

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 1970

[Full Table of Content](#)



70/R/CS/14 NPK to Old Grass

Rothamsted Research

Rothamsted Research (1971) *70/R/CS/14 NPK to Old Grass* ; Numerical Results Of The Field Experiments 1970, pp 147 - 153 - DOI: <https://doi.org/10.23637/ERADOC-1-59>

NPK TO OLD GRASS

(70/R/CS/14)

Park Grass Old Plots 5/1 and 5/2, 1970, the sixth year.

For details of treatments etc. see 'Results' 65/C/22, 66/C/13, 67/C/9, 68/C/7 and 69/R/CS/14.

Area of each plot: 0.0045. Area harvested: 0.0021.

Treatments K1P2 and K6P2 were applied in 1965 only. In each season these plots received N at current rates.

Basal application: 70 cwt ground chalk.

Cultivations, etc.: P and K applied: 15 Jan, 1970. N applied: 16 Mar. Ground chalk applied: 16 Apr. Cut twice: 5 June and 9 Oct. N applied after first cut.

Standard errors per plot. Dry matter, cwt:

Plot 5/1: 1st cut:	2.47 or 13.6% (11 d.f.)
2nd cut:	2.21 or 10.4% (11 d.f.)
Total of 2 cuts:	4.07 or 10.4% (11 d.f.)
Plot 5/2: 1st cut:	3.18 or 10.7% (11 d.f.)
2nd cut:	1.50 or 7.8% (11 d.f.)
Total of 2 cuts:	3.48 or 7.1% (11 d.f.)

70/R/CS/14

SUMMARY OF RESULTS

PLOT 5/1: DRY MATTER, CWT

1ST CUT

Excluding K1 and K6 plots

	P0	P1	P2	P4	Mean
Mean (± 0.87)	10.0	23.1	26.2	23.1	20.6
		(± 1.74)			(± 0.87)
K0	8.5	16.5	19.4	14.1	14.6
K2	11.4	24.9	27.5	23.6	21.8
K4	9.9	25.2	28.3	27.5	22.7
K8	10.1	25.9	29.6	27.1	23.2
		(± 1.23)			(± 0.62)
N1	9.0	18.8	18.6	18.7	16.3
N2	11.0	27.5	33.8	27.4	24.9
	K0	K2	K4	K8	
		(± 1.23)			
N1	13.9	17.5	15.1	18.5	
N2	15.3	26.1	30.4	27.8	

K1 and K6 plots

	K1P2*	K6P2*	Mean
	(± 1.74)	(± 1.23)	
N1	8.1	4.9	6.5
N2	10.9	9.0	9.9
Mean (± 1.23)	9.5	7.0	8.2

* Applied 1965

General mean: 18.1

Mean D.M. %: 25.5

70/R/CS/14

PLOT 5/1: DRY MATTER, CWT

2ND CUT

Excluding K1 and K6 plots

	P0	P1	P2	P4	Mean
Mean (± 0.78)	19.0	20.4	23.2	23.8	21.6
		(± 1.56)			(± 0.78)
K0	20.6	19.6	19.6	21.0	20.2
K2	18.1	21.2	28.1	22.5	22.5
K4	19.1	21.1	23.0	25.3	22.1
K8	18.1	19.7	22.0	26.5	21.6
		(± 1.10)			(± 0.55)
N1	16.6	16.8	19.3	22.5	18.8
N2	21.4	24.1	27.0	25.2	24.4
	K0	K2	K4	K8	
		(± 1.10)			
N1	18.1	18.5	19.2	19.5	
N2	22.3	26.4	25.1	23.7	

K1 and K6 plots

	K1P2*	K6P2*	Mean
	(± 1.56)		(± 1.10)
N1	20.2	17.2	18.7
N2	20.5	21.0	20.7
Mean (± 1.10)	20.3	19.1	19.7

* Applied 1965

General mean: 21.2
Mean D.M. %: 29.4

70/R/CS/14

PLOT 5/1: DRY MATTER, CWT

TOTAL OF 2 CUTS

Excluding K1 and K6 plots

	P0	P1	P2	P4	Mean
Mean (± 1.44)	29.0	43.6	49.4	46.9	42.2
		(± 2.88)			(± 1.44)
K0	29.1	36.1	38.9	35.1	34.8
K2	29.5	46.1	55.6	46.1	44.3
K4	29.0	46.4	51.3	52.7	44.9
K8	28.2	45.7	51.7	53.6	44.8
		(± 2.04)			(± 1.02)
N1	25.6	35.6	37.9	41.2	35.1
N2	32.3	51.5	60.8	52.6	49.3
	K0	K2	K4	K8	

