

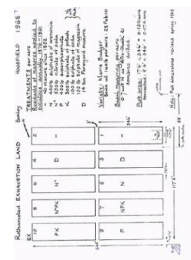
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ROTHAMSTED  
RESEARCH

# Collection of Plans for the Exhaustion Land Experiment

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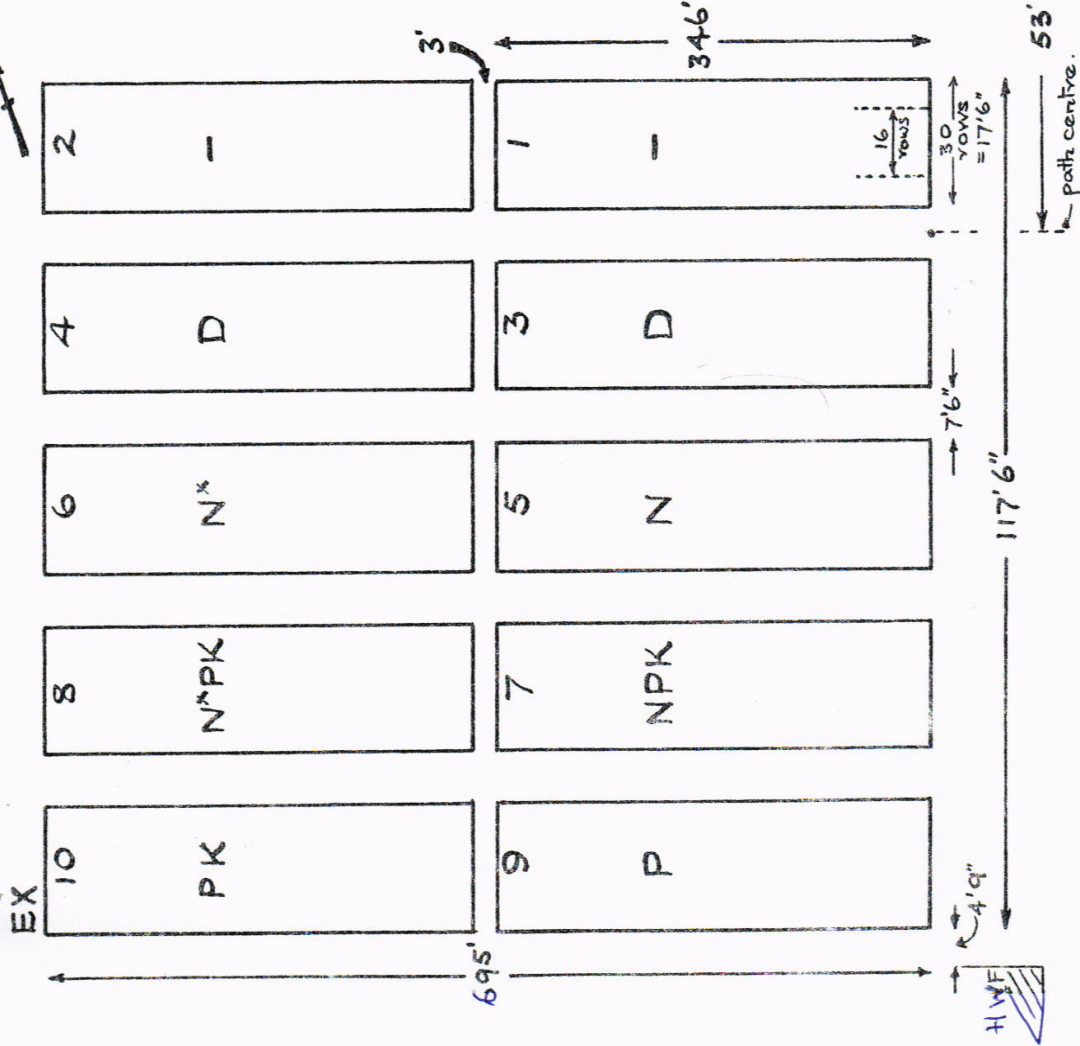


## Default Title

### Rothamsted Research

Rothamsted Research (1973-1986) *Default Title* ; Collection Of Plans For The Exhaustion Land Experiment, pp 1 - 17

Rothamsted EXHAUSTION LAND Barley. HOOSFIELD 1968 ↑



TREATMENTS per acre  
Residuals of manures applied to Potatoes annually 1876-1901

- No manure since 1852
- N 400 lb sulphate of ammonia
- N\* 550 lb nitrate of soda
- P 400 lb superphosphate
- K 300 lb sulphate of potash
- 100 lb sulphate of soda
- 100 lb sulphate of magnesia
- D 14 ton Farmyard manure.

} <sup>K</sup> with <sup>N, P, Mg</sup>

Variety: Maris Badger  
 Sown at 140 lb per acre: 28 Feb 191

Basal manuring per acre  
 0.7 cwt N as Nitro-Chalk 21  
 combine drilled.

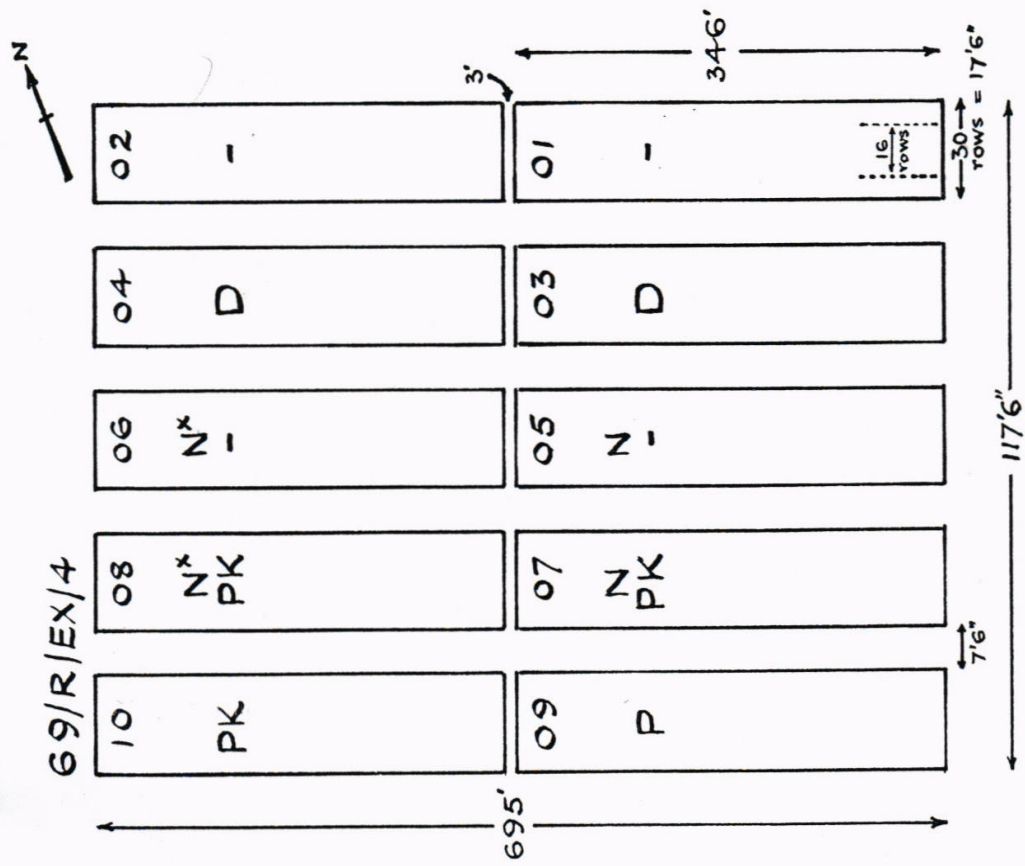
Plot area: 17'6" x 346' = 0.139 acre  
Harvested: 9'4" x 346' = 0.074 acre

White concrete post

Note: Plot dimensions revised spring 1968

4  
681

Rothamsted EXHAUSTION LAND Barley HOOSFIELD 114<sup>th</sup> year 1969



TREATMENTS per acre  
Residuals of Manures applied to POTATOES  
annually 1876 - 1901

- No manure since 1852
- N 400lb sulphate of ammonia
- N\* 550lb nitrate of soda
- P 400lb superphosphate
- K 300lb sulphate of potash
- 100lb sulphate of soda
- 100lb sulphate of magnesia } <sup>K</sup> with Na, Mg
- D 14 tons Farmyard manure.

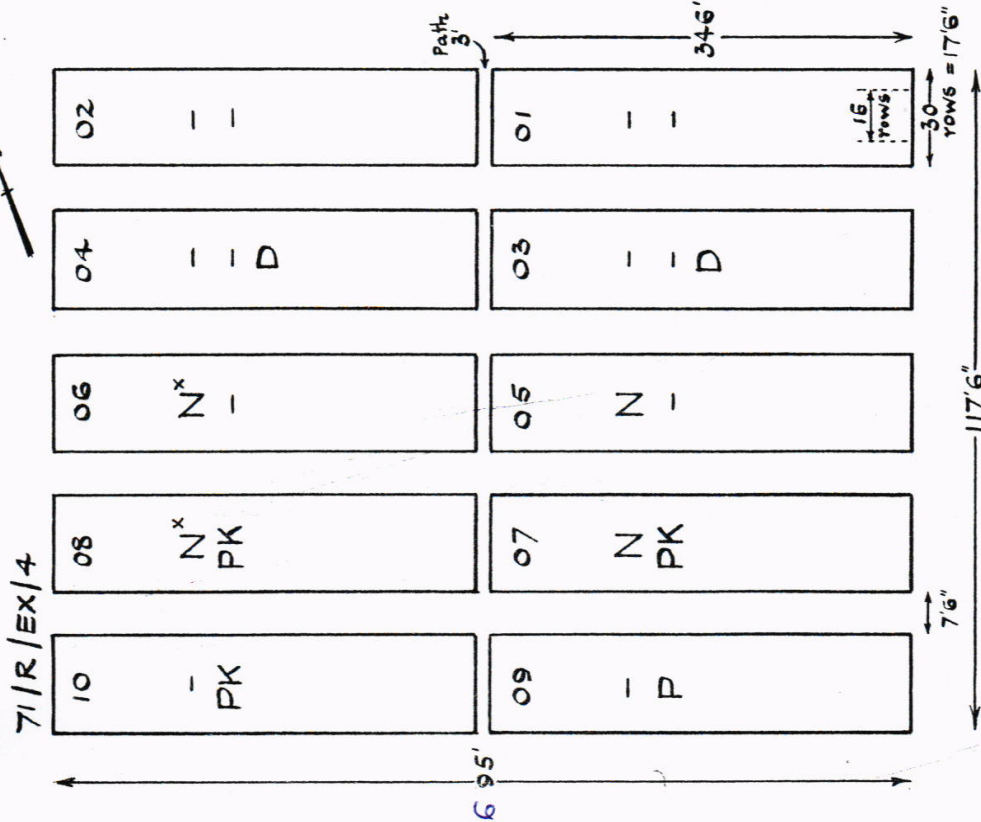
Variety: Maris Badger  
sown at 140lb per acre on 10th March.

