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ROTHAMSTED
RESEARCH

Collection of Plans for the Woburn Ley-arable Experiment

[Full Table of Content](#)

WOBURN ARABLE AND LEY ROTATIONS - STATIONARY FIELD EXPERIMENT

Year	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	
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Default Title

Rothamsted Research

Rothamsted Research (1957-79) *Default Title* ; Collection Of Plans For The Woburn Ley-Arable Experiment, pp 1 - 42

WOBURN Arable and Ley Rotation · STACKYARD FIELD 20th. year · 1957

Code letter G

- 4 MAR 1957

TREATMENT SYMBOLS

Rotation Crops

- A Potatoes, Rye, Carrots
 - Ah Potatoes, Rye (undersown) Hay (2 cuts)
 - Lu Lucerne cut for hay for 3 years
 - L Ley grazed for 3 years
- Lu, A etc. indicate last two rotations (in order)

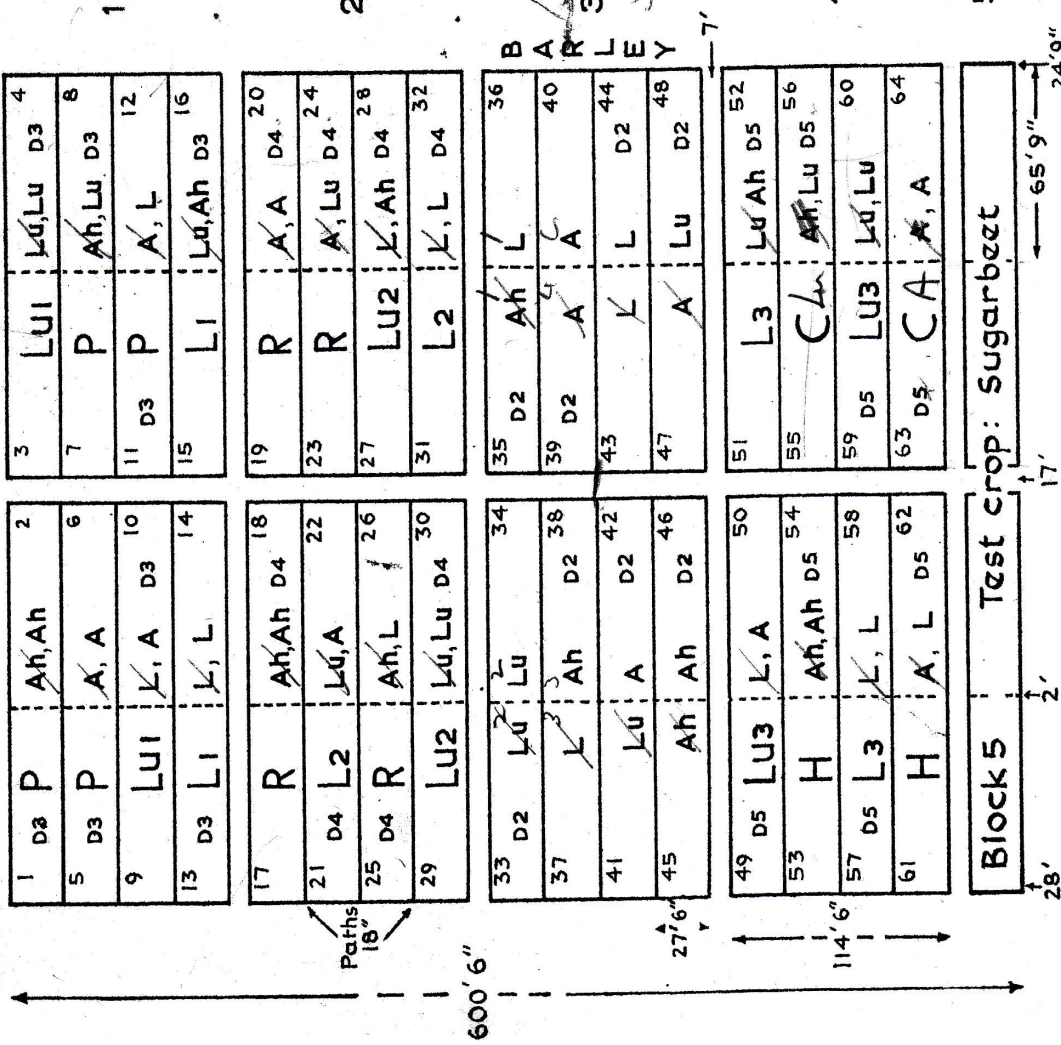
Test crops

- Sugarbeet, barley
- D - Dung at 15 t.p.a. or etc. residual in 2nd. etc crop
- N - 0.72 cwt. N p.a. as Nitrochalk } in addition to basal
- K - 0.9 cwt. K₂O p.a. as muriate }

Block 5 Test crop: Sugarbeet

65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K

Barley. Some plots earled later than others.



Woburn Arable and Ley Rotation

STACKYARD 21st year 1958

TREATMENT SYMBOLS

Rotation	Crops
A	Potatoes, Rye, Carrots
Ah	Potatoes, Rye (undersown) Hay (2 cuts)
Lu	Lucerne cut for hay for 3 years
L	Ley grazed for 3 years

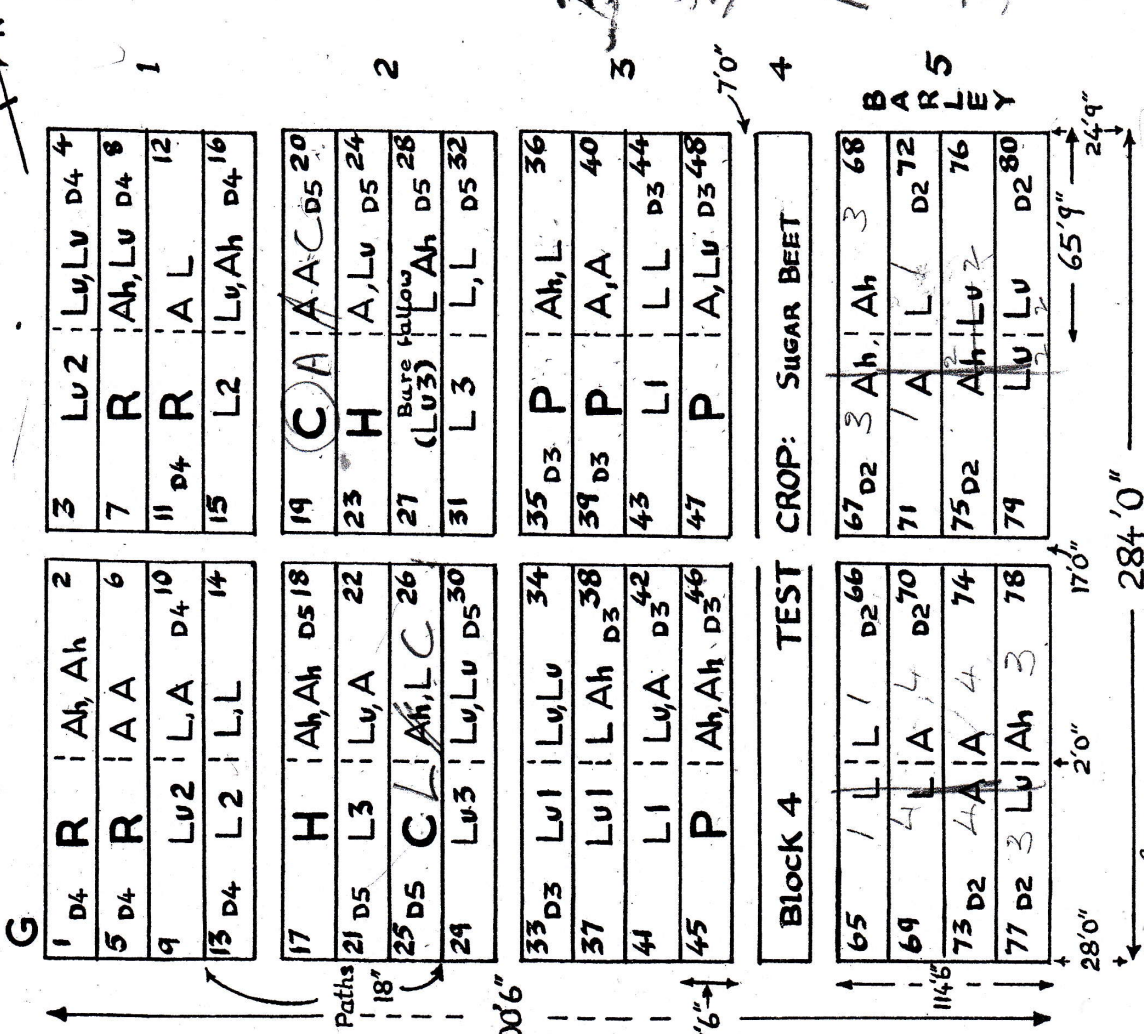
Lu, A etc. indicate last two rotations (in order)

