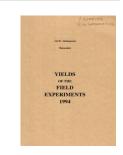
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Yields of the Field Experiments 1994



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94/R/WW/3

WINTER WHEAT

SOWING DATE AND N

Object: To study the effects of a range of amounts of nitrogen fertilizer applied in different ways to w. wheat sown on different dates - Hoosfield Old Four Course.

Sponsors: R.J. Darby, J. Hopkinson.

Design: 3 randomised blocks of 2 x 8 plots.

Plot dimensions: 3.0 x 22.0.

Treatments:

1. SOW DATE	Date of sowing:						
1 2	Second week in September Third week in October						
2. SPRING N	<pre>Rate (kg N), form and timing of nitrogen fertilizer applied in spring and summer to achieve different green area indices (GAI):</pre>						
-	None						
A	Conventional: 60 in mid-March, 205 in late April, both as 27% N						
В	GAI 3: 30 in mid-March, 70 in late April, both as 27% N						
С	GAI 5: 60 in mid-March, 140 in late April, both as						
5	GAI 5: as 'C' plus 40 as foliar urea at growth stage						
D	(GS) 34-35						
Е	GAI 5: as 'C' plus 40 as foliar urea at GS 39-45						
F	GAI 5: as 'C' plus 40 as foliar urea at GS 68						
G	GAI 5: as 'C' plus 40 as 27% N at GS 39-45						

NOTE: Foliar urea contains 46.6% N.

Experimental diary:

- 10-Sep-93 : B : Ploughed.
- 23-Sep-93 : B : Spring-tine cultivated, twice.
- 24-Sep-93 : B : Rotary harrowed.
 - : T : SOW DATE 1: Rotary harrowed, Mercia, dressed Cerevax, drilled at 380 seeds per m².
- 19-Oct-93 : T : SOW DATE 2: Rotary harrowed, Mercia, dressed Cerevax, drilled at 380 seeds per m².
- 21-Dec-93 : B : Draza at 5.5 kg.
- 06-Apr-94 : T : SPRING N A C D E F and G: 27% N at 222 kg.
 - : T : SPRING N B: 27% N at 111 kg.
- 28-Apr-94 : T : SPRING N A: 27% N at 759 kg.
 - : T : SPRING N B: 27% N at 259 kg.
 - : \mathbf{T} : SPRING N C D E F and G: 27% N at 519 kg.

94/R/WW/3

Experimental diary:

24-May-94 : T : SPRING N D: Foliar urea at 86.9 kg in 450 1.

: B : Ally at 30 g with Cheetah Super at 1.5 1 and Starane 2

at 0.75 1 in 200 1.

08-Jun-94 : T : SPRING N E: Foliar urea at 86.9 kg in 450 1.

: T : SPRING N G: 27% N at 148 kg.

13-Jun-94 : B : Halo at 2.0 1 with Mallard 750 EC at 0.5 1 in 200 1.

17-Jun-94 : B : Hostathion at 840 ml in 200 1.

23-Jun-94 : T : SPRING N F: Foliar urea at 86.9 kg in 450 1.

16-Aug-94 : B : Combine harvested.

NOTE: Soil samples were taken in February and August to determine soil mineral N content. Plant samples were taken for growth analysis and N content at fortnightly intervals from March to August. After each foliar urea spray plant samples were taken to determine the degree of spray penetration and the crop N content. Components of yield were measured at harvest.

GRAIN TONNES/HECTARE

***** Tables of means *****

SPRING N SOW DATE	-	- A	В	С	D	E	F	G	Mean
		6.10 7.27							
Mean	1.31	6.68	4.21	5.91	6.06	5.89	6.20	6.32	5.33

*** Standard errors of differences of means ***

SOW DATE	SPRING N	SOW DATE
		SPRING N
0.141	0.283	0.400

***** Stratum standard errors and coefficients of variation: *****

Stratum d.f. s.e. cv% BLOCK.WP 30 0.490 9.2

GRAIN MEAN DM% 86.7

94/R/WW/3

STRAW TONNES/HECTARE

***** Tables of means *****

SPRING N SOW DATE	-	A	В	С	D	Е	F	G	Mean
1	0.18	3.73	2.46	3.41	2.99	3.09	3.01	3.34	2.77
					4.30				
Mean	0.39	4.17	2.65	3.68	3.64	3.50	3 41	3.58	3 13

STRAW MEAN DM% 88.5

PLOT AREA HARVESTED 0.00230