Basal manuring, per acre  
0.7cwt N as 'Nitro-Chalk' 21 combine drilled

Plot area: 17'6" x 346' = 0.139 acre  
Harvested: 9'4" x 346' = 0.074 acre

Rothamsted EXHAUSTION LAND HOOSFIELD 116th year 1971 4

Barley



TREATMENTS per acre (hectare)  
Residuals of Manures applied to POTATOES  
 annually 1876 - 1901

- No manure since 1852
- N 400 lb (448 Kg) sulphate of ammonia
- N<sup>x</sup> 550 lb (617 Kg) nitrate of soda
- P 400 lb (448 Kg) superphosphate
- K 300 lb (336 Kg) sulphate of potash
- 100 lb (112 Kg) sulphate of soda
- 100 lb (112 Kg) sulphate of magnesias } 'K' with Na, Mg
- D 14 tons (35 tonnes) farmyard manure

Basal manuring, per acre (hectare)

0.7 cwt (87.5 Kg) N as 'Nitro-chalk' 2:1 combine drilled

Variety: Julia

Sown at 140 lb per acre (157 Kg/ha) on 25 Feb 1971

Plot area: 17'6" x 346' = 0.139 acre (0.056 ha)

Harvested: 9'4" x 346' = 0.074 acre (0.03 ha)

Note:

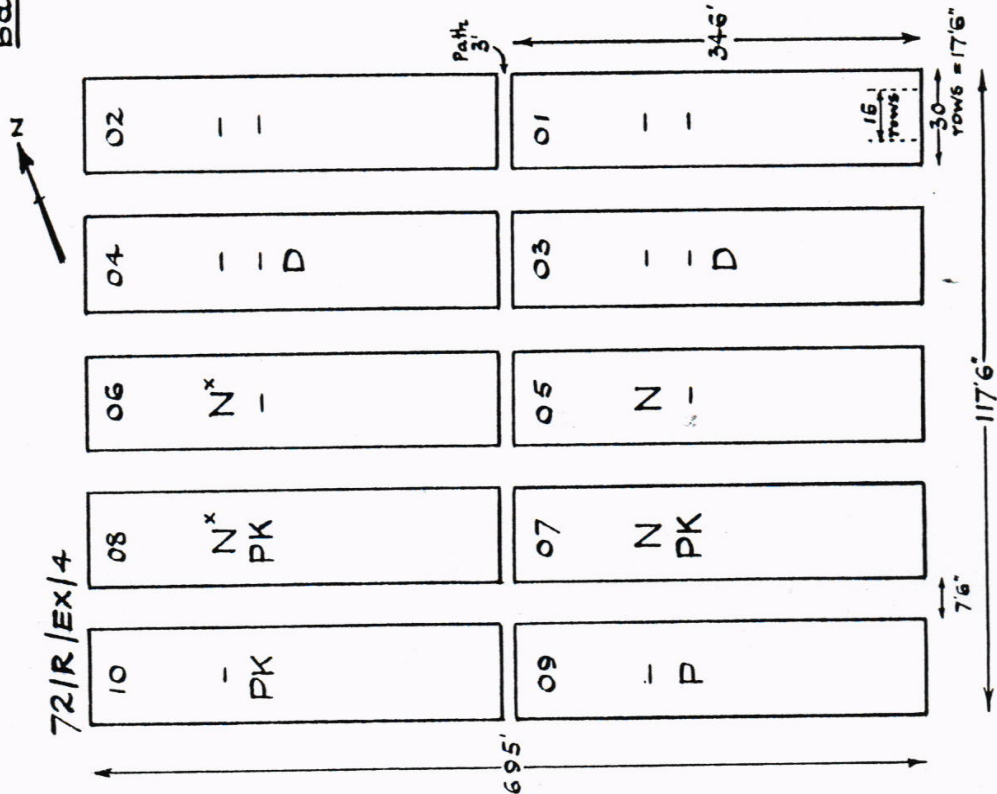
Julia barley drilled on North sideland

HOOSEFIELD 117th year 1972 4

Rothamsted EXHAUSTION LAND

Barley

72/R/EX/4



TREATMENTS per acre (hectare)  
Residuals of Manures applied to POTATOES  
 annually 1876 - 1901

- No manure since 1852
- N<sup>x</sup> 400 lb (448 kg) sulphate of ammonia
- N<sup>x</sup> 550 lb (617 kg) nitrate of soda
- P 400 lb (448 kg) superphosphate
- K 300 lb (336 kg) sulphate of potash
- 100 lb (112 kg) sulphate of soda } 'K' with Na, Mg
- 100 lb (112 kg) sulphate of magnesias }
- D 14 tons (35 tonnes) farmyard manure

Basal manuring, per acre (hectare)

0.7 cwt (87.5 kg) N as 'Nitro-chalk' 21 combine drille.

Variety: Julia (seed dressed with ethirimol)

Sown at 140 lb per acre (157 kg/ha) on 16th March

Plot area: 17'6" x 346' = 0.139 acre (0.056 ha)

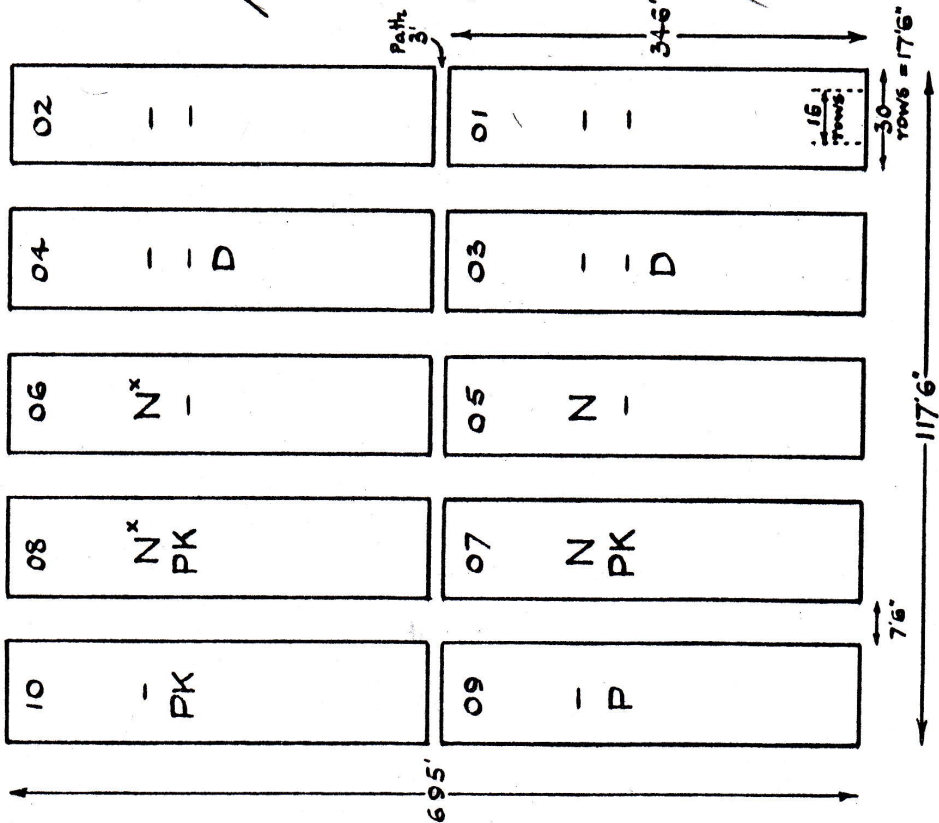
Harvested: 9'4" x 346' = 0.074 acre (0.03 ha)

Note: 10 Sep. 1971: Sprayed with Weedazol (aminotriazole/amm. thiocyanate) Julia barley drilled on North sideland

Rothamsted EXHAUSTION LAND 118th year 1973 4

Barley

73/R/EX/4



TREATMENTS per acre (hectare)  
Residuals of Manures applied to POTATOES  
 annually 1876 - 1901

- N<sup>x</sup> No manure since 1852
  - N<sup>x</sup> 400 lb (448 kg) sulphate of ammonia
  - P 550 lb (617 kg) nitrate of soda
  - K 400 lb (448 kg) superphosphate
  - 300 lb (336 kg) sulphate of potash
  - 100 lb (112 kg) sulphate of soda
  - 100 lb (112 kg) sulphate of magnesia
  - D 14 tons (35 tonnes) farmyard manure
- } 'K' with Na, Mg

Basal manuring, per acre (hectare)

