

FIELD EXPERIMENTS 1958

Crop: Potatoes

Field: Heater Piece

Experiment: Control of leaf roll and rugose mosaic (Virus Y) by insecticide spraying.

Treatments &amp; Layout: 5 x 5 Latin square (4th year).

DDT Emulsion at 2 lb of active ingredient per acre.

1. Sprayed 6 times:- First at 100% emergence, second after 10 days and last 4 at fortnightly intervals.
2. Sprayed on second and fourth occasions.
3. Sprayed on second occasions.
4. Sprayed on fourth occasion.
5. Unsprayed.

Plot Size: Treatment:- 33 rows @ 30" x 25 yds.

Harvest:- 4 rows x 23 yards.

Manuring with dates of:

12 loads/acre F.Y.M.

10 cwts/acre of 10:10:15 compound fertiliser placed by Robot Planter.

Date of drilling: April 10th Variety: King Edward Seed Rate: 1 Ton/acre.

Date of Sprays: (1) June 6th (2) June 16th (3) June 30th.

Date of Harvest:- October 16th (Whitsted with bagging off device).

Date of Riddling:- November 26th  $1\frac{1}{4}$ " top  $1\frac{1}{2}$ " bottom

Remarks (previous cropping, cultivations, etc.)

1957 Seed Barley

1956 Sugar Beet

1955 Spring Oats

Sprays were discontinued after 30th June as it was decided to terminate the trial by taking yield data without saving any seed.

Note Book No.

Results Potato Virus Spraying Trial 18 Acres 1958

Yields of Tubers in tons/acre

Treatment	Total Tubers	Ware	Chats & Seed
1. Sprayed 6 times	8.39	7.64	0.75
2. Sprayed 2nd and 4th occasion	8.52	7.73	0.79
3. Sprayed 2nd occasion	8.35	7.54	0.81
4. Sprayed 4th occasion	6.94	6.21	0.73
5. No Spray	7.99	7.16	0.83
Sig. Difference	<del>0.82</del>	<del>0.91</del>	N.S.
Coeff. of Var.	7.4%	9.1%	14.2%

Virus Counts % of Plots infected June

Treatment	Leaf Roll	Rugose (y) Mosaic
1 6	1.47	5.34
2 2+4	3.93	9.80
3 2nd	11.53	3.80
4 4th	6.53	19.10
5 Nil	13.26	5.13