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## Details of the Classical and Long-term Experiments 1968-73

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### R/PG/5 Park Grass - Grass

#### Rothamsted Research

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## PARK GRASS

(R/PG/5)

The manuring, liming and general management of this experiment has continued as set out in *Details 1967*, pp 35-39, but the rates of application are given for convenience in metric terms.

### Symbols, materials and rates of application

Manures applied annually except where indicated.

|                                   |   |
|-----------------------------------|---|
| N1, N2, N3:                       | Sulphate of ammonia to supply 48, 96, 144 kg N  |
| N1 <sup>x</sup> , N2 <sup>x</sup> | Nitrate of soda to supply 48, 96 kg N   |
| P                                 | Powdered superphosphate (approx. 20% P <sub>2</sub> O <sub>5</sub> ) to supply 34 kg P (except plot 20) |
| K                                 | Sulphate of potash (approx. 50% K <sub>2</sub> O) to supply 224 kg K (except plot 20)                   |
| Na                                | Sulphate of soda (approx. 14% Na) to supply 16 kg Na  |
| Mg                                | Sulphate of magnesia (approx. 10% Mg) to supply 11 kg Mg  |
| Si                                | Silicate of soda at 448 kg water soluble powder   |
| FYM                               | 35 t farmyard manure every fourth year (applied autumn 1968 and 1972)                                   |
| F                                 | Fish meal (about 6.5% N) to supply 63 kg N every fourth year (applied autumn 1970)                      |
| P, K, Na, Mg                      | applied in winter   |
| N1, N2, N1 <sup>x</sup>           | applied in one dressing about March   |
| N2 <sup>x</sup>                   | Half in March and half in April/May   |
| N3                                | Two-thirds applied in March and one-third in April/May  |

**NOTES:** Plot 20: In the three years between applications of FYM mineral fertilisers are applied: 30 kg N (as nitrate of soda), 17 kg P (as superphosphate) and 45 kg K (as muriate of potash)

Plots 5-1, 5-2, 6-N were used for microplot experiments during the period (see 'NPK to Old Grass' and 'N levels to Old Grass')

Plot 6-S: Excluded during the period 1965-71 and used for microplot experiments 1967-70 (simulated grazing R/CS/23; received PKNaMg 1965-71 as previous to 1965). Received N1 in 1972 and N1PKNaMg in 1973.

### Liming.

Ground chalk (t CaCO<sub>3</sub>)

| Sub-plots  | Dec. 1967 |      |      | Nov. 1971 |
|------------|-----------|------|------|-----------|
|            | a         | b    | c    | a         |
| 1          | 2.00      | —    | 3.14 | 2.00      |
| 2, 3, 4/1  | 2.00      | —    | —    | 2.00      |
| 4/2        | 2.00      | 1.26 | 5.65 | —         |
| 7/8        | 2.00      | —    | —    | 2.00      |
| 9          | 2.00      | 2.51 | 4.39 | 2.00      |
| 10         | 2.00      | 1.26 | 5.02 | —         |
| 11/1       | 4.00      | 6.28 | 5.02 | —         |
| 11/2       | 4.00      | 3.77 | 5.02 | —         |
| 13         | 2.00      | —    | 1.26 | 2.00      |
| 14, 16, 17 | 2.00      | —    | —    | 2.00      |

|             | Dec. 1967 |      |   | Nov. 1971 |      |
|-------------|-----------|------|---|-----------|------|
|             | a         | b    | c |           | a    |
| 18          |           | 1.14 | — | 2.51      | 1.14 |
| Whole plots |           |      |   |           |      |
| 5/1         |           | 6.15 |   |           | —    |
| 5/2         |           | 5.53 |   |           | —    |
| 6           |           | 7.53 |   |           | —    |
| 1           |           | —    |   |           | —    |
| 15          |           | —    |   |           | —    |
| 18/2        |           | 1.14 |   |           | 1.14 |
| 19, 20      |           | 1.14 |   |           | —    |

Soil series. Batcombe series

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