0.7 cwt (87.5 kg) N as 'Nitro-chalk' 2.5 combine drilled

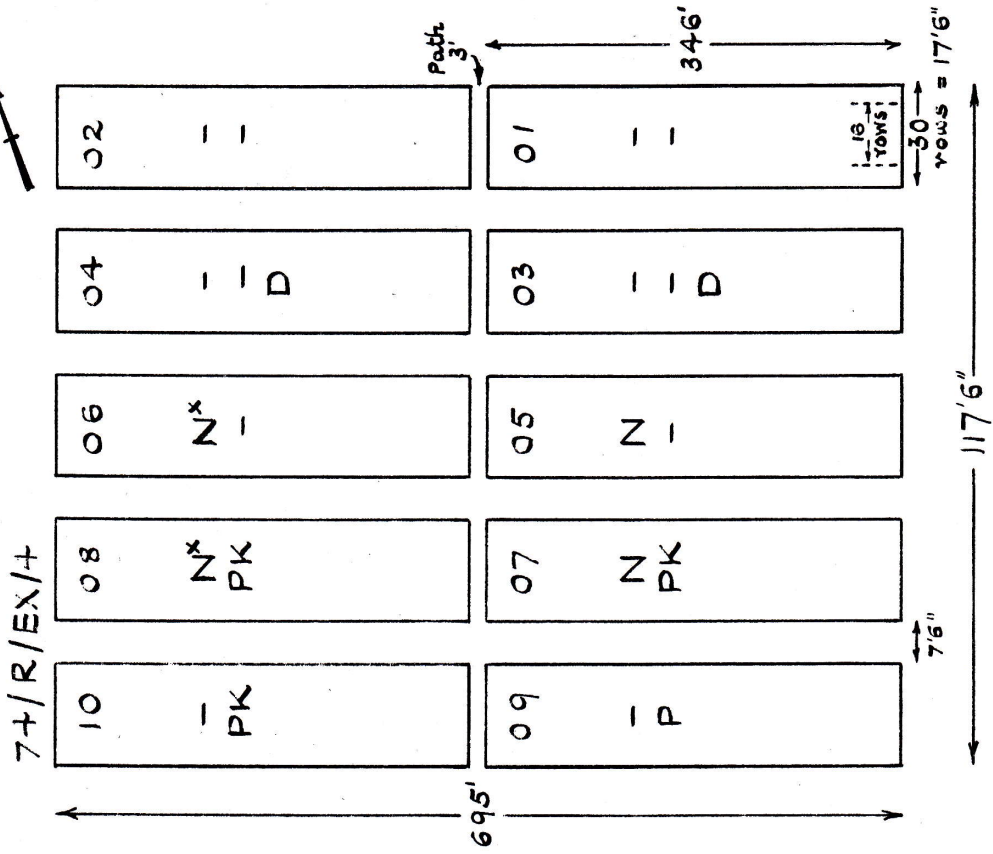
Variety: Julia (seed dressed with ethirimol)

Sown at 140 lb per acre (157 kg/ha) on 9 March

Plot area: 17'6" x 346" = 0.139 acre (0.056 ha)  
 Harvested: 9'4" x 346" = 0.074 acre (0.03 ha)

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Rothamsted EXHAUSTION LAND 119th year BARLEY HOOSFIELD 1974



TREATMENTS per acre (hectare)  
Residuals of Manures applied to POTATOES  
 annually 1876-1901

- No manure since 1852
  - N<sup>x</sup> 400 lb (448 Kg) sulphate of ammonia
  - N<sup>x</sup> 550 lb (617 Kg) nitrate of soda
  - P 400 lb (448 Kg) superphosphate
  - K 300 lb (336 Kg) sulphate of potash
  - 100 lb (112 Kg) sulphate of soda
  - 100 lb (112 Kg) sulphate of magnesium
  - D 14 tons (35 tonnes) farmyard manure
- } "K" with Na, Mg

Basal manuring per acre (hectare)  
 0.7 cwt (87.5 Kg) N as 'Nitro-Chalk' 25 combine drilled

Variety: Julia (seed dressed with ethirimol)  
 Sown at 14.0 lb per acre (157 Kg/ha) or

Plot area: 17'6" x 346' = 0.139 acre (0.056 ha)  
Harvested: 9'4" x 346' = 0.074 acre (0.03 ha)

Rothamsted EXHAUSTION LAND

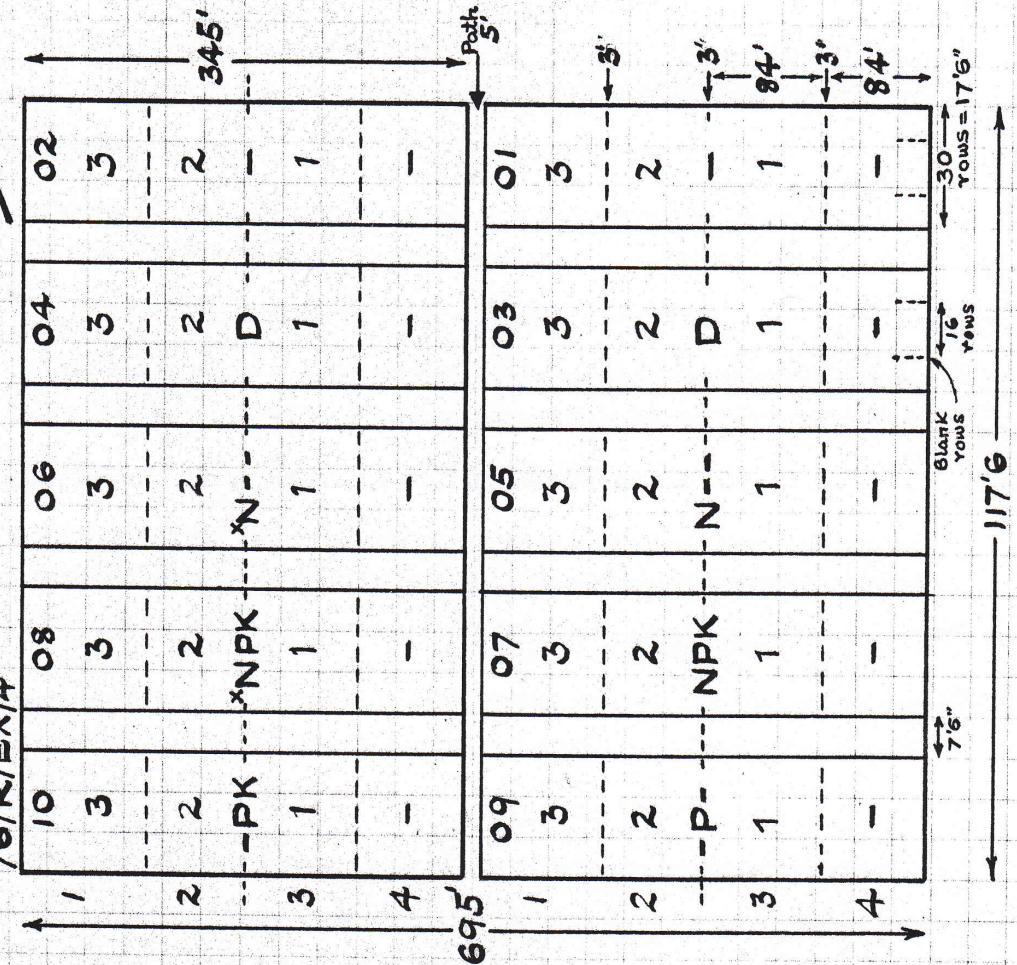
76/R/EX/4

21st Year

BARLEY

HOOSFIELD 1976

4



TREATMENTS per hectare (acre)  
N to sub-plots - 1st Year, bare followed in 1975 (N rates to rotate every year)  
 - 1, 2, 3 None, 48, 96, 144 Kg N as Nitro-Chalk 25 (- 43, 86, 129 lb N)

Basal manuring: None

Variety: Julia, seed dressed with ethirimol sown at 140lb/acre (157 kg/ha) on 3 Mar.

Residuals of Manures applied to POTATOES

Annually 1876 - 1901

- N No manure since 1852
- x N 400lb (448 kg/ha) sulphate of ammonia
- P 550lb (617 kg) nitrate of soda
- K 400lb (448 kg) superphosphate
- D 300lb (336 kg) sulphate of potash } K with Na, Mg
- 100lb (112 kg) sulphate of soda.
- 100lb (112 kg) sulphate of magnesia
- 14 tons (35 tonnes) farmyard manure

Plot area: 17'6" x 345' = 0.139 acre (0.056 ha)  
Sub-plot 17'6" x 84' = 0.034 acre (0.014 ha)  
Harvested: 9'4" x 84' = 0.018 acre (0.0073 ha)

N sequence

|      |    |    |    |    |    |
|------|----|----|----|----|----|
| 1976 | 77 | 78 | 79 | 80 | 81 |
| 0    | 3  | 2  | 1  | 0  | 3  |
| 3    | 1  | 3  | 0  | 2  | 3  |



