ROTHAMSTED RESEARCH

Yields of the Field Experiments 1976

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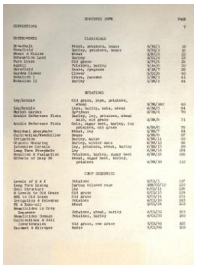

76/W/CS/181 Green Manure - Barley

Rothamsted Research

Rothamsted Research (1977) *76/W/CS/181 Green Manure - Barley ;* Yields Of The Field Experiments 1976, pp 235 - 239 **- DOI: https://doi.org/10.23637/ERADOC-1-15**

76/R/CS/180 IRRIGATED PLOTS ONLY

GRAIN TONNES/HECTARE

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE				
	BENOMYL FENITROT	N PIRIMICA	ALDICARB PIRIMICA	DIELDRIN PIRIMICA
SED	0.166	0.166	0.166	0.166

TABLE				
	BENOMYL PIRIMICA	FENITROT PIRIMICA	N ALDICARB DIELDRIN	N ALDICARB BENOMYL
SED	0.166	0.166	0.235	0.235

TABLE				
	ALDICARB DIELDRIN BENOMYL	N DIELDRIN FENITROT	ALDICARB DIELDRIN FENITROT	N BENOMYL FENITROT
SED	0.235	0.235	0.235	0.235

TABLE				
	ALDICARB BENOMYL FENITROT	DIELDRIN BENOMYL FENITROT	N ALDICARB PIRIMICA	N DIELDRIN PIRIMICA
SED	0.235	0.235	0.235	0.235

TABLE				
	N BENOMYL PIRIMICA	ALDICARB BENOMYL PIRIMICA	DIELDRIN BENOMYL PIRIMICA	N FENITROT PIRIMICA
SED	0.235	0.235	0.235	0.235

TABLE		
	ALDICARB FENITROT PIRIMICA	DIELDRIN FENITROT PIRIMICA
SED	0.235	0.235

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP.SP	19	0.469	15.4

GRAIN MEAN DM% 83.1

SUB PLOT AREA HARVESTED 0.00293

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76/W/CS/181

GREEN MANURE

Object: To study the effects of a green manure sown at different dates and interactions with fertiliser nitrogen to the following crop - Woburn Gt. Hill III, Lansome III.

Sponsors: G.V. Dyke, G.E.G. Mattingly.

The first year, barley.

Design: 4 series (for future additional tests) each of 24 plots. All sown to barley in 1976:
Series I and II Each 12 replicates of 2 plots, fully randomised.
Series III No treatments in 1976.
Series IV 2 replicates of 2 x 6 fully randomised.

Whole plot dimensions: 4.26 x 6.10.

Treatments: Series I and II:-

TREFOIL Methods of sowing trefoil:

NONE Not sown (12 plots)
U SOWN Undersown in spring (12 plots)

Series IV: All combinations of:-

1. TREFOIL Methods of sowing trefoil:

NONE Not sown (duplicated)
U SOWN Undersown in spring (duplicated)

2. N Nitrogen fertiliser (kg N):

0	None
30	30
60	60
90	90
120	120
150	150

NOTE: Trefoil was also sown on certain plots on 20 July. This treatment has been ignored in the analysis because it could not affect yield of mature barley.

Standard applications: Manures: Gt. Hill III, Series I & II: (20:14:14) at 450 kg combine drilled. Lansome III, Series IV: Magnesian limestone at 7.5 t, (0:20:20) at 350 combine drilled. Weedkiller: All Series:- Dinoseb amine at 2.1 kg in 560 l.

Seed: Julia, dressed with ethirimol, sown at 160 kg.
English trefoil, inoculated with Rhizobium, sown at 27 kg.

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Cultivations, etc.:-
Gt. Hill III, Series I & II: Deep-tine cultivated twice: 16 Sept, 17 Sept, 1975. Ploughed: 6 Nov. Spring-tine cultivated: 1 Mar, 1976. Seed sown: 5 Mar.
Lansome III, Series IV: Magnesian limestone applied: 2 Sept, 1975. Ploughed: 9 Oct. Spring-tine cultivated with crumbler and barley sown: 22 Mar, 1976. N applied: 23 Mar.
All Series: Weedkiller applied: 4 May. Trefoil undersown and harrowed in: 10 May. Combine harvested: 28 July.

NOTE: Series III had no treatments, receiving basal instead of test N in error. This series has since been abandoned. Series IV was sown and treated in place of Series III.

SERIES I

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

TREFOIL	NONE	U SOWN	MEAN
	2.63	2.95	2.79

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	TREFOIL
SED	0.288

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
WP	22	0.706	25.3

GRAIN MEAN DM% 89.4

STRAW TONNES/HECTARE

***** TABLES OF MEANS *****

TREFOIL	NONE	U SOWN	MEAN
	1.52	1.89	1.70

STRAW MEAN DM% 90.7

PLOT AREA HARVESTED 0.00186

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76/W/CS/181

SERIES II

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

TREFOIL	NONE	U SOWN	MEAN
	3.59	3.70	3.64

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	TREFOIL
SED	0.189

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
WP	22	0.464	12.7

GRAIN MEAN DM% 88.4

STRAW TONNES/HECTARE

***** TABLES OF MEANS *****

TREFOIL	NONE	U SOWN	MEAN
	2.29	2.39	2.34

STRAW MEAN DM% 91.9

PLOT AREA HARVESTED 0.00186

SERIES III

GRAIN TONNES/HECTARE

GRAND MEAN 3.38

GRAIN MEAN DM% 87.3

STRAW TONNES/HECTARE

GRAND MEAN 2.14

STRAW MEAN DM% 93.7

PLOT AREA HARVESTED 0.00186

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76/W/CS/181

SERIES IV

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

N / TREFOIL	0	30	60	90	120	150	MEAN
NONE	0.23	0.57	0.56	0.79	0.53	0.80	0.58
U SOWN	0.27	0.47	0.63	0.56	0.63	0.50	0.51
MEAN	0.25	0.52	0.60	0.68	0.58	0.65	0.55

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	TREFOIL	N	TREFOIL N
SED	0.146	0.253	0.358

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
WP	12	0.358	65.6

GRAIN MEAN DM% 86.4

STRAW TONNES/HECTARE

***** TABLES OF MEANS *****

N / TREFOIL	0	30	60	90	120	150	MEAN
NONE	0.20	0.47	0.69	0.67	0.75	0.84	0.60
U SOWN	0.17	0.53	0.78	0.67	0.70	0.86	0.62
MEAN	0.18	0.50	0.74	0.67	0.72	0.85	0.61

STRAW MEAN DM% 90.6

PLOT AREA HARVESTED 0.00173

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