K - 137 kg K as sulphate of potash
Na - 16 kg Na as sulphate of soda
Mg - 11 kg Mg as sulphate of magnesia
D - Farmyard manure at 35 tonnes
MIN - P K Na Mg

Sub plots

2. N Nitrogen fertilizer (kg N) as 'Nitro-Chalk' (basal until 1975, on a cyclic system since 1976):

0
48
96
144

For a fuller record of treatments see 'Details' 1967 etc.

Basal applications: Weedkillers: Glyphosate at 1.4 kg in 250 l. Dicamba, mecoprop and MCPA (as 'Herrisol' at 5.0 l) in 500 l applied with the fungicide. Fungicide: Tridemorph at 0.52 kg.

Seed: Georgie, dressed ethirimol, sown at 160 kg.

Cultivations, etc.:- Glyphosate applied: 28 Oct, 1982. Ploughed: 1 Dec. Rotary harrowed, seed sown: 10 Mar, 1983. N treatments applied: 5 May. 'Herrisol' with the fungicide applied: 8 June. Combine harvested: 8 Aug.

https://doi.org/10.23637/ERADOC-1-44

This work is licensed under a Creative Commons Attribution 4.0 International License.

83/R/EX/4

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

N	0	48	96	144	MEAN
PLOTFERT(01)					
1-	0.97	1.65	1.32	1.68	1.40
2-	0.63	1.32	1.28	1.70	1.23
3D	2.00	3.46	4.50	4.51	3.62
4D	0.99	3.01	3.66	4.01	2.92
5N	0.80	1.94	1.46	1.99	1.55
6N*	0.49	1.18	0.36	0.58	0.65
7NMIN	1.67	2.92	4.05	3.79	3.11
8N*MIN	0.56	2.14	2.10	2.54	1.83
9P	2.77	2.76	3.24	4.56	3.33
10MIN	0.99	2.01	1.79	2.67	1.87
MEAN	1.19	2.24	2.38	2.80	2.15

GRAIN MEAN DM% 85.1

STRAW TONNES/HECTARE

***** TABLES OF MEANS *****

N	0	48	96	144	MEAN
PLOTFERT(01)					
1-	0.21	0.58	0.59	0.81	0.55
2-	0.22	0.40	0.43	0.59	0.41
3D	0.22	0.94	2.01	2.73	1.47
4D	0.42	0.90	1.12	2.41	1.21
5N	0.15	0.51	0.55	0.80	0.50
6N*	0.14	0.48	0.14	0.27	0.26
7NMIN	0.49	1.10	1.56	2.71	1.47
8N*MIN	0.15	0.93	0.61	0.87	0.64
9P	0.36	1.03	1.48	3.01	1.47
10MIN	0.14	0.76	0.58	0.96	0.61
MEAN	0.25	0.76	0.91	1.52	0.86

STRAW MEAN DM% 88.7

SUB PLOT AREA HARVESTED 0.00728

https://doi.org/10.23637/ERADOC-1-44