

Serial No.

FIELD EXPERIMENTS 19 55

Crop: Spring Wheat

Field: Bonetan Hyms

Experiment: Nitrogen, Row-width, Seedrate Trial.

Treatments & Layout: 3 x 3 x 3 partially compound factorial trial with 3 true replications (6 sub-blocks).

All combinations of:-

Seedrate:-	1)	1	Bushels per acre.
	2)	"	"
	3)	"	"
Row-width:-	1)	1	ft.
	2)	2	"
	3)	3	"
Nitrogen:-	1)	3 cwt	Nitro-chalk, half on seedbed and half as top-dressing
	2)	6 cwt	" " " " " " " " " "

Plot Size: Treatments: 70 yd. x 3 yd. Harvest: 60 yd. x 2 yd.

Manuring with dates of:

15th March:- 0.4 lb. 16-16 compound fertilizer (Fisons 37) applied to trial area at 6 cwt per acre.
 18th March:- Treatment seedbed dressings of F.C. applied.
 1st May:- Treatment top-dressings of F.C. applied.

Date of Drilling: 17th March Variety: Atlas Seed Rate: as above.

Date of Germination Counts:- 29th April.

Date of Plant and Tiller Counts:- 3rd July.

Date of Ear Counts:- 27th July.

Date of Harvest:- 25th August.

Remarks (previous cropping, cultivations, etc.)

1954 Winter Wheat
 1953 Potatoes
 1952 Barley

Trial was sprayed with DDT (Hexoxylene Plus).

Samples of grain were sent to the Institute of Millers for quality estimations.

Note Book No.

Summary of Results

Yield of Grain (86% D.M.) in Sacks per Acre

		Secrate			Mean	Nitro-Chalk	
		1/2 Bushels	2/3 Bushels	3/4 Bushels		3 out	6 out
Row	4"	9.6	8.7	7.8	8.7	8.0	9.4
Width	8"	9.3	8.5	7.4	8.4	7.7	9.1
Mean		9.5	8.6	7.6	8.5	7.9	9.2
Nitro-Chalk	3 out	8.8	7.9	6.9	7.9		
	6 out	10.1	9.3	8.3	9.2		

Significant Differences for Means-

Secrate:- 0.6
Nitrogen:- 0.5
Row-Width:- 11.2

Coefficient of Variation = 3.6%

Mean per Square Foot

		Secrate			Mean	Nitro-Chalk	
		1/2 Bushels	2/3 Bushels	3/4 Bushels		3 out	6 out
Row	4"	37.0	32.3	29.7	32.4	29.7	33.0
Width	8"	35.2	27.6	28.9	28.5	25.6	25.0
Mean		36.1	29.0	29.3	29.4	27.3	29.5
Nitro-Chalk	3 out	33.4	29.3	28.3	27.3		
	6 out	32.8	29.6	28.3	29.5		

Treatment	Plants Germinating per sq. foot	Plants and Tillers per sq. foot	Tillers per Plant	Bars per sq. foot	Straw Heights	1000 Grain Weights (gr)
1/2 Bushels	27.5	26	224	2.2	3' 3 1/2"	29.10
2/3 Bushels	29.6	28	227	2.7	3' 3 1/2"	26.40
3/4 Bushels	27.8	27	218	2.0	3' 2 1/2"	25.44
4" Rows	28.6	25	130	2.9	3' 3 1/2"	26.43
8" Rows	21.3	23	110	2.6	3' 3"	27.63
3 out N.C.	25.0	26	203	2.3	3' 3 1/2"	26.37
6 out N.C.	24.9	22	132	3.1	3' 3 1/2"	27.69