

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

Yields of the Field Experiments 1979

[Full Table of Content](#)



79/W/CS/11 Soil Structure - Wheat

Rothamsted Research

Rothamsted Research (1980) *79/W/CS/11 Soil Structure - Wheat* ; Yields Of The Field Experiments 1979, pp 94 - 95 - DOI: <https://doi.org/10.23637/ERADOC-1-45>

79/W/CS/11

SOIL STRUCTURE

Object: To study the residual effects of peat, at a range of nitrogen levels, on the yield of wheat - Woburn Stackyard II.

Sponsor: A.E. Johnston.

The 16th year, wheat.

For previous years see 64/C/20(t), 65/C/19(t), 66/C/11(t), 67/C/8(t), 68/C/31(t), 69/W/CS/11(t), 70/W/CS/11(t), 71/W/CS/11, 72/W/CS/11(t) and 73-78/W/CS/11.

Design: Single replicate of 5 x 4.

Whole plot dimensions: 2.13 x 3.05.

Treatments: All combinations of:-

1. PEAT Peat (tonnes dry matter - total applied 1963-72):

0
8
55
110
165

2. N Nitrogen fertiliser as ammonium nitrate (kg N)
cumulative to previous treatments:

0
50
100
150

Basal applications: Manures: P at 85 kg, as triple superphosphate, K at 300 kg, as potassium bicarbonate, Mg at 55 kg, as magnesium sulphate. Weedkillers: Ioxynil 0.32 kg with mecoprop at 0.94 kg in 280 l on the first occasion, ioxynil at 0.42 kg with mecoprop at 1.3 kg in 280 l on the second occasion, applied with tridemorph on both occasions. Fungicides: Tridemorph at 0.53 kg applied with weedkillers. Carbendazim at 0.25 kg with zineb at 1.6 kg in 280 l.

Seed: Maris Hobbit, sown at 210 kg.

Cultivations, etc.: - Hand dug: 12 Sept, 1978. P, K, Mg applied and raked in, seed sown: 3 Oct. Weedkillers and tridemorph applied: 17 Nov. N applied: 23 Apr, 1979. Weedkillers and tridemorph applied: 9 May. Carbendazim and zineb applied: 20 June. Hand harvested: 16 Aug.

NOTE: Soil and crop samples were taken for N, P, K and Mg analysis.

79/W/CS/11

GRAIN TONNES/HECTARE

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

PEAT N	0	8	55	110	165	MEAN
0	3.76	3.32	3.90	5.19	4.42	4.12
50	7.23	7.40	6.80	7.43	6.99	7.17
100	7.19	8.90	8.33	7.84	8.34	8.12
150	8.20	7.43	8.69	7.73	8.42	8.09
MEAN	6.59	6.76	6.93	7.05	7.05	6.88

GRAIN MEAN DM% 81.1

STRAW TONNES/HECTARE

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

PEAT N	0	8	55	110	165	MEAN
0	4.47	4.26	4.63	5.54	4.93	4.77
50	7.55	8.05	7.01	8.13	7.75	7.70
100	7.63	8.59	8.51	8.24	8.64	8.32
150	8.53	8.13	8.58	8.51	8.92	8.53
MEAN	7.04	7.26	7.18	7.60	7.56	7.33

STRAW MEAN DM% 73.4

PLOT AREA HARVESTED 0.00065