ROTHAMSTED RESEARCH

# Yields of the Field Experiments 1966

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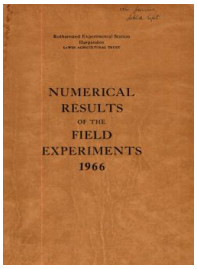


## 66/R/AG/A/4 Agdell - Grass

### Rothamsted Research

Rothamsted Research (1967) *66/R/AG/A/4 Agdell - Grass ;* Yields Of The Field Experiments 1966, pp 19 - 22 **- DOI: https://doi.org/10.23637/ERADOC-1-158**

66/A/4.1

# GRASS - AGDELL 1966

(AG)

For history, treatments etc., see 'Details' 1962 and 'Results' 64/A/4 and 65/A/4.

Area of each microplot: Plots 1 - 4 - 0.0180, Plots 5 - 6 - 0.0162.
Area harvested: 0.0023.

P and K applied after first cut:-
P was applied in 1966 as triple superphosphate to balance withdrawals by grass in 1965, to all sub plots except (P0) which continues to receive no P. Rates in cwt $P_2O_5$:-

| | Sub plots testing P:- | | | | Sub plots testing K:- | | | |
|---|---|---|---|---|---|---|---|---|
| Plot no. | P0 | P1 | P2 | P4 | K0 | K1 | K2 | K4 |
| 1 | - | 1.01 | 1.13 | 1.07 | 0.82 | 0.85 | 0.99 | 1.00 |
| 2 | - | 0.70 | 0.77 | 0.81 | 0.77 | 0.81 | 0.88 | 0.95 |
| 3 | - | 0.79 | 0.80 | 0.98 | 0.79 | 0.87 | 0.86 | 0.97 |
| 4 | - | 0.54 | 0.65 | 0.70 | 0.75 | 0.85 | 0.80 | 0.86 |
| 5 | - | 0.61 | 0.70 | 0.79 | 0.72 | 0.80 | 0.73 | 0.76 |
| 6 | - | 0.65 | 0.73 | 0.82 | 0.77 | 0.73 | 0.77 | 0.73 |

Withdrawals of K by grass were too great to be balanced by a single dressing without risk of damage to the grass. Consequently a standard dressing of 5 lb muriate of potash per sub plot (1.48 cwt $K_2O$ to plots 1, 2, 3 and 4, 1.66 cwt $K_2O$ to plots 5 and 6) was applied, except to sub plots (K0), which continue to receive no K. The remainder of the dressing required to balance withdrawals will be applied in 1967.

Basal dressing: 'Nitro-Chalk' applied at 0.8 cwt N on Mar 18 and after first 2 cuts. The dressing after the third cut was applied at 1.0 cwt N in error.

Cultivations, etc.:
Grass: P and K fertilisers applied: May 25, 1966. Cut 4 times for silage: May 19, June 29, Aug 12, Oct 12.
Fallow: Ploughed: Jan 13, 1966.

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66/A/4.2

# SUMMARY OF RESULTS

## DRY MATTER

| P | K | Plot 5 | 6 | 3 | 4 | 1 | 2 | Mean |
|---|---|---|---|---|---|---|---|---|
| | | | | 1ST CUT | | | | |
| 0 | 4 | 16.5 | 8.8 | 28.1 | 26.3 | 33.6 | 30.0 | 23.9 |
| 1 | 4 | 36.4 | 36.1 | 37.3 | 32.5 | 38.2 | 42.4 | 37.1 |
| 2 | 4 | 42.4 | 42.9 | 37.8 | 37.7 | 39.1 | 40.6 | 40.1 |
| 4 | 4 | 37.9 | 42.3 | 41.0 | 37.0 | 34.9 | 39.5 | 38.8 |
| 4 | 0 | 30.3 | 27.7 | 36.3 | 38.7 | 36.7 | 23.8 | 32.2 |
| 4 | 1 | 35.2 | 38.3 | 36.3 | 35.9 | 40.4 | 36.9 | 37.2 |
| 4 | 2 | 40.2 | 33.8 | 38.5 | 44.5 | 38.8 | 36.4 | 38.7 |
| 4 | 4 | 44.6 | 40.4 | 36.9 | 44.6 | 37.9 | 43.3 | 41.3 |
| Mean | | 35.5 | 33.8 | 36.5 | 37.2 | 37.4 | 36.6 | 36.2 |
| | | | | 2ND CUT | | | | |
| 0 | 4 | 19.8 | 13.7 | 15.2 | 19.3 | 24.6 | 22.4 | 19.2 |
| 1 | 4 | 20.6 | 20.4 | 19.4 | 28.3 | 27.7 | 20.9 | 22.9 |
| 2 | 4 | 24.0 | 23.7 | 24.3 | 15.4 | 25.9 | 19.1 | 22.0 |
| 4 | 4 | 24.0 | 22.4 | 20.7 | 26.0 | 24.0 | 22.6 | 23.3 |
| 4 | 0 | 14.8 | 17.3 | 18.5 | 23.8 | 23.3 | 20.8 | 19.7 |
| 4 | 1 | 24.9 | 27.4 | 21.1 | 29.6 | 26.8 | 28.2 | 26.3 |
| 4 | 2 | 24.3 | 25.3 | 24.5 | 17.0 | 25.5 | 20.7 | 22.9 |
| 4 | 4 | 24.5 | 25.1 | 21.1 | 16.1 | 27.9 | 18.9 | 22.3 |
| Mean | | 22.1 | 21.9 | 20.6 | 21.9 | 25.7 | 21.7 | 22.3 |