Test Crops Sugar beet, barley

D Dung at 15 t.p.a. D2, etc. residual in 2nd.e

N 0.72 cwt N p.a as Nitro-Chalk } in additio

K 0.9 cwt K₂O p.a as muriate } basal man



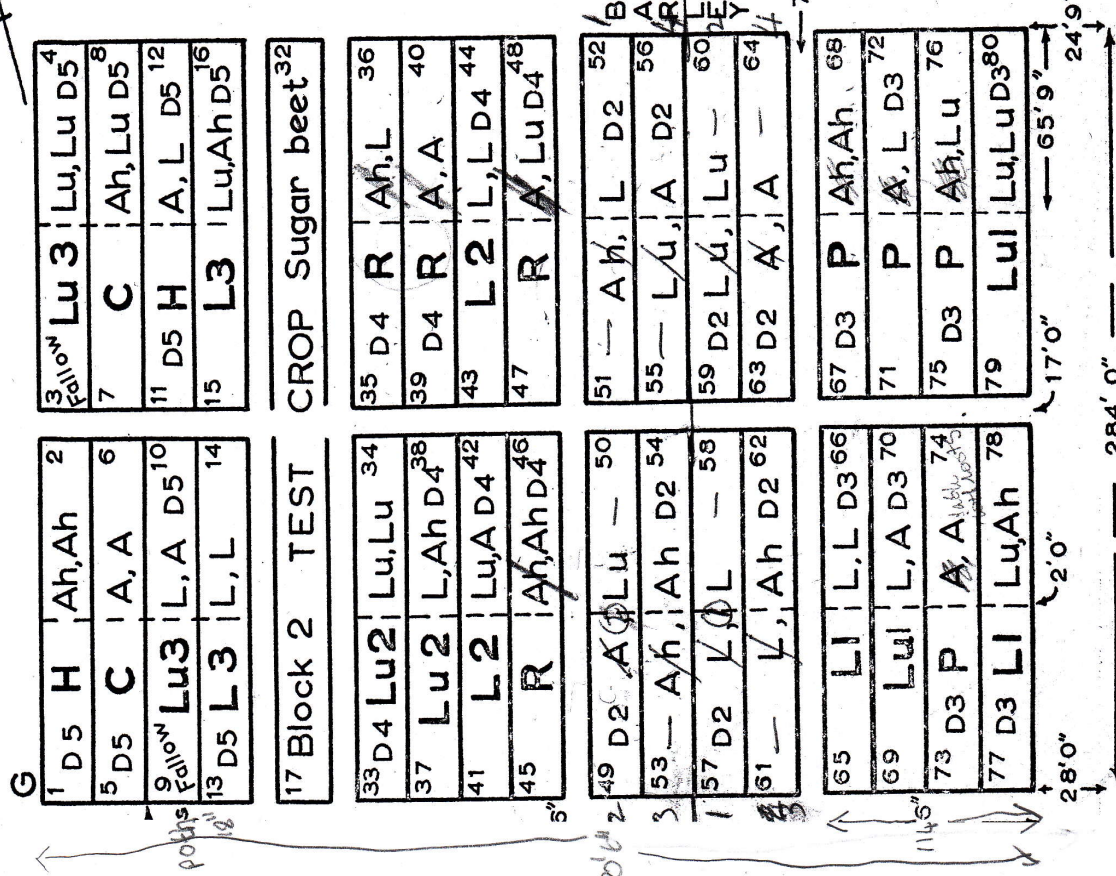
Block 4 Test crop SUGAR BEET

54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN	DN
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z
55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z
57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z

WOBURN Arable and Ley Rotations Code letter G STACKYARD FIELD 22nd year 1959

TREATMENT SYMBOLS
Rotation Crops
 A Potatoes, Rye, Carrots.
 Ah Potatoes, Rye (undersown), Hay (2 cuts).
 Lu Lucerne cut for hay for 3 years.
 L Ley grazed for 3 years
 Lu,A etc. indicate last two rotations (in order)

TEST CROPS: Sugar beet barley
 D Dung at 15 t.p.a. D2 etc. residual in 2nd. etc. crop
 N 0.72 cwt N p.a as 'Nitro-Chalk' } in addition to
 K 0.9 cwt K₂O p.a as muriate of potash } basal NPK



Block 2 TEST CROP: Sugar beet

19	N	N	D	N	20	D	N	-
21	X	N	A	Ah	A	D	N	K
23	Y	F	K	A	A	D	N	K