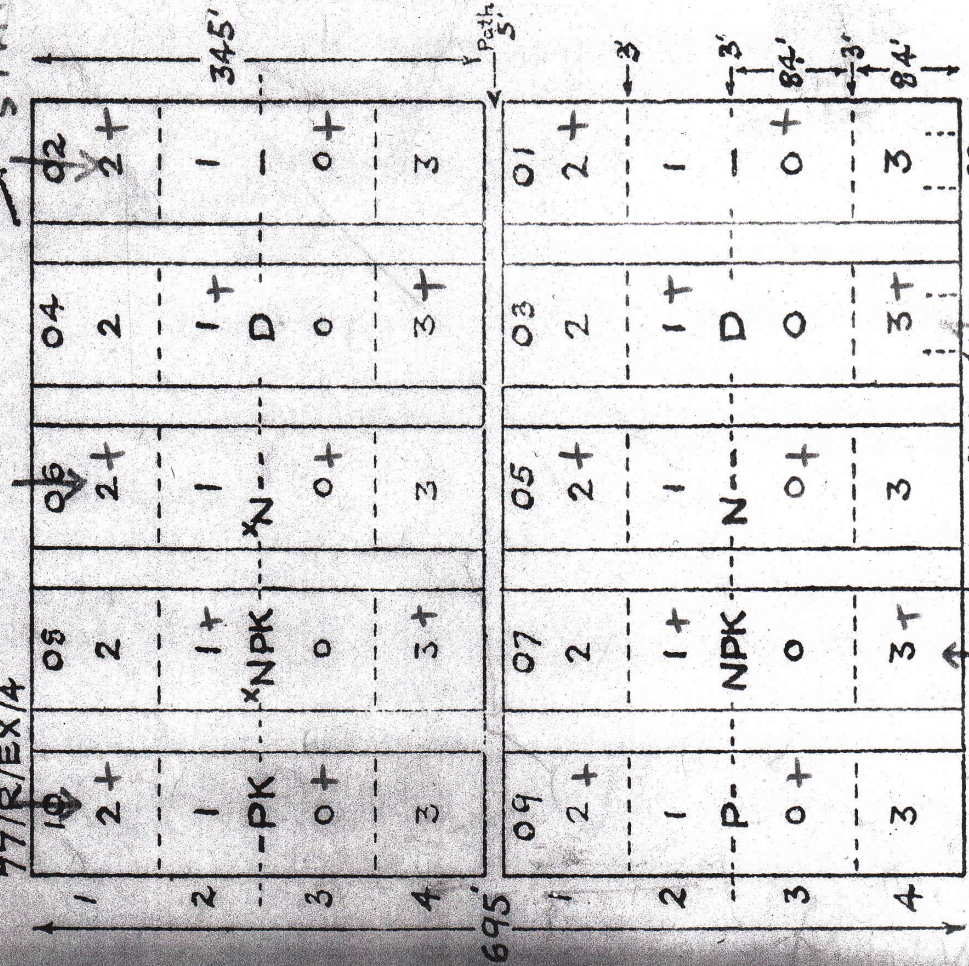
4  
HOOSFIELD 1977

BARLEY

122nd Year

Rothamsted EXHAUSTION LAND

77/R/EX/4



TREATMENTS per hectare (acre)  
N Co Sub-Plots - 2nd Year, bare followed in 1975 (N rates to rotate every year)  
0, 1, 2, 3 None, 48, 96, 144 kg N as Nitro-Chalk 25 (- 43, 86, 129 lb N)

Basal manuring: None

Variety: Julia, seed dressed with ethirimol sown at 140 lb/acre (157 kg/ha) on 9/3/77

Residuals of Manures applied to POTATOES  
Annually 1876-1901

NPK D  
No manure since 1852  
400 lb (448 kg/ha) Sulphate of ammonia  
550 lb (617 kg) Nitrate of soda  
400 lb (448 kg) Superphosphate  
300 lb (336 kg) Sulphate of potash } K with Na, Mg  
100 lb (112 kg) Sulphate of soda  
100 lb (112 kg) Sulphate of magnesia }  
14 tons (35 tonnes) farmyard manure

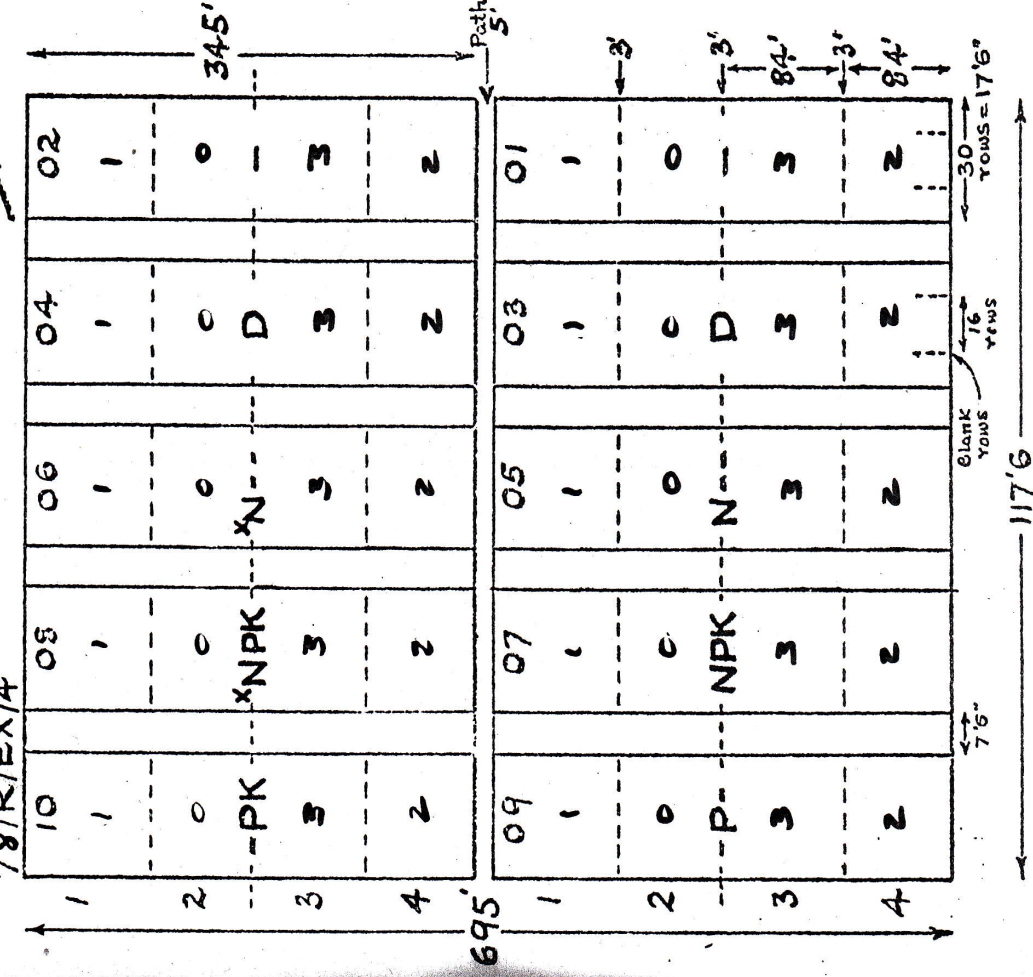
Plot area: 17'6" x 345' = 0.139 acre (0.056 ha)  
Sub-plot: 17'6" x 84' = 0.034 acre (0.014 ha)  
Harvested: 9'4" x 84' = 0.018 acre (0.0073 ha)

N sequence

|      |    |    |    |    |    |
|------|----|----|----|----|----|
| 1976 | 77 | 78 | 79 | 80 | 81 |
| 0    | 3  | 2  | 1  | 0  | 3  |
| 1    | 0  | 3  | 2  | 1  | 0  |
| 2    | 0  | 1  | 3  | 2  | 1  |
| 3    | 0  | 2  | 0  | 3  | 2  |

151 9/18/77

Rothamsted EXHAUSTION LAND 123rd Year BARLEY HOOSFIELD 1978  
 78/R/EX/4 (J.F.J., A.E.J., J.M.)



TREATMENTS per hectare (acre)  
 N to Sub-Plots - 3rd Year (N rates rotate every year) \*

0, 1, 2, 3 None, 48, 96, 144 kg N as Nitro-Chalk 25 (- 43, 86, 129 lb N).

Basal manuring: None

Variety: Julia, seed dressed with ethirimol sown at 140 lb/acre (157 kg/ha) on 31 March

Residuals of Manures applied to POTATOES Annually 1876-1901

- N No manure since 1852
- \*NPK 400 lb (448 kg/ha) sulphate of ammonia
- K 550 lb (617 kg) nitrate of soda
- P 400 lb (448 kg) superphosphate
- D 300 lb (336 kg) sulphate of potash } K with Na, Mg
- 100 lb (112 kg) sulphate of soda.
- 100 lb (112 kg) sulphate of magnesium
- 14 tons (35 tonnes) farmyard manure

Plot area: 17'6" x 345' = 0.139 acre (0.056 ha)  
 Sub-plot 17'6" x 84' = 0.034 acre (0.014 ha)  
 Harvested: 9'4" x 84' = 0.018 acre (0.0073 ha)

\* N sequence

|      |      |      |    |    |    |
|------|------|------|----|----|----|
| 1976 | 1977 | 1978 | 79 | 80 | 81 |
| 0    | 3    | 2    | 1  | 0  | 3  |
| 1    | 0    | 3    | 3  | 1  | 0  |
| 2    | 1    | 0    | 0  | 2  | 3  |
| 3    | 2    | 1    | 0  | 0  | 1  |

Rothamsted EXHAUSTION LAND 12 4 Year BARLEY HOOSFIELD 1979

Sponsors: J.F. Jenkin, A.E. Johnston, J. McCuen  
 TREATMENTS per hectare (acre)  
 N to Sub-Plots

(N rates rotate every year  
 0, 1, 2, 3 None, 48, 96, 144 kg N as Nitro-Chalk  
 (- 43, 86, 129 lb N)

