

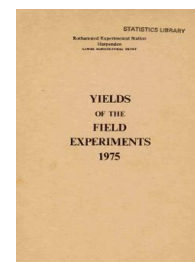
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1975

[Full Table of Content](#)



75/ R/CS/13 - N Levels to Old Grass - Old Grass

Rothamsted Research

Rothamsted Research (1976) *75/ R/CS/13 - N Levels to Old Grass - Old Grass ; Yields Of The Field Experiments 1975*, pp 150 - 152 - DOI: <https://doi.org/10.23637/ERADOC-1-141>

75/R/CS/13

N LEVELS TO OLD GRASS

Object: To study the effects of a range of nitrogen rates on yield and botanical composition of very old permanent pasture given a single dressing of P and K annually. N fixed by legumes is estimated and the effect of treatments on nutrients available in the soil is also studied - Park Grass Old Plot 6.

Sponsor: A.E. Johnston.

The eleventh year, old grass.

For previous years see 65/C/33(t), 66/C/14, 67/C/10(t), 68/C/8(t), 69/R/CS/13(t), 70/R/CS/13(t), 71/R/CS/13, 72/R/CS/13(t) and 73-74/R/CS/13.

Design: 4 randomised blocks of 10 plots.

Whole plot dimensions: 1.83 x 10.1.

Treatments: Fertiliser nitrogen (kg N-total per annum applied in four equal dressings as 'Nitro-Chalk'):

	TOTAL N
None (sprayed with mecoprop to control legumes, two plots per block)	0(S)
None (two plots per block)	0
75	75
150	150
225	225
300	300
375	375
450	450

NOTE: Mecoprop applied as 'Clovotox' at 8.4 l in 280 l on 18 Apr.

Basal applications: 34 kg P as superphosphate, 224 kg K as potassium sulphate, 11 kg Mg as magnesium sulphate.

Cultivations, etc.:- Basal P, K and Mg applied: 9 Dec, 1974. N applied: 18 Mar, 1975, 6 June and 8 Aug. Cut: 5 June, 7 Aug and 20 Oct.

75/R/CS/13

1ST CUT (20/5/75) DRY MATTER TONNES/HECTARE

*** TABLES OF MEANS ***

TOTAL N	0(S)	0	75	150	225	300	375	450	MEAN
	0.58	2.27	2.39	2.93	3.78	4.55	5.12	5.31	2.98

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

TABLE	TOTAL N
SED	0.154 (1)
	0.188 (2)
	0.218 (3)

(1) 0(S) V 0

(2) 0(S) OR 0 AGAINST ANY ONE OF THE REMAINDER

(3) ANY OF REMAINDER

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

STRATUM	DF	SE	CV%
BLOCK.WP	29	0.308	10.3

1ST CUT MEAN DM% 20.9

2ND CUT (8/7/75) DRY MATTER TONNES/HECTARE

*** TABLES OF MEANS ***

TOTAL N	0(S)	0	75	150	225	300	375	450	MEAN
	0.53	1.47	1.31	1.58	2.06	2.20	2.41	2.39	1.60

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

TABLE	TOTAL N
SED	0.145 (1)
	0.177 (2)
	0.205 (3)

(1) 0(S) V 0

(2) 0(S) OR 0 AGAINST ANY ONE OF THE REMAINDER

(3) ANY OF REMAINDER

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

STRATUM	DF	SE	CV%
BLOCK.WP	29	0.289	18.1

2ND CUT MEAN DM% 20.9

75/R/CS/13

3RD CUT (20/10/75) DRY MATTER TONNES/HECTARE

*** TABLES OF MEANS ***

TOTAL N	0(S)	0	75	150	225	300	375	450	MEAN
	0.33	0.59	0.84	1.12	1.58	1.77	1.96	1.99	1.11

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

TABLE	TOTAL N
SED	0.066 (1)
	0.081 (2)
	0.094 (3)

(1) 0(S) V 0

(2) 0(S) OR 0 AGAINST ANY ONE OF THE REMAINDER

(3) ANY OF REMAINDER

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

STRATUM	DF	SE	CV%
BLOCK.WP	29	0.132	12.0

3RD CUT MEAN DM% 23.6

TOTAL OF 3 CUTS DRY MATTER TONNES/HECTARE

*** TABLES OF MEANS ***

TOTAL N	0(S)	0	75	150	225	300	375	450	MEAN
	1.44	4.33	4.55	5.63	7.42	8.52	9.49	9.68	5.68

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

TABLE	TOTAL N
SED	0.186 (1)
	0.227 (2)
	0.263 (3)

(1) 0(S) V 0

(2) 0(S) OR 0 AGAINST ANY ONE OF THE REMAINDER

(3) ANY OF REMAINDER

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

STRATUM	DF	SE	CV%
BLOCK.WP	29	0.371	6.5

TOTAL OF 3 CUTS MEAN DM% 21.8

PLOT AREA HARVESTED 0.00086