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# Numerical Results of the Field Experiments 1970

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## 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 ( $\pm 0.87$ )	10.0	23.1	26.2	23.1	20.6
		( $\pm 1.74$ )			( $\pm 0.87$ )
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
		( $\pm 1.23$ )			( $\pm 0.62$ )
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	
		( $\pm 1.23$ )			
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		
		( $\pm 1.74$ )	( $\pm 1.23$ )		
N1	8.1	4.9	6.5		
N2	10.9	9.0	9.9		
Mean ( $\pm 1.23$ )	9.5	7.0	8.2		

\* Applied 1965

General mean: 18.1  
 Mean D.M. %: 25.5

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PLOT 5/1: DRY MATTER, CWT

2ND CUT

Excluding K1 and K6 plots

	P0	P1	P2	P4	Mean
Mean ( $\pm 0.78$ )	19.0	20.4	23.2	23.8	21.6
		( $\pm 1.56$ )			( $\pm 0.78$ )
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
		( $\pm 1.10$ )			( $\pm 0.55$ )
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	

		( $\pm 1.10$ )			
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
		( $\pm 1.56$ )	( $\pm 1.10$ )
N1	20.2	17.2	18.7
N2	20.5	21.0	20.7
Mean ( $\pm 1.10$ )	20.3	19.1	19.7

\* Applied 1965

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

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PLOT 5/1: DRY MATTER, CWT

TOTAL OF 2 CUTS

Excluding K1 and K6 plots

	P0	P1	P2	P4	Mean
Mean ( $\pm 1.44$ )	29.0	43.6	49.4	46.9	42.2
		( $\pm 2.88$ )			( $\pm 1.44$ )
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
		( $\pm 2.04$ )			( $\pm 1.02$ )
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	
		( $\pm 2.04$ )			
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		
		( $\pm 2.88$ )	( $\pm 2.04$ )		
N1	28.3	22.1	25.2		
N2	31.4	30.0	30.7		
Mean ( $\pm 2.04$ )	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 ( $\pm 1.13$ )	30.6	30.4	29.7	27.7	29.6
		( $\pm 2.25$ )			( $\pm 1.13$ )
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
		( $\pm 1.59$ )			( $\pm 0.80$ )
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	

		( $\pm 1.59$ )			
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
		( $\pm 2.25$ )	( $\pm 1.59$ )
N1	19.6	20.3	19.9
N2	37.4	42.6	40.0
Mean ( $\pm 1.59$ )	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 ( $\pm 0.53$ )	19.3	18.6	18.7	20.2	19.2
		( $\pm 1.06$ )			( $\pm 0.53$ )
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
		( $\pm 0.75$ )			( $\pm 0.38$ )
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	

		( $\pm 0.75$ )			
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
		( $\pm 1.06$ )	
N1	20.0	18.6	19.3
N2	19.3	21.3	20.3
			( $\pm 0.75$ )
Mean ( $\pm 0.75$ )	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 ( $\pm 1.23$ )	49.9	49.0	48.4	47.9	48.8
		( $\pm 2.46$ )			( $\pm 1.23$ )
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
		( $\pm 1.74$ )			( $\pm 0.87$ )
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	
		( $\pm 1.74$ )			
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		
		( $\pm 2.46$ )	( $\pm 1.74$ )		
N1	39.6	38.8	39.2		
N2	56.7	63.9	60.3		
Mean ( $\pm 1.74$ )	48.1	51.4	49.7		

\* Applied 1965

General mean: 49.0  
 Mean D.M. %: 30.6