25	Z	N	K	I	Z	D	N	-
27	X	N	N	-	124	D	N	K
29	Y	N	K	Lu	Ah	D	N	K
31	Z	N	K	I	Z	D	N	-
33	X	N	N	-	128	D	N	K
35	Y	N	K	Ah	Lu	D	N	K
37	Z	N	N	-	132	D	N	-
39	X	D	N	K	A	L	D	3
41	Y	D	N	-	136	D	N	-
43	Z	D	N	-	140	D	N	-
45	X	D	N	K	L	A	D	3
47	Y	D	N	-	144	D	N	-
49	Z	D	N	-	148	D	N	-
51	X	D	N	K	Lu	Lu	D	3
53	Y	D	N	-	152	D	N	-
55	Z	D	N	-	156	D	N	-

WOBURN Available and Ley Rotations Code letter G STACKYARD FIELD 23rd year 1960

TREATMENT SYMBOLS
Rotation
 A Potatoes, Rye, Carrots
 Ah Potatoes, Rye (Johnson) Hay (2 cuts)
 Lu Lucerne cut for hay for 3 years
 L Ley grazed for 3 years
 Lu, A etc indicate last 2 rotations in order.
 Ah followed by best crops Sugar beet, barley
 D during 15 ton/ha, D2 etc, residual in 2nd, etc crop
 N, K: 0.72 wt N, 0.9 wt K₂O in addition to basal

Leg 1
 Leg 2
 AH3

Block	TEST CROP	Sugar beat
1	AK/Ah 3 D2	16
3	Ah 3 D2	19
21	Ah 3 D2	23
25	Ah 3 D2	27
29	Ah 3 D2	31
33	Ah 3 D2	35
37	Ah 3 D2	39
41	Ah 3 D2	43
45	Ah 3 D2	47
49	Ah 3 D2	51
53	Ah 3 D2	55
57	Ah 3 D2	59
61	Ah 3 D2	63
65	Ah 3 D2	67
69	Ah 3 D2	71
73	Ah 3 D2	75
77	Ah 3 D2	79