Basal manuring: None

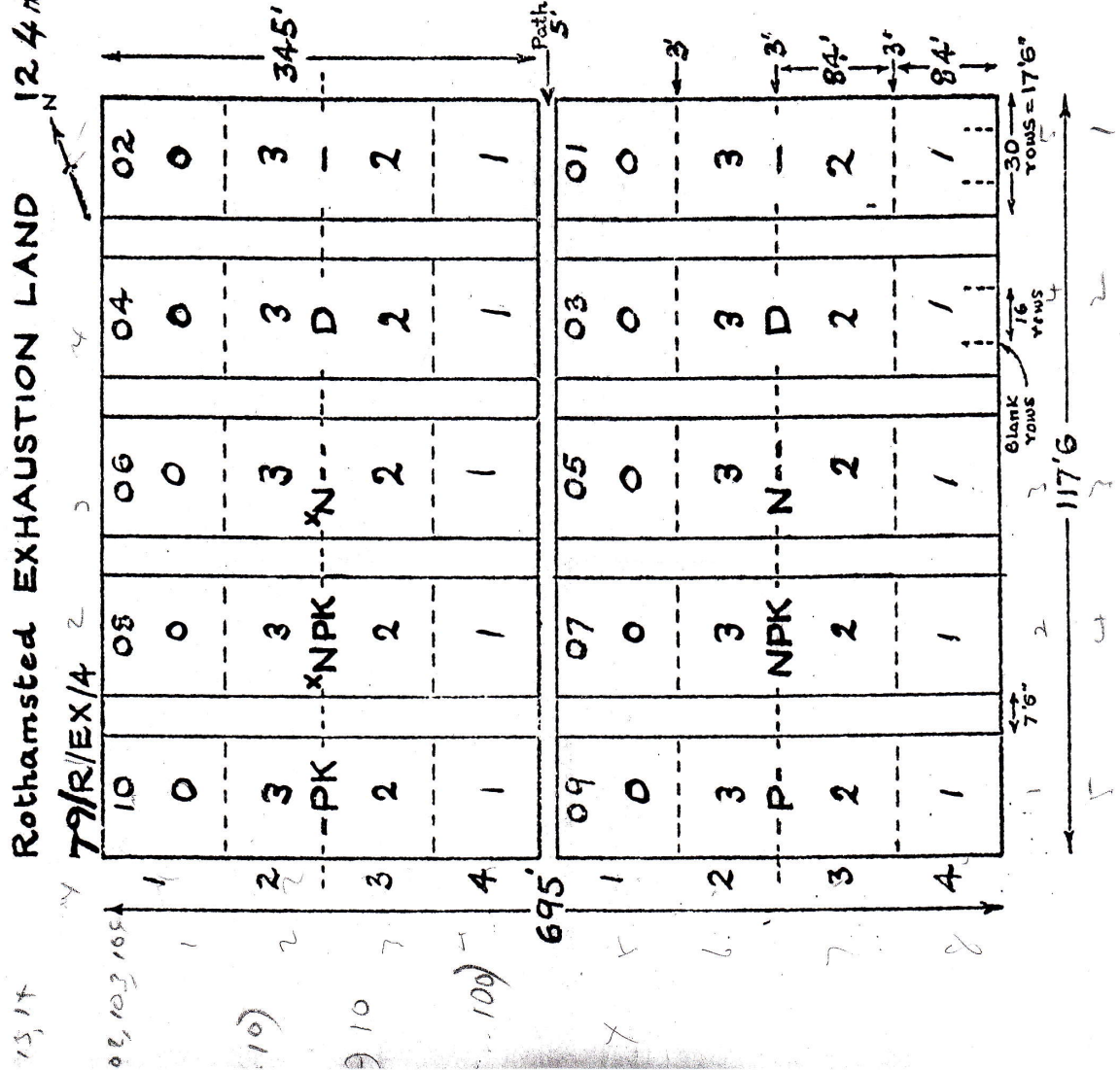
Variety: Julia, seed dressed with ethiri<sup>not</sup>  
 sown at 140 lb/acre (157 kg/ha) on 18 April

Residuals of Manures applied to POTATO  
 Annually 1876 - 1901

- NPK D  
 No manure since 1852  
 400 lb (448 kg/ha) sulphate of ammonia  
 550 lb (617 kg) nitrate of soda  
 400 lb (448 kg) superphosphate  
 300 lb (336 kg) sulphate of potash } K<sub>2</sub>O  
 100 lb (112 kg) sulphate of soda } Na<sub>2</sub>O  
 100 lb (112 kg) sulphate of magnesia } MgO  
 14 tons (35 tonnes) farmyard manure

Plot area: 17'6" x 345' = 0.139 acre (0.056)  
 sub-plot 17'6" x 84' = 0.034 acre (0.014)  
 Harvested: 9'4" x 84' = 0.018 acre (0.0073)

\* N sequence 1976 77 78 79 80 81  
 0 1 2 3 4 5  
 1 2 3 4 5  
 2 3 4 5  
 3 4 5  
 4 5  
 5



Rothamsted EXHAUSTION LAND 12.5 Year BARLEY HOOSFIELD 1980 4

Sponsors J.F. Jenkin, A.E. Johnston, J. MacEwen

TREATMENTS per hectare (acre)  
N to Sub-Plots (Started 1976)

0, 1, 2, 3 None, 48, 96, 144 kg N as Nitro-Chalk 26  
(N rates rotate every year)\*

Basal manuring: None

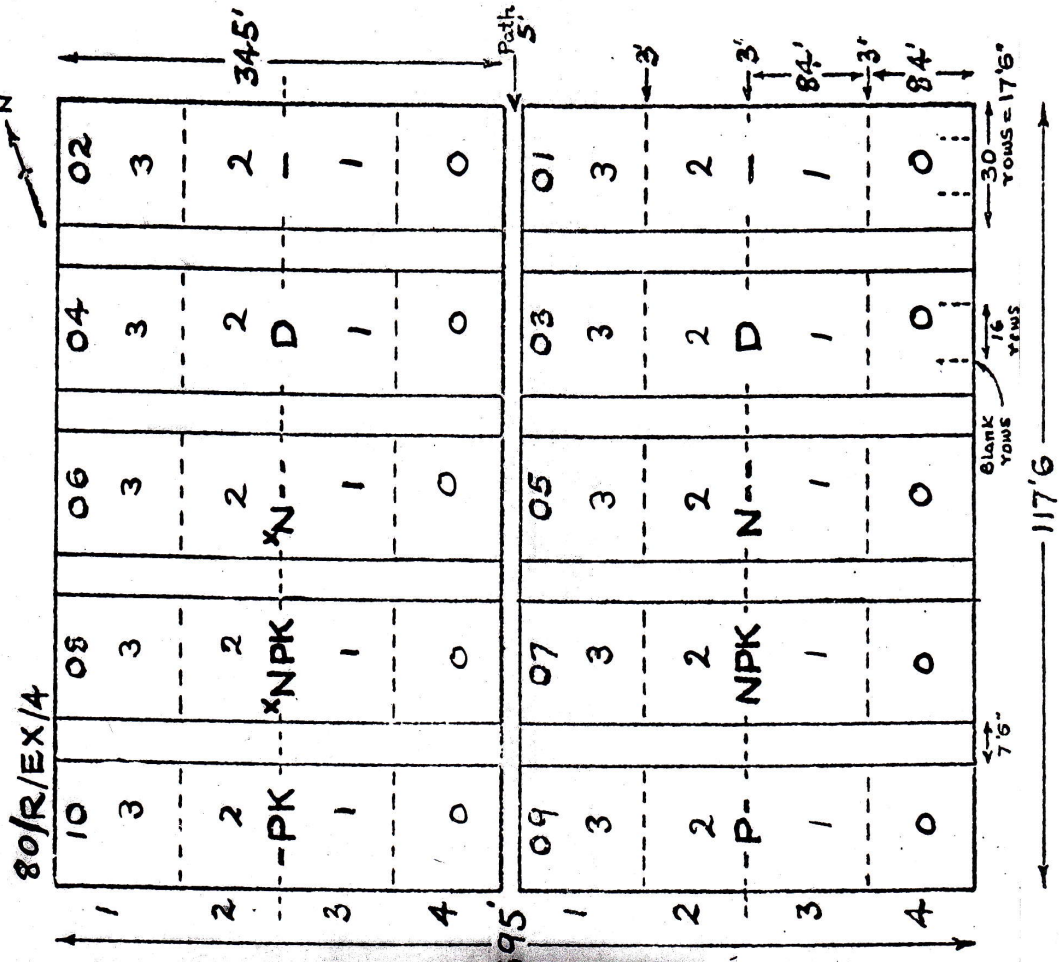
Variety: Georgie, seed/dressed with ethirimol  
Sown at 140 lb/acre (157 kg/ha) 9 April

Residuals of Manures applied to POTATOES  
Annually 1876-1901

- N NPK D  
No manure since 1852  
400 lb (448 kg/ha) Sulphate of ammonia  
550 lb (617 kg) Nitrate of soda  
400 lb (448 kg) Superphosphate  
300 lb (336 kg) Sulphate of potash } K with  
100 lb (112 kg) Sulphate of soda } Na, Mg  
100 lb (112 kg) Sulphate of magnesia }  
14 tons (35 tonnes) farmyard manure

Plot area: 17'6" x 34'5" = 0.139 acre (0.056 ha)  
Sub-plot 17'6" x 8'4" = 0.034 acre (0.014 ha)  
Harvested: 9'4" x 8'4" = 0.018 acre (0.0073 ha)