Mean D.M. %: 1st cut: 18.0
2nd cut: 18.4

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DRY MATTER

| P | K | Plot 5 | 6 | 3 | 4 | 1 | 2 | Mean |
|---|---|---|---|---|---|---|---|---|
| | | | | 3RD CUT | | | | |
| 0 | 4 | 3.7 | 2.8 | 12.0 | 9.9 | 14.4 | 12.0 | 9.1 |
| 1 | 4 | 13.9 | 16.2 | 15.4 | 12.2 | 21.0 | 16.2 | 15.8 |
| 2 | 4 | 16.2 | 14.7 | 14.2 | 14.0 | 18.0 | 14.8 | 15.3 |
| 4 | 4 | 14.6 | 15.6 | 19.7 | 14.5 | 19.4 | 14.4 | 16.4 |
| 4 | 0 | 9.5 | 7.2 | 8.8 | 10.1 | 12.4 | 9.2 | 9.5 |
| 4 | 1 | 15.6 | 16.3 | 16.5 | 14.2 | 17.7 | 14.5 | 15.8 |
| 4 | 2 | 19.3 | 12.9 | 13.4 | 13.5 | 16.6 | 18.7 | 15.7 |
| 4 | 4 | 20.5 | 16.8 | 15.7 | 16.8 | 16.2 | 17.5 | 17.2 |
| Mean | | 14.2 | 12.8 | 14.5 | 13.1 | 17.0 | 14.7 | 14.4 |
| | | | | 4TH CUT | | | | |
| 0 | 4 | 3.2 | 3.7 | 13.4 | 10.4 | 20.0 | 11.5 | 10.4 |
| 1 | 4 | 13.0 | 10.9 | 16.9 | 17.7 | 13.9 | 16.7 | 14.9 |
| 2 | 4 | 9.5 | 15.9 | 13.6 | 12.4 | 18.8 | 17.6 | 14.6 |
| 4 | 4 | 15.2 | 15.5 | 17.0 | 18.8 | 15.2 | 13.7 | 15.9 |
| 4 | 0 | 4.8 | 3.6 | 11.2 | 8.7 | 16.2 | 6.9 | 8.6 |
| 4 | 1 | 15.4 | 12.8 | 15.1 | 14.5 | 18.6 | 14.7 | 15.2 |
| 4 | 2 | 8.3 | 11.7 | 16.5 | 16.5 | 12.3 | 13.1 | 13.1 |
| 4 | 4 | 12.6 | 14.8 | 12.6 | 16.5 | 13.7 | 16.7 | 14.5 |
| Mean | | 10.2 | 11.1 | 14.5 | 14.4 | 16.1 | 13.9 | 13.4 |

Mean D.M. %: 3rd cut: 15.0
4th cut: 19.3

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66/A/4.4

DRY MATTER

Plot

| P | K | 5 | 6 | 3 | 4 | 1 | 2 | Mean |
|---|---|---|---|---|---|---|---|---|
| | | TOTAL OF 4 CUTS | | | | | | |
| 0 | 4 | 43.2 | 29.0 | 68.7 | 65.9 | 92.6 | 75.9 | 62.6 |
| 1 | 4 | 83.9 | 83.6 | 89.0 | 90.7 | 100.8 | 96.2 | 90.7 |
| 2 | 4 | 92.1 | 97.2 | 89.9 | 79.5 | 101.8 | 92.1 | 92.1 |
| 4 | 4 | 91.7 | 95.8 | 98.4 | 96.3 | 93.5 | 90.2 | 94.3 |
| 4 | 0 | 59.4 | 55.8 | 74.8 | 81.3 | 88.6 | 60.7 | 70.1 |
| 4 | 1 | 91.1 | 94.8 | 89.0 | 94.2 | 103.5 | 94.3 | 94.5 |
| 4 | 2 | 92.1 | 83.7 | 92.9 | 91.5 | 93.2 | 88.9 | 90.4 |
| 4 | 4 | 102.2 | 97.1 | 86.3 | 94.0 | 95.7 | 96.4 | 95.3 |
| Mean | | 82.0 | 79.6 | 86.1 | 86.7 | 96.2 | 86.8 | 86.2 |

Mean D.M. %: 17.7

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