

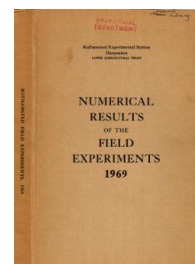
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Numerical Results of the Field Experiments 1969

[Full Table of Content](#)



69/R/CS/43 - Aqua Ammonia - Grass

Rothamsted Research

Rothamsted Research (1970) *69/R/CS/43 - Aqua Ammonia - Grass* ; Numerical Results Of The Field Experiments 1969, pp 214 - 217 - DOI: <https://doi.org/10.23637/ERADOC-1-96>

GRAZED GRASS

(69/R/CS/43)

Aqua ammonia, Highfield IX 1969, the first year.

Design: 4 randomised blocks of 9 plots.

Area of each plot: 0.0161. Area harvested: 0.0002.

Treatments: None (NO) and all combinations of:-

1. Nitrogen: Injected aqueous ammonia in a single annual dressing. (I)
Broadcast 'Nitro-Chalk' in 6 equal dressings between March and September. (B)
2. Total annual rates of N: 1.0 (N1), 2.0 (N2), 3.0 (N3), 4.0 (N4) cwt.

NOTE: (1) Yields are calculated from sample cuts taken by rotary mower from under a wire netting cage (1 yard square), placed on each plot at the beginning of the grazing season. After each cut the cage is moved to a new area trimmed with the rotary mower.

Basal applications: 10 cwt (0:20:20).

Cultivations, etc.: Basal PK applied: 5 Mar, 1969. Aqueous ammonia injected: 12 Mar. 'Nitro-Chalk' applied, sample cages placed: 21 Mar. Sample cuts taken: 5 May, 2 June, 25 June, 5 Aug, 4 Sept, 29 Oct. 'Nitro-Chalk' applied after first 5 cuts.

NOTES: (2) Visual estimates were made of the percentage surface area within each cage covered by clover leaves immediately before cutting.

(3) The percentage of N in the dry grass was calculated.

Standard errors per plot. Dry matter, cwt:

1st cut:	3.21 or 18.0% (21 d.f.)
2nd cut:	1.99 or 7.5% (21 d.f.)
3rd cut:	2.40 or 11.7% (21 d.f.)
4th cut:	2.56 or 9.1% (21 d.f.)
5th cut:	1.99 or 13.0% (21 d.f.)
6th cut:	1.70 or 16.4% (21 d.f.)
Total of 6 cuts:	6.21 or 5.2% (21 d.f.)

SUMMARY OF RESULTS

DRY MATTER: CWT

	N1	N2	N3	N4	Mean
1ST CUT					
	(±1.61)				(±0.80)
I	17.8	17.8	16.9	17.9	17.6
B	14.9	18.4	17.9	21.4	18.1
Mean (±1.14)	16.3	18.1	17.4	19.7	17.9
General mean:	17.4				
NO:	13.8				
2ND CUT					
	(±1.00)				(±0.50)
I	24.0	26.9	27.4	27.6	26.5
B	25.5	25.9	27.7	28.7	26.9
Mean (±0.70)	24.8	26.4	27.5	28.1	26.7
General mean:	25.7				
NO:	17.7				
3RD CUT					
	(±1.20)				(±0.60)
I	19.2	20.8	23.3	22.7	21.5
B	14.8	19.4	21.7	21.7	19.4
Mean (±0.85)	17.0	20.1	22.5	22.2	20.4
General mean:	19.7				
NO:	13.6				
Mean D.M. %: 1st cut: 20.2					
2nd cut: 14.7					
3rd cut: 16.3					

DRY MATTER: CWT

	N1	N2	N3	N4	Mean
4TH CUT					
	(±1.28)				(±0.64)
I	23.5	26.5	28.5	31.9	27.6
B	25.9	28.8	29.8	29.4	28.5
Mean (±0.90)	24.7	27.6	29.1	30.6	28.0

General mean: 27.4

NO: 22.2

5TH CUT

	(±0.99)				(±0.50)
I	12.9	11.7	15.2	16.3	14.0
B	15.9	17.4	17.4	15.2	16.5
Mean (±0.70)	14.4	14.5	16.3	15.8	15.2

General mean: 14.8

NO: 10.8

6TH CUT

	(±0.85)				(±0.43)
I	8.8	9.0	10.2	10.7	9.7
B	8.6	11.2	12.9	11.6	11.1
Mean (±0.60)	8.7	10.1	11.6	11.2	10.4

General mean: 9.9

NO: 6.4

Mean D.M. %: 4th cut: 17.7

5th cut: 22.4

6th cut: 32.6

DRY MATTER: CWT					
	N1	N2	N3	N4	Mean
TOTAL OF 6 CUTS					
	(±3.10)				(±1.55)
I	106.1	112.6	121.5	127.1	116.8
B	105.6	121.0	127.4	128.0	120.5
Mean (±2.20)	105.9	116.8	124.4	127.6	118.7

General mean: 114.9
 NO: 84.6

Mean D.M. %: 20.7