

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 1985

[Full Table of Content](#)



85/R/CS/140 Chemical Reference Plots - S. Barley

Rothamsted Research

Rothamsted Research (1986) *85/R/CS/140 Chemical Reference Plots - S. Barley* ; Yields Of The Field Experiments 1985, pp 118 - 122 - DOI: <https://doi.org/10.23637/ERADOC-1-19>

85/R/CS/140

CHEMICAL REFERENCE PLOTS

Object: To study the persistence in soil of agricultural chemicals applied annually, singly and in combination and their effects on soil microflora and on yield of continuous s. barley - Long Hoos V 3.

Sponsors: G.G. Briggs, R. Macdonald.

The 12th year, s. barley.

For previous years see 74-84/R/CS/140.

Design: Single replicate of 32 plots.

Whole plot dimensions: 4.06 x 4.57.

Treatments, applied cumulatively except as stated:

All combinations of:-

1. WEEDKLLR Weedkiller in autumn:
 NONE None
 GLYPHOS Glyphosate at 1.4 kg to barley stubble each autumn since 1979.
2. FUNGCIDE(1) Fungicide in autumn:
 NONE None
 TRIADIM Triadimefon at 0.25 kg in autumn 1981, 1982 and 1984, 0.28 kg in autumn 1983.
3. FUNGCIDE(2) Fungicide in spring:
 NONE None
 BENOMYL Benomyl at 4 kg to seedbed
4. INSECTCDE Insecticide:
 NONE None
 CHLORFEN Chlorfenvinphos at 2 kg to the seedbed
5. NEMACIDE Nematicide:
 NONE None
 ALDICARB Aldicarb at 6 kg to the seedbed as granules

NOTE: Glyphosate and triadimefon were applied in 220 l on 26 Sept, 1984 and 17 Oct respectively. Other treatments were applied on 19 Mar, 1985.

85/R/CS/140

Basal applications: Manures: 'Nitro-Chalk' (27.5% N) at 550 kg.
Weedkillers: Mecoprop, bromoxynil and ioxynil (as 'Brittox' at 3.5 l) in 220 l.

Seed: Klaxon, seed not dressed, sown at 160 kg.

Cultivations, etc.:- Ploughed: 1 Nov, 1984. N applied, spring-tine cultivated: 18 Mar, 1985. Power harrowed, seed sown: 19 Mar. Weedkillers applied: 10 May. Combine harvested: 23 Aug.

GRAIN TONNES/HECTARE

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

FUNGCIDE(1)	NONE	TRIADIM	MEAN
WEEDKLLR			
NONE	6.92	7.33	7.13
GLYPHOS	7.04	7.24	7.14
MEAN	6.98	7.29	7.14
FUNGCIDE(2)	NONE	BENOMYL	MEAN
WEEDKLLR			
NONE	7.04	7.21	7.13
GLYPHOS	7.23	7.06	7.14
MEAN	7.13	7.14	7.14
FUNGCIDE(2)	NONE	BENOMYL	MEAN
FUNGCIDE(1)			
NONE	7.00	6.97	6.98
TRIADIM	7.27	7.30	7.29
MEAN	7.14	7.14	7.14
INSCTCDE	NONE	CHLORFEN	MEAN
WEEDKLLR			
NONE	7.01	7.24	7.13
GLYPHOS	7.39	6.90	7.14
MEAN	7.20	7.07	7.14
INSCTCDE	NONE	CHLORFEN	MEAN
FUNGCIDE(1)			
NONE	7.16	6.80	6.98
TRIADIM	7.24	7.34	7.29
MEAN	7.20	7.07	7.14