		(± 2.04)			
N1	32.0	36.1	34.2	38.0	
N2	37.6	52.6	55.5	51.6	

K1 and K6 plots

	K1P2*	K6P2*	Mean
	(± 2.88)		(± 2.04)
N1	28.3	22.1	25.2
N2	31.4	30.0	30.7
Mean (± 2.04)	29.8	26.1	27.9

* Applied 1965

General mean: 39.3

Mean D.M. %: 27.4

70/R/CS/14

PLOT 5/2: DRY MATTER, CWT

1ST CUT

Excluding K1 and K6 plots

	P0	P1	P2	P4	Mean
Mean (± 1.13)	30.6	30.4	29.7	27.7	29.6
		(± 2.25)			(± 1.13)
K0	28.0	28.6	28.6	26.2	27.8
K2	32.0	33.1	30.6	27.7	30.8
K4	31.4	29.9	30.7	27.3	29.8
K8	31.1	30.0	29.0	29.6	29.9
		(± 1.59)			(± 0.80)
N1	18.9	18.2	18.0	15.0	17.5
N2	42.3	42.6	41.5	40.4	41.7
	K0	K2	K4	K8	

N1	16.8	18.6	17.5	17.2
N2	38.9	43.1	42.1	42.7

K1 and K6 plots

	K1P2*	K6P2*	Mean
	(± 2.25)		(± 1.59)
N1	19.6	20.3	19.9
N2	37.4	42.6	40.0
Mean (± 1.59)	28.5	31.4	30.0

* Applied 1965

General mean: 29.7

Mean D.M. %: 27.4

70/R/CS/14

PLOT 5/2: DRY MATTER, CWT

2ND CUT

Excluding K1 and K6 plots

	P0	P1	P2	P4	Mean
Mean (± 0.53)	19.3	18.6	18.7	20.2	19.2
		(± 1.06)			(± 0.53)
K0	20.4	19.0	20.5	20.1	20.0
K2	18.8	17.8	19.0	20.2	18.9
K4	19.0	19.8	18.4	19.4	19.2
K8	19.0	18.0	16.8	21.0	18.7
		(± 0.75)			(± 0.38)
N1	17.1	16.4	17.1	17.2	16.9
N2	21.5	20.8	20.3	23.2	21.4
	K0	K2	K4	K8	

		(± 0.75)			
N1	18.1	18.2	15.7	15.7	
N2	21.9	19.6	22.6	21.7	

K1 and K6 plots

	K1P2*	K6P2*	Mean
	(± 1.06)		(± 0.75)
N1	20.0	18.6	19.3
N2	19.3	21.3	20.3
Mean (± 0.75)	19.6	19.9	19.8

* Applied 1965

General mean: 19.3

Mean D.M. %: 33.9

70/R/CS/14

PLOT 5/2: DRY MATTER, CWT

TOTAL OF 2 CUTS

Excluding K1 and K6 plots

	P0	P1	P2	P4	Mean
Mean (± 1.23)	49.9	49.0	48.4	47.9	48.8
		(± 2.46)			(± 1.23)
K0	48.3	47.5	49.1	46.4	47.8
K2	50.7	50.9	49.6	47.9	49.8
K4	50.4	49.8	49.1	46.7	49.0
K8	50.2	48.0	45.7	50.6	48.6
		(± 1.74)			(± 0.87)
N1	36.0	34.7	35.0	32.2	34.5
N2	63.8	63.4	61.7	63.6	63.1
	K0	K2	K4	K8	
		(± 1.74)			
N1	34.9	36.8	33.2	32.9	
N2	60.8	62.7	64.8	64.3	

K1 and K6 plots

	K1P2*	K6P2*	Mean
	(± 2.46)		(± 1.74)
N1	39.6	38.8	39.2
N2	56.7	63.9	60.3
Mean (± 1.74)	48.1	51.4	49.7

* Applied 1965

General mean: 49.0

Mean D.M. %: 30.6