

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

Numerical Results of the Field Experiments 1968

[Full Table of Content](#)



68/C/34 Fumigants and Irrigation - Barley

Rothamsted Research

Rothamsted Research (1970) *68/C/34 Fumigants and Irrigation - Barley* ; Numerical Results Of The Field Experiments 1968, pp 257 - 260 - DOI: <https://doi.org/10.23637/ERADOC-1-58>

68/c/34.1

FUMIGANTS AND IRRIGATION

(WCR)

The effect of fumigants on the control of *Pratylenchus* spp. in barley - Woburn Butt Close Series III, 1st year.

Design: 3 blocks of 4 plots, with fumigants on quarter plots and nitrogen on eighth plots with split plot confounding.

Area of each sub plot: 0.0050. Area harvested: 0.0020.

Treatments: All combinations of:-

Whole plots: 1. Irrigation: None (O), full irrigation (I).

Quarter plots: 2. Fumigants: None (O), chloropicrin at 400 lb injected at 12 inch spacings (C), D-D at 33 1/2 gals injected at 12 inch spacings (D), Temik at 6 lb a.i. (60 lb granules) combine drilled (T).

Eighth plots: 3. Nitrogen: None (NO), 0.4 (N1), 0.8 (N2), 1.2 (N3) cwt N as 'Nitro-Chalk'.

Basal applications: 270 lb (0:20:20). Weedkiller: Ioxynil/mecoprop (Atril C at 5 pts in 25 gals).

Cultivations, etc.: Ploughed: 19 Sept, 1967. D-D injected: 30 Oct. Chloropicrin injected: 7 Nov. Magnesian limestone applied at 22 1/2 cwt: 8 Nov. Basal PK applied: 4 Mar, 1968. Seed at 140 lb, and Temik combine drilled: 5 Mar, 'Nitro-Chalk' applied: 11 Mar. Weedkiller applied: 26 Apr. Irrigation applied at 0.5 inches: 14 June, and 0.75 inches: 20 June. Combine harvested: 21 Aug. Variety: Maris Badger. Previous crops: Spring wheat 1966, barley 1967.

NOTE: Crop and soil samples taken at intervals through the growing season for nematode counts.

Standard error per plot (pooled).

Grain: 4.05 or 16.0% (62 d.f.)

68/C/34.2

SUMMARY OF RESULTS

GRAIN

	O	C	D	T	Mean
	(±1.17)				(±0.58)
O	25.6	30.8	23.6	22.3	25.6
I	25.1	29.8	23.2	21.9	25.0
Mean (±0.83)	25.4	30.3	23.4	22.1	25.3
	NO	N1	N2	N3	
	(±1.17)				
O	13.6	29.1	30.9	28.6	
I	14.2	28.4	29.7	27.8	
	(±1.65)				
O	10.0	27.4	32.6	31.4	
C	29.4	32.1	30.8	28.9	
D	9.3	29.1	29.4	25.9	
T	6.9	26.5	28.5	26.7	
Mean (±0.83)	13.9	28.8	30.3	28.2	

Mean D.M. %: 82.9

68/c/34.3

STRAW					
	O	C	D	T	Mean
O	25.2	32.8	26.5	23.9	27.1
I	28.3	33.0	26.1	25.4	28.2
Mean	26.8	32.9	26.3	24.7	27.7
	NO	N1	N2	N3	
O	17.2	31.5	33.2	26.6	
I	17.8	32.4	33.8	28.9	
O	11.2	28.5	36.5	30.9	
C	31.4	36.4	33.9	29.9	
D	15.2	34.0	31.8	24.3	
T	12.2	29.0	31.7	25.8	
Mean	17.5	32.0	33.5	27.7	

Mean D.M. %: 86.9

