

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 1983

[Full Table of Content](#)



83/R/CS/279 Nematicides and Stem Nematodes - Lucerne

Rothamsted Research

Rothamsted Research (1984) *83/R/CS/279 Nematicides and Stem Nematodes - Lucerne* ; Yields Of The Field Experiments 1983, pp 165 - 173 - DOI: <https://doi.org/10.23637/ERADOC-1-44>

83/R/CS/279

NEMATICIDES AND STEM NEMATODE

Object: To study, on sites initially free from or infested by stem nematode (*Ditylenchus dipsaci*), the effects of nematicides on lucerne - Long Hoos V 5 (healthy) and Long Hoos IV 2 (infested).

Sponsor: A.G. Whitehead.

The second year, lucerne.

For previous year see 82/R/CS/279.

Design: On each site: 3 randomised blocks of 14 plots.

Whole plot dimensions: 1.2 x 3.7.

Treatments (applied to HEALTHY and INFESTED sites):

TREATMNT	Varieties, rates and methods of applying nematicides:
V 0	Vertus, untreated
V A1	Vertus, aldicarb at 1.5 kg in seed furrows in 1982
E 0	Europe, untreated
E A1	Europe, aldicarb at 1.5 kg in seed furrows in 1982
E A2	Europe, aldicarb at 3.0 kg in seed furrows in 1982
E A1 A1	Europe, aldicarb at 1.5 kg in seed furrows in 1982, repeated after each cut thereafter
E A1 T1	Europe, aldicarb at 1.5 kg in seed furrows in 1982, thiabendazole at 1.5 kg over the rows in spring 1983
E A2 T2	Europe, aldicarb at 3.0 kg in seed furrows in 1982, thiabendazole at 3.0 kg over the rows in spring 1983
E C1	Europe, carbofuran at 1.5 kg in seed furrows in 1982
E C2	Europe, carbofuran at 3.0 kg in seed furrows in 1982
E C1 T1	Europe, carbofuran at 1.5 kg in seed furrows in 1982, thiabendazole at 1.5 kg over the rows in spring 1983
E C2 T2	Europe, carbofuran at 3.0 kg in seed furrows in 1982, thiabendazole at 3.0 kg over the rows in spring 1983
E T1 T1	Europe, thiabendazole at 1.5 kg over the rows at sowing in 1982 and in spring 1983
E T2 T2	Europe, thiabendazole at 3.0 kg over the rows at sowing in 1982 and in spring 1983

NOTE: Aldicarb and carbofuran were applied as granules, thiabendazole in 7500 l by weeder bar.

Basal applications: Weedkiller: Propyzamide at 0.7 kg in 220 l.

Cultivations, etc.:-

Both sites: Top: 17 Jan, 1983. Weedkiller applied: 18 Jan. Cut: 13 June (healthy site), 14 June (infected site). Treatments applied: 24 June. Cut: 26 July. Treatments applied: 2 Aug. Cut: 26 Sept. Treatments applied: 12 Oct.

NOTE: The percentage of stems infected with stem nematode was assessed on the infected site only, in July.

83/R/CS/279 LONG HOOS V 5 (HEALTHY SITE)
 1ST CUT (13/6/83) DRY MATTER TONNES/HECTARE

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

TREATMNT	
V 0	6.00
V A1	5.28
E 0	6.03
E A1	6.83
E A2	6.45
E A1 A1	8.27
E A1 T1	6.80
E A2 T2	6.64
E C1	6.26
E C2	6.67
E C1 T1	7.10
E C2 T2	7.17
E T1 T1	7.85
E T2 T2	7.18
MEAN	6.75

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

TABLE	TREATMNT
-----	-----
SED	0.387

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

STRATUM	DF	SE	CV%
BLOCK.WP	26	0.474	7.0
1ST MEAN DM%	17.8		

83/R/CS/279 LONG HOOS V 5 (HEALTHY SITE)

2ND CUT (26/7/83) DRY MATTER TONNES/HECTARE

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

TREATMNT	
V 0	5.61
V A1	5.33
E 0	6.18
E A1	6.17
E A2	6.08
E A1 A1	6.31
E A1 T1	6.41
E A2 T2	6.04
E C1	6.11
E C2	6.26
E C1 T1	6.57
E C2 T2	5.96
E T1 T1	5.69
E T2 T2	5.84
MEAN	6.04

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

TABLE	TREATMNT
-----	-----
SED	0.480

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

STRATUM	DF	SE	CV%
BLOCK.WP	26	0.588	9.7
2ND MEAN DM%	25.6		

83/R/CS/279 LONG HOOS V 5 (HEALTHY SITE)

