

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 1966

[Full Table of Content](#)



66/R/BX/C/27 Anhydrous Ammonia - Established Grass

Rothamsted Research

Rothamsted Research (1967) *66/R/BX/C/27 Anhydrous Ammonia - Established Grass* ; Yields Of The Field Experiments 1966, pp 219 - 221 - DOI: <https://doi.org/10.23637/ERADOC-1-158>

66/C/27.1

ESTABLISHED GRASS

(BX)

Anhydrous ammonia for grass, West Barnfield I 1966, the first year.

Design: 4 randomised blocks of 16 plots.

Area of each plot: 0.0080. Area harvested: 0.0052.

Treatments: All combinations of:-

1. Forms of nitrogen: Anhydrous ammonia injected 2 - 3 inches deep (I). 'Nitro-Chalk' broadcast in spring (B). 'Nitro-Chalk' dressing divided equally between 3 cuts (BD).
2. Levels of nitrogen: 1.0 (N1), 2.0 (N2), 3.0 (N3), 4.0 (N4) cwt N.
together with no nitrogen - without (NO), with (NO I) the injector running idle through the turf (two plots of each per block).

Basal application: 560 lb (0:14:28).

Cultivations, etc.: - Anhydrous ammonia injected: Mar 2, 1966. 'Nitro-Chalk' to (B) plots and first dressing to (BD) plots and basal PK applied: Mar 8. Cut 3 times: May 16, July 4, Oct 5. 'Nitro-Chalk' applied after first 2 cuts.

Standard errors per plot. Dry matter:

- 1st cut: 2.69 or 10.7% (44 d.f.)
- 2nd cut: 1.89 or 7.4% (44 d.f.)
- 3rd cut: 1.95 or 23.2% (44 d.f.)
- Total of 3 cuts: 4.03 or 6.8% (44 d.f.)

66/C/27.2

SUMMARY OF RESULTS

DRY MATTER

	N1	N2	N3	N4	Mean
1ST CUT					
		(± 1.35)			(± 0.67)
I	17.0	24.3	23.2	25.0	22.4
B	35.5	36.9	38.4	36.4	36.8
BD	22.5	32.1	35.5	35.9	31.5
Mean (± 0.78)	25.0	31.1	32.4	32.4	30.2

NO NO I
 (± 0.95)
 9.6 9.9

General mean: 25.1

Mean D.M. %: 18.8

2ND CUT

		(± 0.94)			(± 0.47)
I	16.5	19.8	21.0	22.2	19.9
B	21.0	33.4	36.1	34.9	31.4
BD	29.9	39.3	38.2	37.6	36.2
Mean (± 0.54)	22.5	30.8	31.8	31.6	29.2

NO NO I
 (± 0.67)
 14.5 15.0

General mean: 25.6

Mean D.M. %: 26.5

66/c/27.3

DRY MATTER					
	N1	N2	N3	N4	Mean
3RD CUT					
		(±0.98)			(±0.49)
I	2.3	1.5	1.8	1.8	1.8
B	1.6	4.0	7.1	15.2	7.0
BD	10.4	24.1	26.7	27.4	22.2
Mean (±0.56)	4.8	9.8	11.9	14.8	10.3

NO NO I

(±0.69)
3.3 2.1

General mean: 8.4

Mean D.M. %: 23.5

TOTAL OF 3 CUTS					
		(±2.01)			(±1.01)
I	35.8	45.6	46.0	49.0	44.1
B	58.1	74.4	81.7	86.6	75.2
BD	62.9	95.4	100.4	100.8	89.9
Mean (±1.16)	52.3	71.8	76.0	78.8	69.7

NO NO I

(±1.42)
27.4 27.1

General mean: 59.1

Mean D.M. %: 22.9