

Serial No.

F.R. 35

FIELD EXPERIMENTS 19 56Crop: **Spring Wheat**Field: **17 acres**Experiment: **Nitrogen, Row-width, Seedrate Trial.**

Treatments & Layout:

**3 x 2 x 2 partially compounded factorial trial with 3 true replications
(6 sub-blocks).**

All combinations of:-

Seedrate (1).	1 1/2 bushels per acre.
(2).	2 1/2 " " "
(3).	3 1/2 " " "
Row-width (1).	4"
(2).	8"
Nitrogen (1).	3cwt. nitro-chalk, half on seedbed and half as top-dressing.
(2).	6cwt. " " " " " " " " " " " "

~~Plot Size~~

Manuring with dates of:

12th March. 5cwt. of Fishers 37 per acre. (0:0:16)
13th March. Treatment seedbed dressings of nitro-chalk applied.
2nd May. Treatment top-dressings of nitro-chalk applied.

Plot size:- Treatment 3yds. x 60yds. Harvest:- 18 rows at 4" or 9 rows at 8"

Date of Drilling: 13th March.

Variety: **Atle.**Seed Rate: **x 48yds.
as above.**

Date of germination counts:-

25th April.

Date of straw heights:-

7th August.

Date of harvest:-

17th August.

Remarks (previous cropping, cultivations, etc.)

1955. Sugar beet.

1954. Vining peas followed by white turnips.

1953. Oats.

7th May. Trial sprayed with phenoxyloene plus.

19th May. Brown aphid observed in large numbers on spring wheats.

Note Book No.

Results of Spring Wheat Nitrogen, Row-width x Seedrate Trial, 1956

Yield of grain @ 80% d.m. in sacks per acre.

	SEEDRATE			MEAN	NITRO-CHALK	
	1½ bushels	2½ bushels	3½ bushels		3 cwt.	6 cwt.
Row-width 4"	9.5	10.5	10.5	10.2	10.0	10.4
8"	9.5	9.7	9.7	9.5	9.4	9.6
MEAN	9.4	10.1	10.1	9.8	9.7	10.0
Nitro-chalk 3cwt.	9.3	10.1	9.7	9.7		
6cwt.	9.5	10.1	10.4	10.0		

Significant Differences for Means:-
 Seedrate N.S.
 Nitrogen N.S.
 Row-width 0.5
 N.S. Coeff. of var. 7.9%

YIELD PER SQUARE FOOT.

	SEEDRATE			MEAN	NITRO-CHALK	
	1½ bushels	2½ bushels	3½ bushels		3cwt.	6cwt.
Row-width 4"	42.3	45.7	57.6	48.5	47.9	49.2
8"	39.4	44.7	51.8	45.3	43.7	46.9
MEAN	40.8	45.2	54.7	46.9	45.8	48.0
Nitro-chalk 3cwt.	40.7	45.2	51.4	45.8		
6cwt.	41.0	45.2	57.9	48.0		

Significant Differences for Means:-
 Seedrate 5.0
 Nitrogen N.S.
 Row-width N.S.
 N.S. Coeff. of var. 12.4%

Treatment	Plants germinating per sq. ft.	Pods per sq. ft.	Straw Heights	1,000 grain weights (gr.)
1½ bushels	22.5	40.8	3'5"	37.6
2½ bushels	43.1	45.2	3'5"	37.2
3½ bushels	52.7	54.7	3'5"	36.5
SIG. DIFF.	1.1	5.0	-	-
4" rows	41.8	48.5	3'4"	37.3
8" rows	37.0	45.3	3'5"	36.8
SIG. DIFF.	N.S.	N.S.	-	-
3cwt. N.O.	40.7	45.8	3'5"	37.1
6cwt. N.O.	40.5	48.0	3'5"	37.1
SIG. DIFF.	N.S.	N.S.	-	-