Block	TEST CROP	Sugar Beet
1	D-K	14 D--
2	DN-Ah	14 DNK
3	DNK-Ah	14 DNK
4	D-K	14 D-K
5	D-K	14 DN-
6	DNK-Ah	14 DN-
7	D-K	14 DN-
8	DNK-Ah	14 DN-
9	D-K	14 DN-
10	DNK-Ah	14 DN-
11	D-K	14 DN-
12	DNK-Ah	14 DN-
13	D-K	14 DN-
14	DNK-Ah	14 DN-
15	D-K	14 DN-
16	DNK-Ah	14 DN-
17	D-K	14 DN-
18	DNK-Ah	14 DN-
19	D-K	14 DN-
20	DNK-Ah	14 DN-
21	D-K	14 DN-
22	DNK-Ah	14 DN-
23	D-K	14 DN-
24	DNK-Ah	14 DN-
25	D-K	14 DN-
26	DNK-Ah	14 DN-
27	D-K	14 DN-
28	DNK-Ah	14 DN-
29	D-K	14 DN-
30	DNK-Ah	14 DN-
31	D-K	14 DN-
32	DNK-Ah	14 DN-
33	D-K	14 DN-
34	DNK-Ah	14 DN-
35	D-K	14 DN-
36	DNK-Ah	14 DN-
37	D-K	14 DN-
38	DNK-Ah	14 DN-
39	D-K	14 DN-
40	DNK-Ah	14 DN-
41	D-K	14 DN-
42	DNK-Ah	14 DN-
43	D-K	14 DN-
44	DNK-Ah	14 DN-
45	D-K	14 DN-
46	DNK-Ah	14 DN-
47	D-K	14 DN-
48	DNK-Ah	14 DN-
49	D-K	14 DN-
50	DNK-Ah	14 DN-
51	D-K	14 DN-
52	DNK-Ah	14 DN-
53	D-K	14 DN-
54	DNK-Ah	14 DN-
55	D-K	14 DN-
56	DNK-Ah	14 DN-
57	D-K	14 DN-
58	DNK-Ah	14 DN-
59	D-K	14 DN-
60	DNK-Ah	14 DN-
61	D-K	14 DN-
62	DNK-Ah	14 DN-
63	D-K	14 DN-
64	DNK-Ah	14 DN-
65	D-K	14 DN-
66	DNK-Ah	14 DN-
67	D-K	14 DN-
68	DNK-Ah	14 DN-
69	D-K	14 DN-
70	DNK-Ah	14 DN-
71	D-K	14 DN-
72	DNK-Ah	14 DN-
73	D-K	14 DN-
74	DNK-Ah	14 DN-
75	D-K	14 DN-
76	DNK-Ah	14 DN-
77	D-K	14 DN-
78	DNK-Ah	14 DN-
79	D-K	14 DN-
80	DNK-Ah	14 DN-

WOBURN Anable and Ley Rotations. Code letter G. STACKYARD FIELD 21st year 1961

TREATMENT SYMBOLS

Rotations: A, Ak, Lu, L

Legs: (R) Barley, (R) Barley, (R) Barley
 Potatoes: Ry, R (up/down), Ry, R (2 cuts)
 Lucerne: cut for hay for 3 years.
 Ley: grazed for 3 years.

Lu, A etc. indicate that 2 rotations in order.
 All followed by test crops Sugar beet, Barley.
 D being 15 tons for, D 2 etc. residual in 2nd block crop.
 N, K: 0.72 cut N, 0.9 cut K in addition to basal