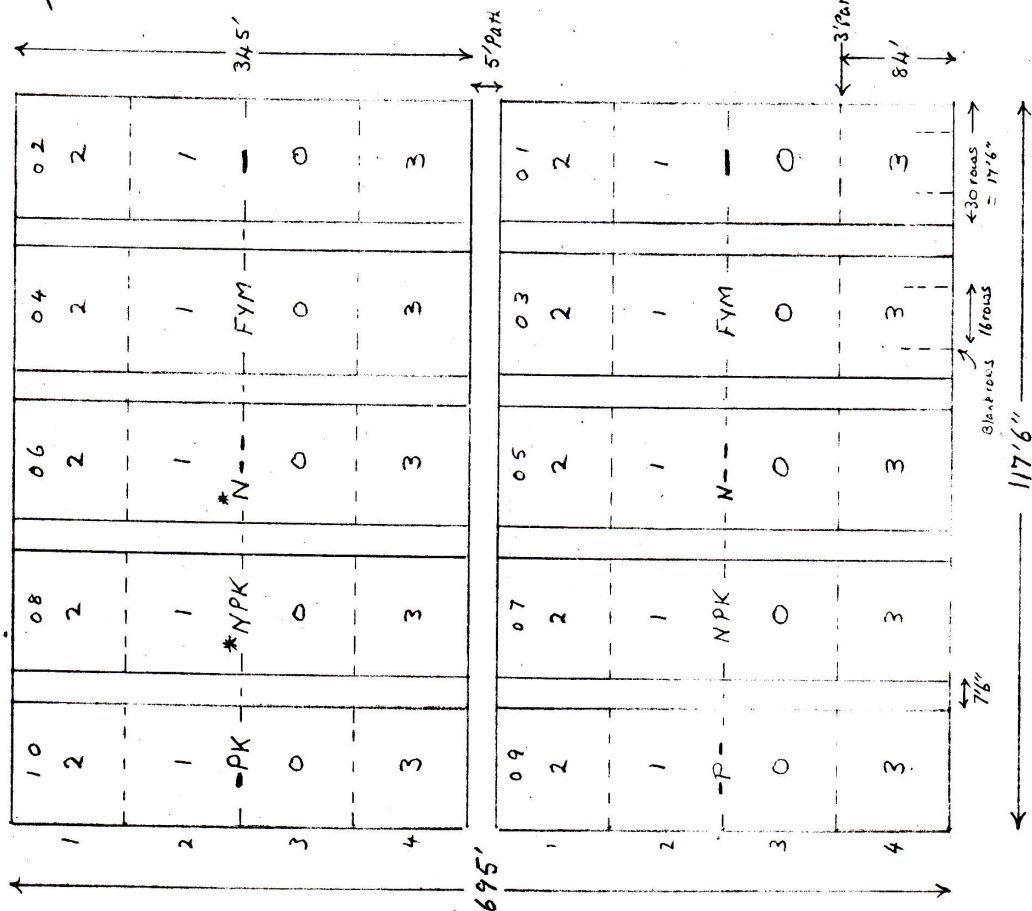
\* N sequence 1976 77 78 79 80 81  
0 3 2 1 0 3  
1 0 3 3 0 3  
2 3 0 1 2 3



NOTE: Northern sidebands to receive N at 96 kg/ha in 1980

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81/R/EX/14 ROTHAMSTED EXHAUSTION LAND 126th YEAR BARLEY HOOSFIELD 1981



Sponsors: T. Fenby, A.E. Johnston, J. McEwen

TREATMENTS Per hectare (acre)

N to Sub-Plots (Started 1976)  
(N rates rotate every year)

0, 1, 2, 3 None, 48, 96, 144 kg N as Nitro-Chalk, 26% N  
(-, 43, 86, 129 lb N)

BASAL MANURING: None

VARIETY: Georgie, seed dressed with Ekaminol  
Sown at 140 lb/acre (157 kg/ha) on 18 February

RESIDUALS OF MANURES APPLIED TO POTATOES

ANNUALLY 1876 - 1901

|     |                       |                      |
|-----|-----------------------|----------------------|
| -   | No manure since 1852  |                      |
| N   | 400 lb/AC (448 kg/ha) | Sulphate of ammonia  |
| *N  | 550 " " (617 " " )    | Nitrate of Soda      |
| P   | 400 " " (448 " " )    | Superphosphate       |
| K   | 300 " " (336 " " )    | Sulphate of potash   |
|     | 100 " " (112 " " )    | Sulphate of Soda     |
|     | 100 " " (112 " " )    | Sulphate of Magnesia |
| FYM | 14 tons (35 tonnes)   | Farmyard manure      |

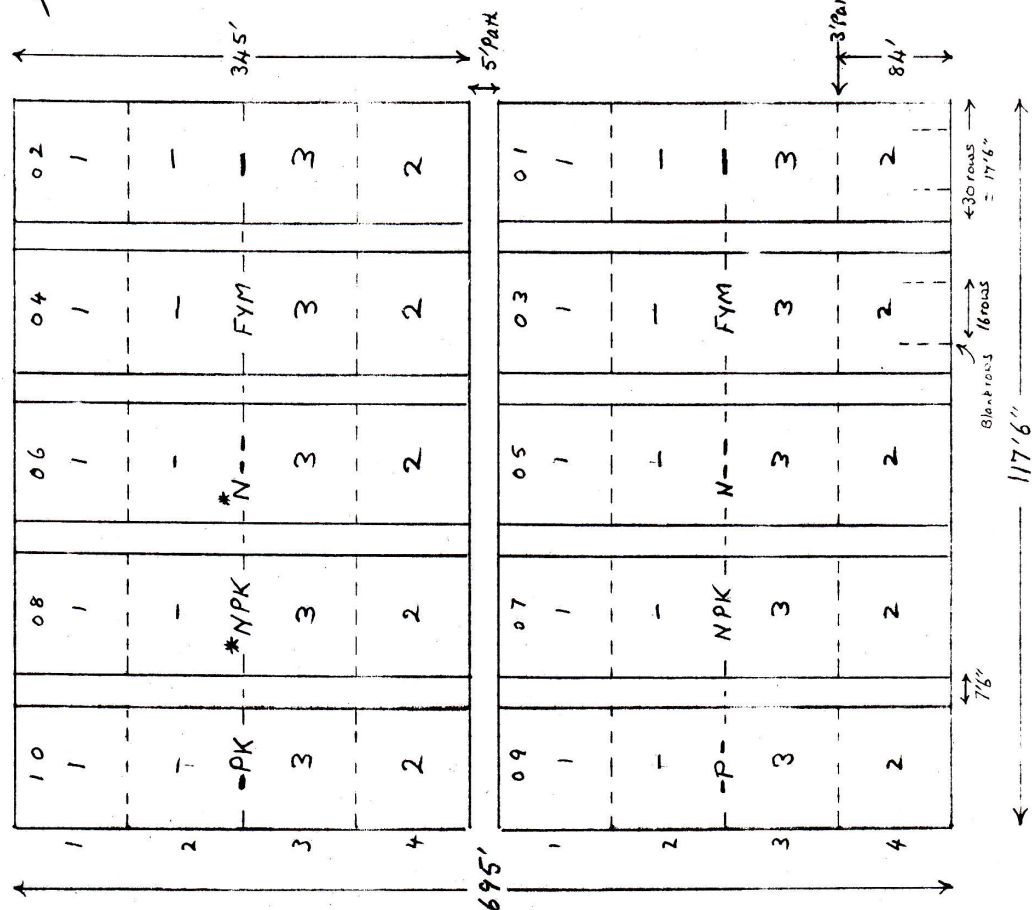
PLOT AREA: 17'6" x 345' = 0.139 AC (0.056 ha)

Sub-Plot 17'6" x 84' = 0.034 " (0.014 " )  
Harvested 9'4" x 84' = 0.018 " (0.0073 " )

|   |            |      |     |     |     |     |     |
|---|------------|------|-----|-----|-----|-----|-----|
| T | N Sequence | 1980 | '81 | '82 | '83 | '84 | '85 |
|   |            | 0    | 3   | 2   | 1   | 0   | 3   |
|   |            | 1    | 0   | 3   | 2   | 1   | 0   |
|   |            | 2    | 1   | 0   | 3   | 2   | 1   |
|   |            | 3    | 2   | 1   | 0   | 3   | 2   |

82/R/Ex/14 ROTHAMSTED EXHAUSTION LAND 12TH YEAR BARLEY HOOSFIELD 1982

Sponsors: J.F. Temlyn, A.E. Johnston, J. McEwen



TREATMENTS Per hectare (acre)

N to Sub-plots (Started 1976)  
(N rates rotate every year)  
- , 1, 2, 3 None, 48, 96, 144 kg N as Nitro-chalk, 26% N  
( , 43, 86, 129 lb N)

BASAL MANURING: None

VARIETY: Georgie, seed dressed with Ethirimol  
Sown at 140 lb/acre (157 kg/ha) on 30 March

RESIDUALS OF MANURES APPLIED TO POTATOES

ANNUALLY 1876-1901

|     |                       |                      |                   |
|-----|-----------------------|----------------------|-------------------|
| -   | No Manure since 1852  | Sulphate of ammonia  | } 'K' with Na, Mg |
| N   | 400 lb/AC (448 kg/ha) | Nitrate of Soda      |                   |
| *N  | 550 " " (617 " " )    | Superphosphate       |                   |
| P   | 400 " " (448 " " )    | Sulphate of Potash   |                   |
| K   | 300 " " (336 " " )    | Sulphate of Magnesia |                   |
| FYM | 100 " " (112 " " )    | Farmyard manure      |                   |
|     | 14 tons (35 tonnes)   |                      |                   |

PLOT AREA: 17'6" x 345' = 0.139 acre (0.056 ha)

Sub-Plot Harvested

|              |                       |     |     |     |     |     |
|--------------|-----------------------|-----|-----|-----|-----|-----|
|              | 17'6" x 84' = 0.034 " | '81 | '82 | '83 | '84 | '85 |
| 9'4" x 84'   | = 0.018 "             |     |     |     |     |     |
| + N Sequence |                       | 0   | 3   | 2   | 1   | 0   |
|              |                       | 1   | 0   | 3   | 2   | 1   |
|              |                       | 2   | 1   | 0   | 3   | 2   |
|              |                       | 3   | 2   | 1   | 0   | 3   |
|              |                       |     |     |     |     | 2   |

83/R/EX/4 ROTHAMSTED EXHAUSTION LAND

128th YEAR

BARLEY HOOSFIELD 1983



Sponsors: J. F. Tempy, A. E. Johnston, J. McEwen

TREATMENTS Per hectare (acre)

N to Sub-Plots (Started 1976)

(N rates rotate every year)  
 -, 1, 2, 3 None, 48, 96, 144 kg N as Nitro-Clak, 26% N  
 (-, 43, 86, 129 lb N)

