

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 1969

[Full Table of Content](#)



69/R/CS/44 - Break Crops & Wheat - Cereals & Legumes

Rothamsted Research

Rothamsted Research (1970) *69/R/CS/44 - Break Crops & Wheat - Cereals & Legumes* ; Numerical Results Of The Field Experiments 1969, pp 218 - 219 - **DOI:**

<https://doi.org/10.23637/ERADOC-1-96>

BREAK CROPS AND WHEAT

(69/R/CS/44)

Cereals and legumes, Long Hoos III 1969, the first year.

Design: 3 randomised blocks of 12 plots.

Area of each plot: 0.0415. Area harvested: Barley - 0.0275,
Oats - 0.0276. Beans - 0.0259, Clover - 0.0099.

Treatments: Break crops:- Spring beans (2 plots per block), clover
(2 plots per block) and all combinations of:-
1. Break crops: Barley (B), oats (O).
2. Undersown: None (O), Trefoil (T).
3. Nitrogen: 0.4 (N1), 0.8 (N2) cwt as 'Nitro-Chalk' in the seedbed.

Basal and other applications: 450 lb (0:20:20) across the plough
furrow. Weedkillers: Paraquat at 0.75 lb ion in 20 gals.
MCPB at 2 lb a.e. in 30 gals to undersown plots of barley
and oats and to clover. MCPA at 38 oz and dicamba at 1.28 oz
in 20 gals to barley and oats. Insecticide: Phorate at
28 oz in granules to beans.

Cultivations, etc.: Paraquat applied: 28 Sept, 1968. Ploughed:
8 Nov. PK basal compound applied: 26 Mar, 1969.
Barley: Seed drilled at 140 lb: 26 Mar, 1969. Trefoil undersown
at 30 lb: 28 Mar. 'Nitro-Chalk' applied: 2 Apr. MCPB applied:
22 May. MCPA/dicamba applied: 23 May. Combine harvested:
13 Aug. Variety: Zephyr.
Oats: Seed drilled at 160 lb: 26 Mar, 1969. Trefoil undersown
at 30 lb: 28 Mar. 'Nitro-Chalk' applied: 2 Apr. MCPB applied:
22 May. MCPA/dicamba applied: 23 May. Combine harvested:
20 Aug. Variety: Manod.
Spring beans: Seed drilled at 200 lb: 26 Mar, 1969. Insecticide
applied: 18 June. Combine harvested: 10 Sept. Variety:
Maris Bead.
Clover: Seed sown at 30 lb: 28 Mar, 1969. MCPB applied:
22 May. Cut once: 14 Aug. Variety: Broad Red (inoculated seed).
Previous crops: Spring beans 1967, winter wheat 1968. Variety
of trefoil: English.

NOTE: Barley plots were sampled in summer for eyespot (*Cercospora herpotrichoides*) and take-all (*Ophiobolus graminis*). Trefoil
and clover were sampled before ploughing in and estimates made
of the dry matter and N per acre.

Standard errors per plot.

Barley, Grain, cwt: 3.51 or 8.2% (6 d.f.)

Oats, Grain, cwt: 0.65 or 1.6% (6 d.f.)

SUMMARY OF RESULTS

	O	T	Mean
BARLEY, GRAIN: CWT			
	(±2.03)		(±1.43)
N1	40.3	40.6	40.4
N2	45.5	44.5	45.0
Mean (±1.43)	42.9	42.5	42.7
OATS, GRAIN: CWT			
	(±0.38)		(±0.27)
N1	41.0	39.8	40.4
N2	43.8	43.9	43.9
Mean (±0.27)	42.4	41.8	42.1

SPRING BEANS, GRAIN: CWT

Mean 24.5

RED CLOVER, DRY MATTER: CWT

1ST AND ONLY CUT

Mean 46.2

Mean D.M. %: Barley: 82.5
 Oats: 81.2
 Spring beans: 80.1
 Red clover: 21.7