3RD CUT (26/9/83) DRY MATTER TONNES/HECTARE

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

TREATMNT	
V 0	1.55
V A1	1.76
E 0	2.11
E A1	1.83
E A2	1.91
E A1 A1	2.40
E A1 T1	2.16
E A2 T2	1.40
E C1	2.08
E C2	2.24
E C1 T1	2.33
E C2 T2	1.66
E T1 T1	2.12
E T2 T2	2.01
MEAN	1.97

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

TABLE	TREATMNT
-----	-----
SED	0.211

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

STRATUM	DF	SE	CV%
BLOCK.WP	26	0.258	13.1
3RD CUT MEAN DM%	24.4		

83/R/CS/279 LONG HOOS V 5 (HEALTHY SITE)
TOTAL OF 3 CUTS DRY MATTER TONNES/HECTARE

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

TREATMNT	
V 0	13.16
V A1	12.37
E 0	14.32
E A1	14.83
E A2	14.44
E A1 A1	16.98
E A1 T1	15.36
E A2 T2	14.09
E C1	14.45
E C2	15.17
E C1 T1	16.00
E C2 T2	14.79
E T1 T1	15.66
E T2 T2	15.03
MEAN	14.76

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

TABLE	TREATMNT
-----	-----
SED	0.732

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

STRATUM	DF	SE	CV%
BLOCK.WP	26	0.897	6.1
TOTAL OF 3 CUTS MEAN DM%	22.6		
PLOT AREA HARVESTED	0.00045		

83/R/CS/279 LONG HOOS IV 2 (INFESTED SITE)

1ST CUT (14/6/83) DRY MATTER TONNES/HECTARE

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

TREATMNT	
V 0	6.41
V A1	5.43
E 0	6.78
E A1	6.14
E A2	5.69
E A1 A1	7.86
E A1 T1	6.53
E A2 T2	8.13
E C1	7.72
E C2	8.42
E C1 T1	7.26
E C2 T2	8.65
E T1 T1	4.58
E T2 T2	7.39
MEAN	6.93

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

TABLE	TREATMNT
-----	-----
SED	0.618

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

STRATUM	DF	SE	CV%
BLOCK.WP	26	0.757	10.9
1ST MEAN DM%			19.5

83/R/CS/279 LONG HOOS IV 2 (INFESTED SITE)
2ND CUT (26/7/83) DRY MATTER TONNES/HECTARE

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

TREATMNT	
V 0	4.95
V A1	3.94
E 0	4.16
E A1	3.61
E A2	3.43
E A1 A1	5.91
E A1 T1	4.62
E A2 T2	4.88
E C1	5.47
E C2	5.64
E C1 T1	4.66
E C2 T2	4.86
E T1 T1	3.61
E T2 T2	4.37
MEAN	4.58

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

TABLE	TREATMNT
-----	-----
SED	0.556

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

STRATUM	DF	SE	CV%
BLOCK.WP	26	0.682	14.9
2ND MEAN DM%			24.8

83/R/CS/279 LONG HOOS IV 2 (INFESTED SITE)
3RD CUT (26/9/83) DRY MATTER TONNES/HECTARE

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

TREATMNT	
V 0	1.62
V A1	1.03
E 0	0.90
E A1	0.50
E A2	0.53
E A1 A1	1.53
E A1 T1	0.63
E A2 T2	0.75
E C1	0.95
E C2	1.06
E C1 T1	0.98
E C2 T2	0.49
E T1 T1	1.30
E T2 T2	0.56
MEAN	0.92

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

TABLE	TREATMNT
-----	-----
SED	0.386

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

STRATUM	DF	SE	CV%
BLOCK.WP	26	0.473	51.6
3RD CUT MEAN DM%	28.1		

83/R/CS/279 LONG HOOS IV 2 (INFESTED SITE)

TOTAL OF 3 CUTS DRY MATTER TONNES/HECTARE

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

TREATMNT	
V 0	12.98
V A1	10.40
E 0	11.84
E A1	10.26
E A2	9.65
E A1 A1	15.30
E A1 T1	11.78
E A2 T2	13.75
E C1	14.14
E C2	15.13
E C1 T1	12.91
E C2 T2	13.99
E T1 T1	9.49
E T2 T2	12.33
MEAN	12.43

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

TABLE	TREATMNT
-----	-----
SED	1.106

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

STRATUM	DF	SE	CV%
BLOCK.WP	26	1.354	10.9
TOTAL OF 3 CUTS MEAN DM%	24.1		
PLOT AREA HARVESTED	0.00045		