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Numerical Results of the Field Experiments 1969

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69/S/CS/3 - Rates, Forms and Times of N - Grass

Rothamsted Research

Rothamsted Research (1970) *69/S/CS/3 - Rates, Forms and Times of N - Grass* ; Numerical Results Of The Field Experiments 1969, pp 231 - 232 - DOI: <https://doi.org/10.23637/ERADOC-1-96>

GRASS

(69/S/CS/3)

Rates, forms and times of application of N, Saxmundham Grove Plot, 1969, the first year.

NOTE: This experiment is sited on the area occupied by grass, 'N and cutting', 1967 - 68 (see 'Results' 67/C/47 and 68/C/43) - the previous treatments are ignored.

Design: 4 randomised blocks of 9 plots.

Area of each plot: 0.0018. Area harvested: 1st cut: 0.0013, 2nd and 3rd cuts: 0.0012, 4th cut: 0.0007.

Treatments (T): (in cwt N)

| | Anhydrous ammonia | 'Nitro-Chalk' | Date of application |
|----|-------------------|---------------|---------------------|
| 1 | 0.0 | 0.0 | 11 Mar |
| 2 | 2.5 | 0.0 | 11 Mar |
| 3 | 5.0 | 0.0 | 11 Mar |
| 4 | 0.0 | 2.5 | 11 Mar |
| 5 | 0.0 | 5.0 | 11 Mar |
| 6 | 2.5 + 'N serve' | 0.0 | 11 Mar |
| 7 | 5.0 + 'N serve' | 0.0 | 11 Mar |
| 8 | 0.0 | 1.25 | 11 Mar |
| | | .63 | 29 May |
| | | .62 | 29 July |
| 9 | 0.0 | 2.5 | 11 Mar |
| | | 1.25 | 29 May |
| | | 1.25 | 29 July |
| 10 | 2.5 | 0.0 | 11 Mar |
| | | 1.25 | 29 May |
| | | 1.25 | 29 July |

Basal applications: 1.0 cwt P₂O₅, 2.0 cwt K₂O as triple superphosphate and muriate of potash.

Cultivations, etc.: Basal PK applied: 11 Mar, 1969. Cut 4 times: 29 May, 22 July, 11 Sept, 28 Oct.

NOTE: The yields of Treatment 1 were omitted from the analysis.

Standard errors per plot. Dry matter, cwt:

| | |
|------------------|-------------------------|
| 1st cut: | 5.24 or 11.4% (24 d.f.) |
| 2nd cut: | 3.88 or 12.2% (24 d.f.) |
| 3rd cut: | 1.69 or 9.8% (24 d.f.) |
| 4th cut: | 1.40 or 21.0% (24 d.f.) |
| Total of 4 cuts: | 6.54 or 6.4% (24 d.f.) |

SUMMARY OF RESULTS

DRY MATTER: CWT

| T2 | T3 | T4 | T5 | T6 | T7 | T8 | T9 | T10 | Mean |
|-----------------|-------|------|-------|------|-------|------|-------|-------|-------|
| 1ST CUT | | | | | | | | | |
| (±2.62) | | | | | | | | | |
| 47.0 | 47.4 | 45.9 | 52.4 | 44.2 | 44.2 | 38.6 | 47.6 | 48.0 | 46.2 |
| 2ND CUT | | | | | | | | | |
| (±1.94) | | | | | | | | | |
| 30.5 | 35.5 | 10.8 | 34.4 | 35.3 | 37.5 | 26.1 | 38.9 | 37.8 | 31.9 |
| 3RD CUT | | | | | | | | | |
| (±0.84) | | | | | | | | | |
| 9.4 | 18.9 | 4.4 | 12.8 | 13.8 | 21.9 | 21.4 | 26.1 | 26.5 | 17.2 |
| 4TH CUT | | | | | | | | | |
| (±0.70) | | | | | | | | | |
| 7.7 | 7.4 | 4.8 | 7.0 | 6.2 | 7.5 | 6.1 | 6.5 | 6.9 | 6.7 |
| TOTAL OF 4 CUTS | | | | | | | | | |
| (±3.27) | | | | | | | | | |
| 94.5 | 109.2 | 65.9 | 106.7 | 99.4 | 111.1 | 92.2 | 119.1 | 119.3 | 101.9 |

| | T1 | Mean D.M. %* |
|------------------|------|--------------|
| 1st cut: | 10.0 | 18.3 |
| 2nd cut: | 2.4 | 24.9 |
| 3rd cut: | 2.0 | 26.5 |
| 4th cut: | 4.2 | 39.2 |
| Total of 4 cuts: | 18.6 | 27.2 |

* All plots