

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 1982

[Full Table of Content](#)



82/W/CS/11 Soil Structure - S. Barley

Rothamsted Research

Rothamsted Research (1983) *82/W/CS/11 Soil Structure - S. Barley* ; Yields Of The Field Experiments 1982, pp 94 - 96 - DOI: <https://doi.org/10.23637/ERADOC-1-33>

82/W/CS/11

SOIL STRUCTURE

Object: To study the direct effects of sowing dates and times of applying nitrogen and the residual effects of peat on the nutrient contents and yields of s. barley - Woburn Stackyard II.

Sponsor: A.E. Johnston.

The 20th year, s. barley.

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 73-81/W/CS/11.

Design: Single replicate of 20 plots.

Whole plot dimensions: 2.13 x 3.05.

Treatments: Combinations of:-

1. PEAT Peat (tonnes dry matter - total applied 1963-72):
 0 0
 1 8
 2 55
 3 110
 4 165

2. SOW DATE Dates of sowing:
 9 FEB 9 February, 1982
 9 MAR 9 March
 24 MAR 24 March
 13 APR 13 April

3. N Times of applying nitrogen fertilizer at 96 kg N:
 - Never
 NS On the date of sowing
 NL On 11 May for SOW DATE 9 FEB and 9 MAR; on 17 May for
 SOW DATE 24 MAR; on 28 May for SOW DATE 13 APR

Basal applications: Manures: P at 85 kg as triple superphosphate, K at 300 kg as potassium bicarbonate, Mg at 55 kg as magnesium sulphate. Fungicides: Carbendazim with maneb and tridemorph (as 'Cosmic' at 4.0 kg) with captafol at 1.0 l in 280 l with the insecticide on two occasions. Insecticide: Pirimicarb at 0.14 kg.

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

Cultivations, etc.: - P, K, Mg applied: 6 Jan, 1982. Hand dug: 1 Feb. Fungicides with insecticide applied: 19 May, 4 June. Hand harvested: 16 Aug.

NOTE: Crop samples were taken at regular intervals during the season for N, P, K and Mg analysis.

82/W/CS/11

GRAIN TONNES/HECTARE

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

GRAND MEAN 5.14

SOW DATE	N PEAT	-	NS	NL
9 FEB	0	2.67		
9 FEB	1		6.73	
9 FEB	2			6.32
9 FEB	3	2.02		
9 FEB	4		6.93	
9 MAR	0	2.09		
9 MAR	1		7.17	
9 MAR	2			6.19
9 MAR	3	2.46		
9 MAR	4		7.19	
24 MAR	0	2.67		
24 MAR	1		7.50	
24 MAR	2			5.79
24 MAR	3		7.42	
24 MAR	4	3.22		
13 APR	0		7.40	
13 APR	1	2.78		
13 APR	2			5.87
13 APR	3		7.33	
13 APR	4	3.00		

GRAIN MEAN DM% 85.8

82/W/CS/11

STRAW TONNES/HECTARE

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

GRAND MEAN	4.25			
SOW DATE	N	-	NS	NL
	PEAT			
9 FEB	0	1.90		
9 FEB	1		5.42	
9 FEB	2			5.41
9 FEB	3	1.34		
9 FEB	4		6.04	
9 MAR	0	1.28		
9 MAR	1		5.82	
9 MAR	2			5.07
9 MAR	3	1.79		
9 MAR	4		6.21	
24 MAR	0	1.93		
24 MAR	1		6.49	
24 MAR	2			5.37
24 MAR	3		6.14	
24 MAR	4	2.27		
13 APR	0		6.14	
13 APR	1	2.16		
13 APR	2			5.55
13 APR	3		6.60	
13 APR	4	2.18		

STRAW MEAN DM% 88.1

PLOT AREA HARVESTED 0.00014