BARLEY

3	Lu	Lu	D2	4
7	Lu	A	D2	8
11	D2	L	AL	12
15	AL	L	D2	16

19	P	A	A	D3	20
23	L1	Lu	AL	D3	24
27	P	AL	Lu	D3	28
31	L1	L	L	D3	32

2	D2	AL	AL	3
6	D2	A	A	6
10	A	Lu	D2	10
14	D2	L	L	14

17	P	AL	AL	D3	18
21	P	A	L	A	22
25	L1	L	A	L	26
29	L1	Lu	Lu	D3	30

Block 3 TEST CROP Sugar Beet

49	D4	R	AL	L	D4	52
53	R	AL	AL	D4	56	
57	D4	L2	Lu	Lu	Lu	60
61	L2	L	AL	D4	64	

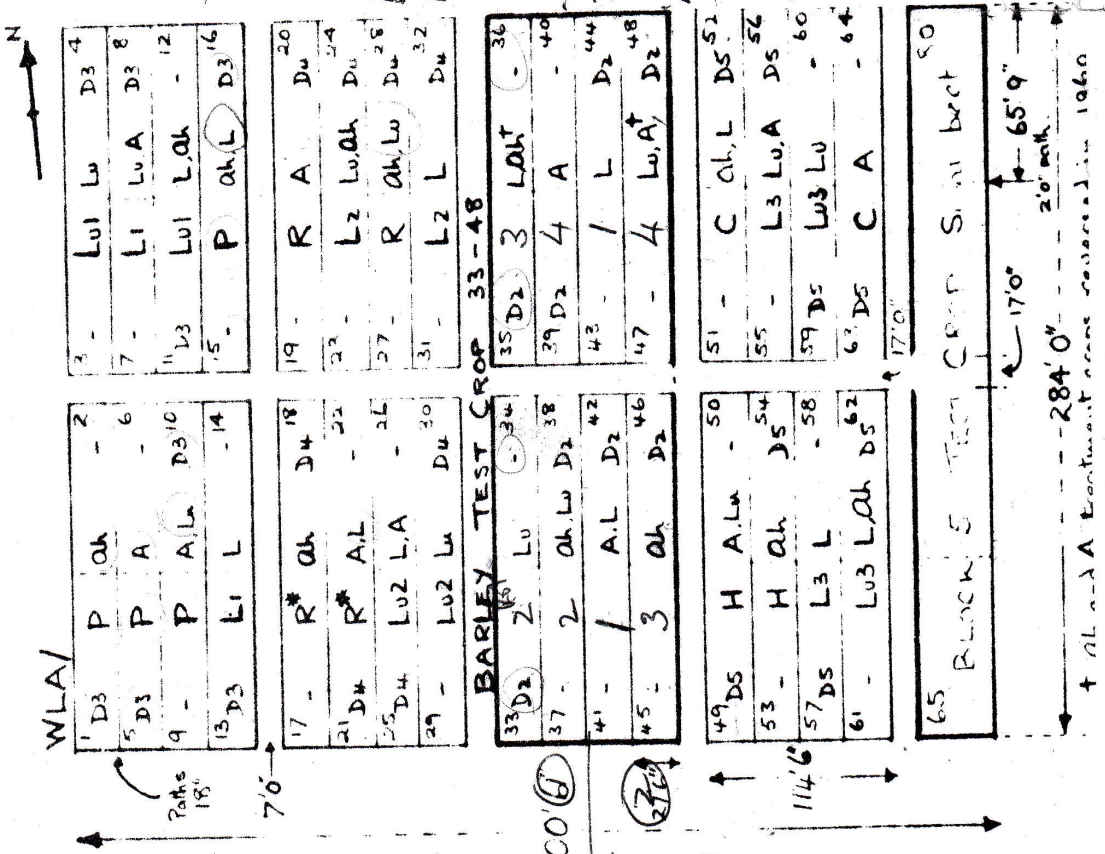
65	D5	H	AL	AL	68	
69	H	A	L	D5	72	
73	D5	C	AL	Lu	76	
77	D5	L3	Lu	Lu	D5	80

Block 3 TEST CROP Sugar Beet

35	D--	184	-	NK	36	-	NK
39	DK	Lx	L	--	40	-	NK
43	DN	Lu	Lu	--	44	-	NK
47	DNK	L	L	--	48	-	NK
51	DN	L	L	--	52	-	NK
55	DK	L	L	--	56	-	NK
59	DK	L	L	--	60	-	NK
63	DK	L	L	--	64	-	NK
67	DK	L	L	--	70	-	NK
71	DK	L	L	--	74	-	NK
75	DK	L	L	--	78	-	NK
81	DK	L	L	--	84	-	NK

