

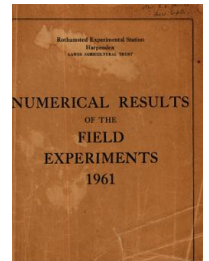
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED  
RESEARCH

# Yields of the Field Experiments 1961

[Full Table of Content](#)



## 61/R/DF/1 Sugar Beet - Control of Virus Spread (Insecticides)

### Rothamsted Research

Rothamsted Research (1962) *61/R/DF/1 Sugar Beet - Control of Virus Spread (Insecticides)* ; Yields Of The Field Experiments 1961, pp 133 - 134 - DOI: <https://doi.org/10.23637/ERADOC-1-182>

61/Df/1.1

## SUGAR BEET

Control of virus spread by insecticides - Fosters Corner 1961.

Design:  $4 \times 4$  Latin square.

Area of each plot: 0.0560 acres. Area harvested: 0.0121 acres.

### Treatments:

Unsprayed (0)

Granular systemic insecticide\* harrowed into seedbed at 40 lb (2 lb active ingredient) per acre (D);

Sprayed with demeton methyl at 12 fluid oz in 60 gallons per acre on June 14,\* 1961, after receipt of spray warning (M);

Foliar application\* at 30 lb ( $1\frac{1}{2}$  lb active ingredient) per acre (F).

\*O, O-diethyl-S-2-(ethylthio) ethylphosphorodithioate.

Basal dressing per acre: 3 cwt agricultural salt and 6 cwt compound fertiliser (16% N, 9%  $P_2O_5$ , 9%  $K_2O$ ).

Cultivations, etc.: Ploughed: Sept 22, 1960. Salt applied: Feb 16, 1961. Ploughed 2nd time: Feb 17. Basal compound fertiliser applied: Mar 20. Granular systemic insecticide broadcast: Apr 11. Seed drilled at  $9\frac{1}{2}$  lb per acre: Apr 13. Singled: June 5. Lifted: Oct 23. Variety: Klein E. Previous crop: Spring wheat.

Note: Regular counts of aphids numbers and estimates of incidence of virus yellows were made.

Standard error per plot.

Roots (washed): 0.862 tons per acre or 5.3% (6 d.f.)

Total sugar: 3.03 cwt per acre or 5.7% (6 d.f.)

61/Df/1.2

Summary of Results

		<u>Insecticide</u>				
		0	D	M	F	Mean
<u>Roots (washed): tons per acre</u>						
Mean	( $\pm 0.431$ )	15.92	17.13	16.11	16.11	16.32
Increase	( $\pm 0.610$ )		1.21	0.19	0.19	
<u>Sugar percentage</u>						
Mean		16.2	16.4	16.0	16.6	16.3
Increase			+0.2	-0.2	+0.4	
<u>Total sugar: cwt per acre</u>						
Mean	( $\pm 1.52$ )	51.6	56.3	51.6	53.5	53.2
Increase	( $\pm 2.14$ )		4.7	0.0	1.9	

Insecticide

0 = Unsprayed

D = Granular systemic insecticide\* harrowed into seedbed at 40 lb (2 lb active ingredient) per acre

M = Sprayed with demeton methyl at 12 fluid oz in 60 gallons per acre on June 14, 1961, after receipt of spray warning

F = Foliar application\* at 30 lb ( $1\frac{1}{2}$  lb active ingredient) per acre.

\*O,O-diethyl-S-2-(ethylthio)ethylphosphorodithioate.