85/R/CS/140

GRAIN TONNES/HECTARE

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

INSCTCDE	NONE	CHLORFEN	MEAN	
FUNGCIDE(2)				
NONE	7.21	7.06	7.14	
BENOMYL	7.19	7.08	7.14	
MEAN	7.20	7.07	7.14	
NEMACIDE	NONE	ALDICARB	MEAN	
WEEDKLLR				
NONE	6.94	7.32	7.13	
GLYPHOS	7.18	7.11	7.14	
MEAN	7.06	7.21	7.14	
NEMACIDE	NONE	ALDICARB	MEAN	
FUNGCIDE(1)				
NONE	6.84	7.12	6.98	
TRIADIM	7.27	7.30	7.29	
MEAN	7.06	7.21	7.14	
NEMACIDE	NONE	ALDICARB	MEAN	
FUNGCIDE(2)				
NONE	7.10	7.17	7.14	
BENOMYL	7.01	7.26	7.14	
MEAN	7.06	7.21	7.14	
NEMACIDE	NONE	ALDICARB	MEAN	
INSCTCDE				
NONE	7.08	7.32	7.20	
CHLORFEN	7.04	7.10	7.07	
MEAN	7.06	7.21	7.14	
FUNGCIDE(1)	NONE		TRIADIM	
FUNGCIDE(2)	NONE	BENOMYL	NONE	BENOMYL
WEEDKLLR				
NONE	6.85	7.00	7.23	7.43
GLYPHOS	7.15	6.94	7.30	7.18
FUNGCIDE(1)	NONE		TRIADIM	
INSCTCDE	NONE	CHLORFEN	NONE	CHLORFEN
WEEDKLLR				
NONE	6.93	6.91	7.09	7.58
GLYPHOS	7.39	6.70	7.38	7.10

85/R/CS/140

GRAIN TONNES/HECTARE

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

FUNGCIDE(2)	NONE		BENOMYL	
INSCTCDE	NONE	CHLORFEN	NONE	CHLORFEN
WEEDKLLR				
NONE	6.93	7.15	7.09	7.34
GLYPHOS	7.48	6.97	7.29	6.82
FUNGCIDE(2)	NONE		BENOMYL	
INSCTCDE	NONE	CHLORFEN	NONE	CHLORFEN
FUNGCIDE(1)				
NONE	7.11	6.89	7.21	6.72
TRIADIM	7.30	7.24	7.17	7.43
FUNGCIDE(1)	NONE		TRIADIM	
NEMACIDE	NONE	ALDICARB	NONE	ALDICARB
WEEDKLLR				
NONE	6.72	7.12	7.15	7.51
GLYPHOS	6.97	7.12	7.39	7.09
FUNGCIDE(2)	NONE		BENOMYL	
NEMACIDE	NONE	ALDICARB	NONE	ALDICARB
WEEDKLLR				
NONE	6.92	7.16	6.95	7.48
GLYPHOS	7.28	7.17	7.08	7.04
FUNGCIDE(2)	NONE		BENOMYL	
NEMACIDE	NONE	ALDICARB	NONE	ALDICARB
FUNGCIDE(1)				
NONE	6.91	7.09	6.78	7.16
TRIADIM	7.30	7.24	7.25	7.36
INSCTCDE	NONE		CHLORFEN	
NEMACIDE	NONE	ALDICARB	NONE	ALDICARB
WEEDKLLR				
NONE	6.79	7.23	7.09	7.40
GLYPHOS	7.37	7.41	6.99	6.80
INSCTCDE	NONE		CHLORFEN	
NEMACIDE	NONE	ALDICARB	NONE	ALDICARB
FUNGCIDE(1)				
NONE	7.03	7.29	6.65	6.96
TRIADIM	7.12	7.35	7.42	7.25
INSCTCDE	NONE		CHLORFEN	
NEMACIDE	NONE	ALDICARB	NONE	ALDICARB
FUNGCIDE(2)				
NONE	7.13	7.28	7.08	7.05
BENOMYL	7.03	7.36	7.00	7.15

85/R/CS/140

GRAIN TONNES/HECTARE

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

MARGINS OF TWO FACTOR TABLES	0.124
TWO FACTOR TABLES	0.175
THREE FACTOR TABLES	0.247

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

STRATUM	DF	SE	CV%
WP	6	0.350	4.9

GRAIN MEAN DM% 83.6

PLOT AREA HARVESTED 0.00075