

FIELD EXPERIMENTS 1953

Crop: Spring Wheat.

Field: 24 Acres.

Experiment: To determine the level and time of application of a nitrogenous fertiliser for Spring Wheat, all plots having received the same level of phosphate and potash.

Treatments & Layout:

Ransomised Block Layout with 7 treatments and 6 replications.

<u>Treatments</u>	<u>On Seed-bed</u>	<u>As Top-Dressing</u>	<u>Symbol</u>
A	Nil	Nil	Nil.
B	1	1	1:1
C	2	0	2:0
D	2	2	2:2
E	4	0	4:0
F	3	3	3:3
G	6	0	6:0

} Cwt. Nitro-Chalk:

Manuring with dates of:

Basal Dressing of 7 cwt. Fisons No. 7. ( 5 cwt. supers. ) ( 13 1/2 P<sub>2</sub>O<sub>5</sub> 13 1/2 K<sub>2</sub>O )  
 ( 14 1/5 cwt. muriate )  
 applied to the seed-bed.

Top-Dressing done on 27th May.

Date of drilling: 10th March, 1953 Variety: Atle Seed Rate: 2 1/2 bushels per acre.

Date of Basal Manuring 25th February.

Date of

Remarks (previous cropping, cultivations, etc.)

1952 Sugar Beet. (Tops carted off) (8 cwt. NH No. 1)  
 1951 Potatoes. (3 cwt. Kainit.)

Note Book No.

Box file. 20. r.

Yield of Grain (86% D.M.)

Treatment:-

Yield Sacks per Acre

Control (No nitrogen)	9.6
2 cwt N/C on Seed-bed	12.0
1 cwt " " " + 1 cwt as Top-Dressing	12.9
4 cwt N/C on Seed-bed	13.6
2 cwt " " " + 2 cwt as Top-Dressing	15.2
6 cwt N/C on Seed-bed	14.8
3 cwt N/C " " + 3 cwt as Top-Dressing	16.6
Significant Difference	0.7

	<u>Seed-Bed Dressing</u>	<u>Split Dressing</u>	<u>Means</u>
Control	9.6	9.6	9.6
2 cwt N/C	12.0	12.9	12.5
4 cwt N/C	13.6	15.2	14.4
6 cwt N/C	14.8	16.6	15.7
Means	13.5	14.9	

Summary of Germination and Tiller Counts

TREATMENT:	Plants germinating per/ft. of row	No. of Ears at harvest/plant germ.	Ears/foot at harvest	Ear Wt. at harvest <del>grams</del>	Ear Wt. %
0	20.5	1.1	21.9	<del>0.68</del>	100
1/1	21.0	1.1	22.6	<del>0.88</del>	129.4
2/0	20.2	1.1	21.5	<del>0.87</del>	127.9
2/2	21.1	1.1	23.0	<del>1.02</del>	150.0
4/0	21.0	1.1	23.3	<del>0.91</del>	133.8
3/3	22.0	1.1	24.7	<del>1.04</del>	152.9
6/0	20.6	1.2	25.4	<del>0.91</del>	133.8
Sig. Difference Coefficient of Variation	N.S.		1.5		
	8.8%		5.5%		

Comparisons of Total Applications

0	20.5	1.1	21.9	<del>0.68</del>	100
2	20.6	1.1	22.1	<del>0.88</del>	128.7
4	21.1	1.1	23.2	<del>0.97</del>	141.9
6	21.3	1.2	25.1	<del>0.98</del>	143.4

Split v Unsplit Dressings

Split	21.4	1.1	23.4	<del>0.92</del>	144.1
Unsplit	20.6	1.1	23.4	<del>0.90</del>	131.8