BASAL MANURING: None

VARIETY: Georgie, seed dressed with Ekurimol,  
 Sown at 140 lb/acre (157 kg/ha) on 10/3/83

RESIDUALS OF MANURES APPLIED TO POTATOES

ANNUALLY 1876 - 1901

|     |                       |                      |
|-----|-----------------------|----------------------|
| -   | No Manure since 1852  | Sulphate of ammonia  |
| N   | 400 lb/AC (448 kg/ha) | Nitrate of Soda      |
| *N  | 550 " " (617 " " )    | Superphosphate       |
| P   | 400 " " (448 " " )    | Sulphate of potash   |
| K   | 300 " " (336 " " )    | Sulphate of Soda     |
|     | 100 " " (112 " " )    | Sulphate of Magnesia |
| FYM | 14 tons (35 tonnes)   | Farmyard manure      |

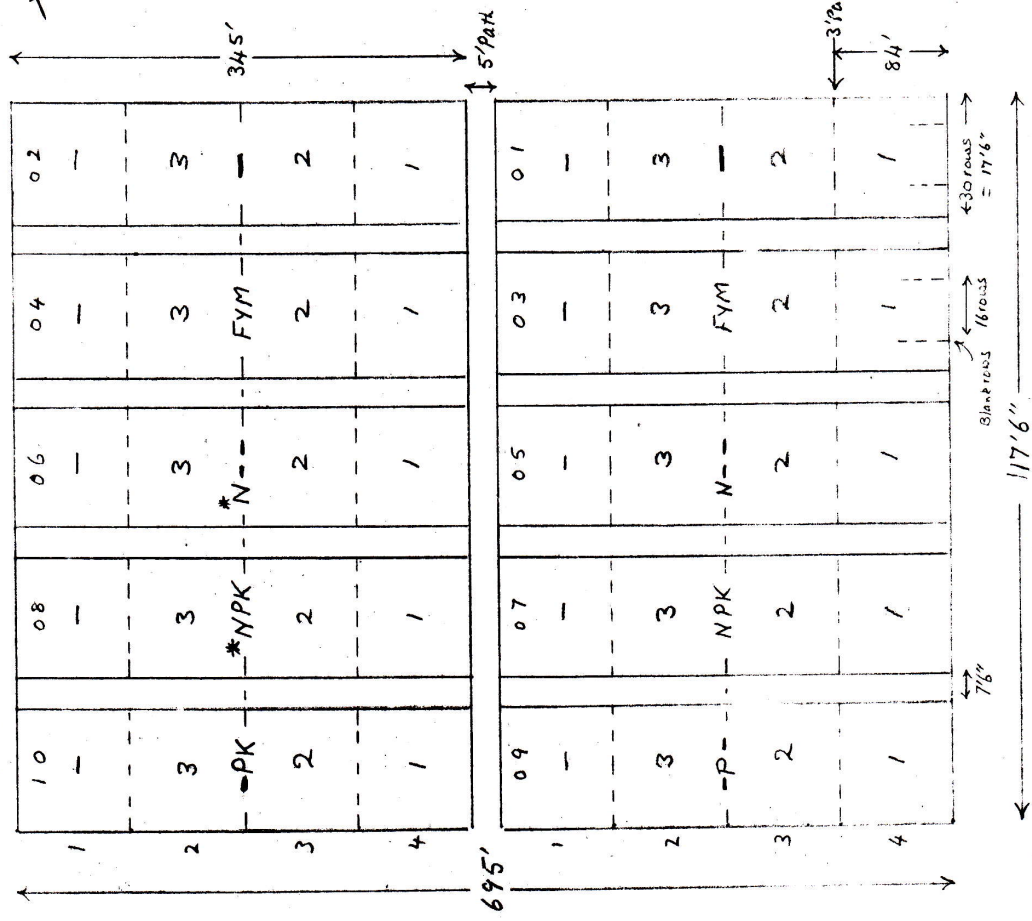
} K with Na, Mg

PLOT AREA: 17'6" x 34'5" = 0.139 acre (0.056 ha)

Sub-Plot 17'6" x 8'4" = 0.034 "

Harvested 9'4" x 8'4" = 0.018 "

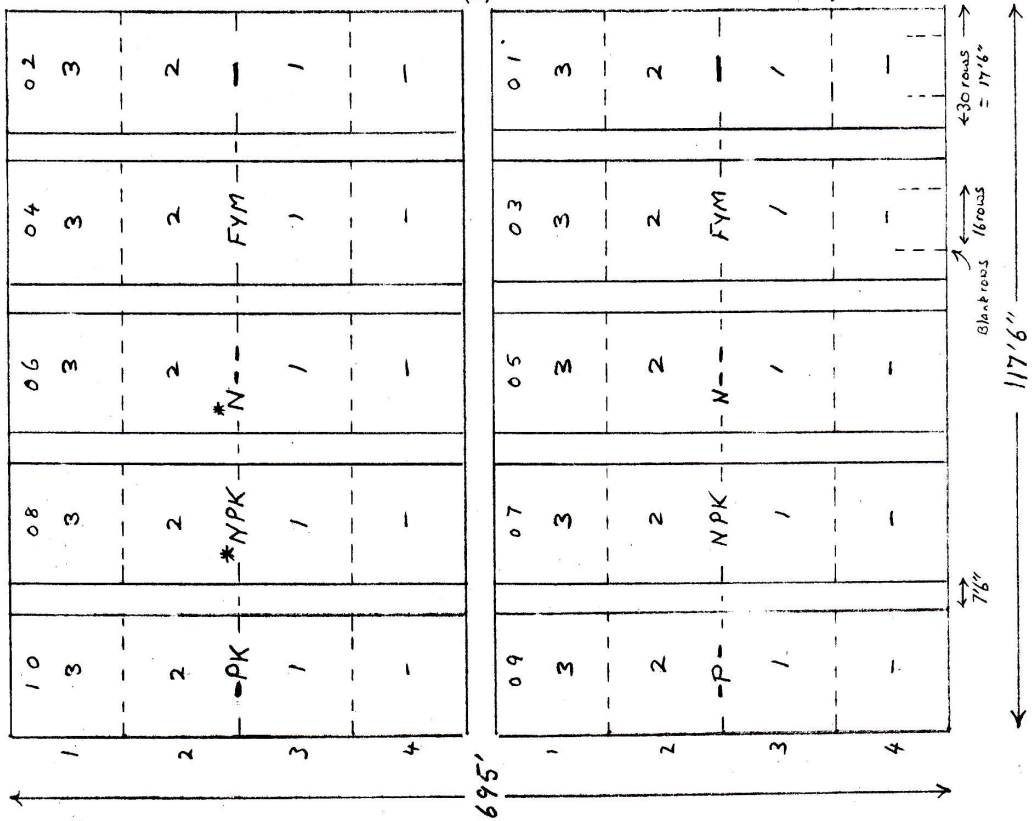
|              |      |     |     |     |     |     |
|--------------|------|-----|-----|-----|-----|-----|
| + N Sequence | 1980 | '81 | '82 | '83 | '84 | '85 |
|              | -    | 3   | 2   | 1   | -   | 3   |
|              | 1    | -   | 3   | 2   | 1   | -   |
|              | 2    | 1   | -   | 3   | 2   | 1   |
|              | 3    | 2   | 1   | -   | 3   | 2   |



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84/R/Ex/4 ROTHAMSTED EXHAUSTION LAND 129 H YEAR BARLEY HOOSFIELD 1984

Sponsors: J. F. Tembyn, A. E. Johnston, J. McEwen



TREATMENTS Per hectare (acre)

N to Sub-plots (Started 1976)  
(N rates rotate every year)  
None, 48, 96, 144 kg N as Nitro-Clark, 26% N  
(-, 43, 86, 129 lb N)

BASAL MANURING: None

VARIETY: Triumph, seed dressed with Baytan, sown at 140 lb/acre (157 kg/ha) on 10 March

RESIDUALS OF MANURES APPLIED TO POTATOES

ANNUALLY 1876-1901

|     |                       |                      |
|-----|-----------------------|----------------------|
| -   | No Manure since 1852  |                      |
| N   | 400 lb/AL (448 kg/ha) | Sulphate of ammonia  |
| *N  | 550 " " (617 " " )    | Nitrate of Soda      |
| P   | 400 " " (448 " " )    | Superphosphate       |
| K   | 300 " " (336 " " )    | Sulphate of potash   |
|     | 100 " " (112 " " )    | Sulphate of Soda     |
|     | 100 " " (112 " " )    | Sulphate of Magnesia |
| FYM | 14 tons (35 tonnes)   | Farmyard manure      |

PLOT AREA: 17'6" x 345' = 0.139 acre (0.056 ha)

Sub-Plot 17'6" x 84' = 0.034 " (0.014 " )

Harvested 9'4" x 84' = 0.018 " (0.0073 " )

|              |      |     |     |     |     |     |     |
|--------------|------|-----|-----|-----|-----|-----|-----|
| + N Sequence | 1980 | 181 | 182 | 183 | 184 | 185 | 186 |
|              |      | 3   | 2   | 1   | -   | 3   | 2   |
|              |      | 1   | -   | 3   | 2   | 1   | -   |
|              |      | 2   | 1   | -   | 3   | 2   | 1   |
|              |      | 3   | 2   | 1   | -   | 3   | 2   |



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ROTHAMSTED EXHAUSTION LAND 130 K. YEAR BARLEY HOOSFIELD 1985

Sponsors: T. F. Temby, R. E. Johnston, J. McEwen

TREATMENTS Per hectare (acre)

N to Sub-plots (Started 1976)

(N rates rotate every year)

1, 2, 3 None, 48, 96, 144 kg N as Nitro-Chalk, 27.5% N  
(1, 43, 86, 129 lb N)

BASAL MANURING: None

VARIETY: Triumph, seed dressed with Baytan, sown at 157 kg/ha on 18 March

RESIDUALS OF MANURES APPLIED TO POTATOES

ANNUALLY 1876-1901

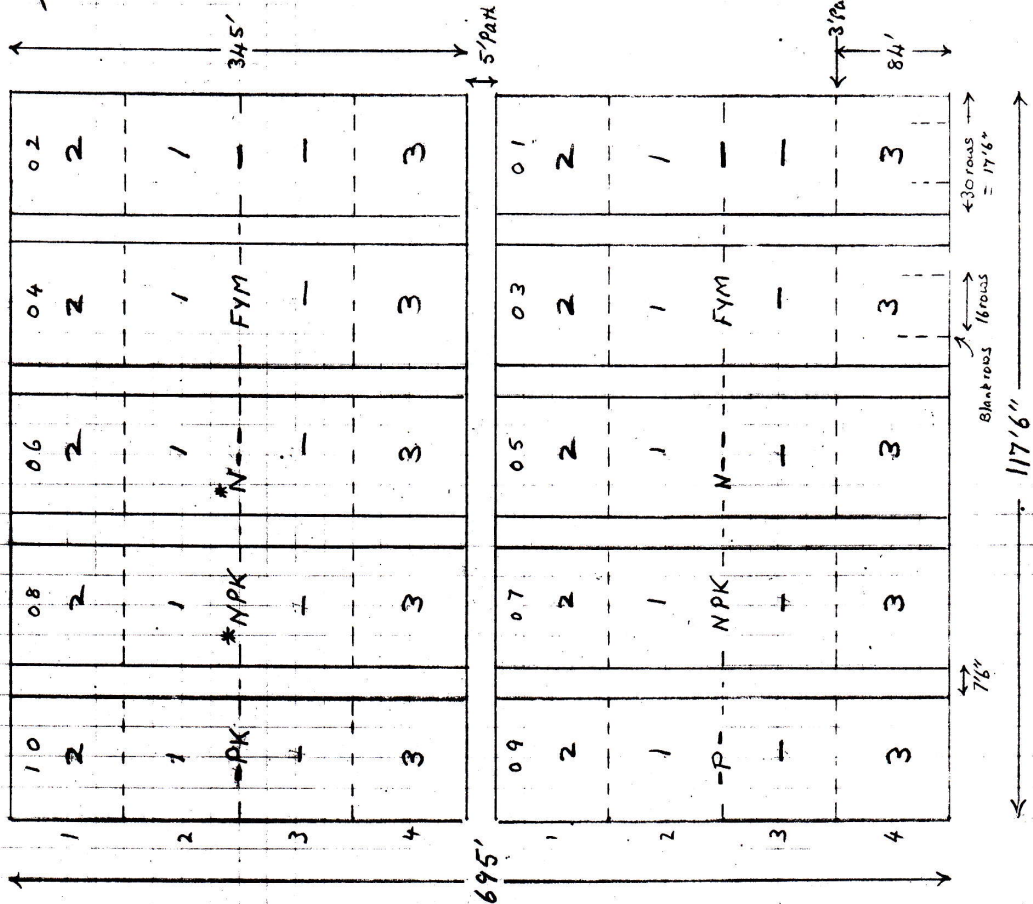
|     |                       |                      |
|-----|-----------------------|----------------------|
| -   | No Manure since 1852  |                      |
| N   | 400 lb/AC (448 kg/ha) | Sulphate of ammonia  |
| *N  | 550 " " (617 " " )    | Nitrate of Soda      |
| P   | 400 " " (448 " " )    | Superphosphate       |
| K   | 300 " " (336 " " )    | Sulphate of potash   |
|     | 100 " " (112 " " )    | Sulphate of Soda     |
|     | 100 " " (112 " " )    | Sulphate of Magnesia |
| FYM | 14 tons (35 tonnes)   | Farmyard manure      |

PLOT AREA: 17'6" x 345' = 0.139 acre (0.056 ha)

Sub-plot 17'6" x 84' = 0.034 " (0.014 " )

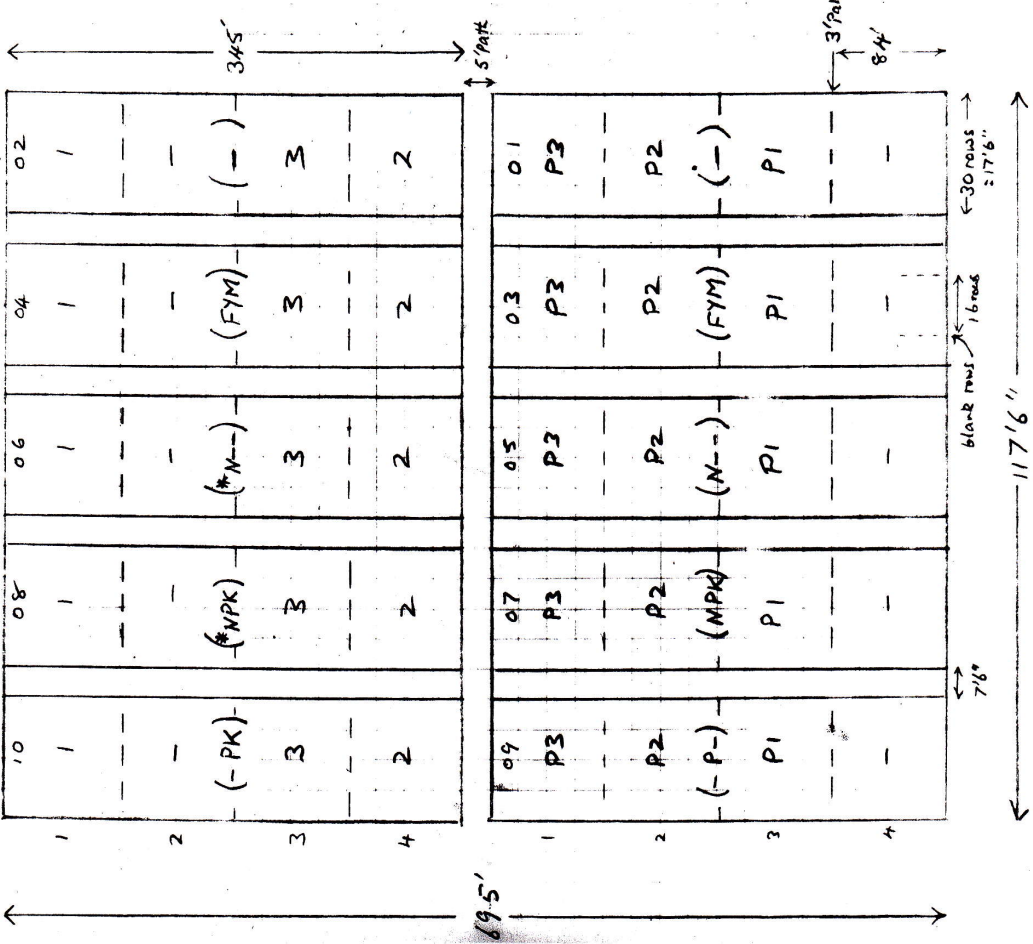
Harvested 9'4" x 84' = 0.018 " (0.0073 " )

|              |      |     |     |     |     |     |     |     |
|--------------|------|-----|-----|-----|-----|-----|-----|-----|
| † N sequence | 1980 | '81 | '82 | '83 | '84 | '85 | '86 | '87 |
|              | -    | 3   | 2   | 1   | -   | 3   | 2   | 1   |
|              | 1    | -   | 3   | 2   | 1   | -   | 3   | 2   |
|              | 2    | 1   | -   | 3   | 2   | 1   | -   | 3   |
|              | 3    | 2   | 1   | -   | 3   | 2   | 1   | -   |



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86/R/EX/4 ROTHAMSTED EXHAUSTION LAND 131 SE. YEAR S. BARLEY HOOSFIELD 1986



Sponsors: J.F. Jenkyn, A.E. Johnston, J. McEwen

TREATMENTS Per Aa. (acre)  
 N to sub-plots (most half plots 07, 04, 06, 08, 10), in 1986. Started on all plots 1976.  
 - 1, 2, 3. None, 48, 96, 144 kg N as Nitram, 33.5% N  
 ( , 43, 86, 129 lb N)  
 N sequence - to 3 to 2 to 1, rotating every year.

P to sub-plots (East half only plots 01, 03, 05, 07, 09) started 1986  
 - None  
 P1 100 kg P<sub>2</sub>O<sub>5</sub> (annually until index 1 achieved on most impoverished plots)  
 P2 200 " " (Annually until index 2 achieved)  
 P3 300 " " ( " " 3 " " )

BASAL MANURING (Eastern half plots 01, 03, 05, 07, 09) started 1986  
 N at 144 kg N ha<sup>-1</sup> + K at 100 kg K<sub>2</sub>O ha<sup>-1</sup>

VARIETY Triumph, dressed 'Baytan', followed by fungicide strips as recommended by county miller  
 approx 2 May

RESIDUALS OF MANURES APPLIED TO POTATOES ANNUALLY 1876-1901

|     |                       |                      |
|-----|-----------------------|----------------------|
| N   | 400 lb/ac (448 kg/ha) | Sulphate of Ammonia  |
| *N  | 550 " " (617 " " )    | Nitrate of Soda      |
| P   | 400 " " (448 " " )    | Superphosphate       |
| K   | 300 " " (336 " " )    | Sulphate of Potash   |
|     | 100 " " (112 " " )    | Sulphate of Soda     |
|     | 100 " " (112 " " )    | Sulphate of Magnesia |
| FYM | 14 tons (35 tonnes)   | Farmyard manure      |

PLOT AREA

|                  |                       |
|------------------|-----------------------|
| 17'6" x 345'     | = 0.139 ac (0.056 ha) |
| 17'6" x 84'      | = 0.034 " (0.014 " )  |
| 84' x 9'4" x 84' | = 0.018 " (0.0073 " ) |