1960 Plot (35,36) and (47,48) cropping rotated in 1961. (A) to be included in 1961 plan.

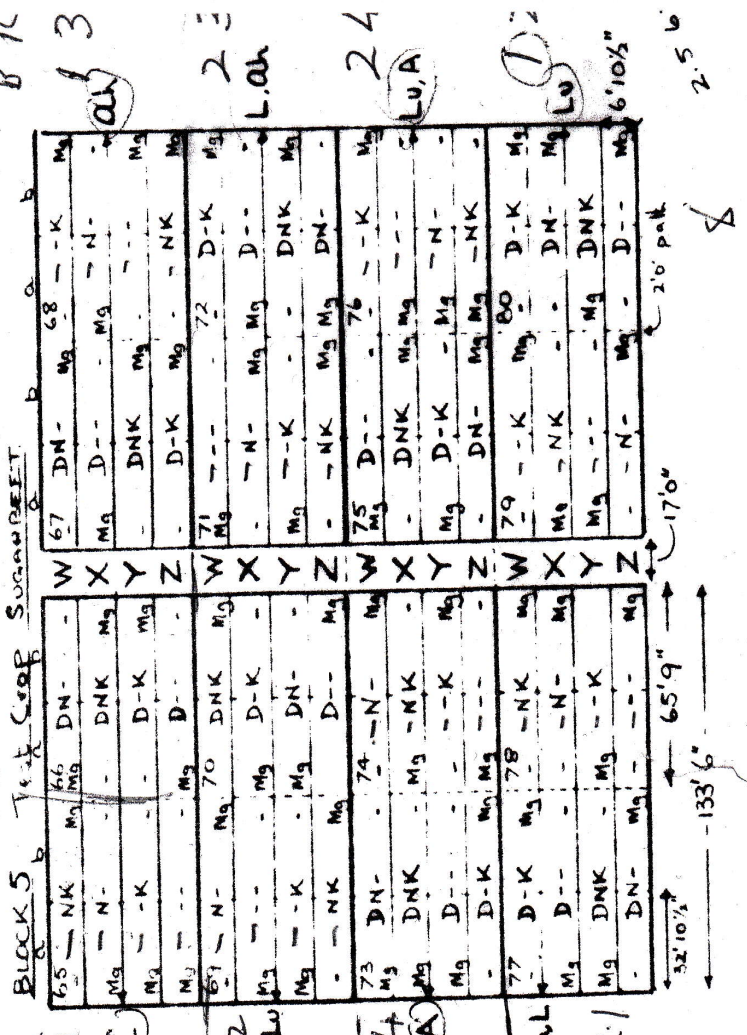
WOBURN Arable and Ley Rotations



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 CREEFIELD V.L.A. STACKYARD 25th year 1962

CROP ROTATIONS (3 years treatment crops, 2 years test crops)
 3 year Leys
 1 GRASS } LUCERNE } POTATOES } ARABLE CROPS }
 2 LEY } FOR } RYE }
 3 GRATED } HAY } CARROTS }
 4 } SUGARBEET } TESTING }
 5 } BARLEY } DUNG } N.K. Mg

NOTE: A single crop rotation (12 Lu) is followed on 4 plots per block. Arable and Ley rotations alternate on remaining 4 plots (Lu, A).
 D Dung at 15 ton per acre to sugar-beet. Do, 3, 4, 5 Dung residues in 2nd, 3rd, 4th yr.
 N 0.72 cut N as Nitrochak 21 K 0.9 cut K2O as nitrate of potash.
 Mg 600 lb manganese sulphate per acre.
 All crops receive basal fertilizers.



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WOBURN Arable and Ley Rotations

STACKYARD 26th year 1963

WLA/

TREATMENT CROPS

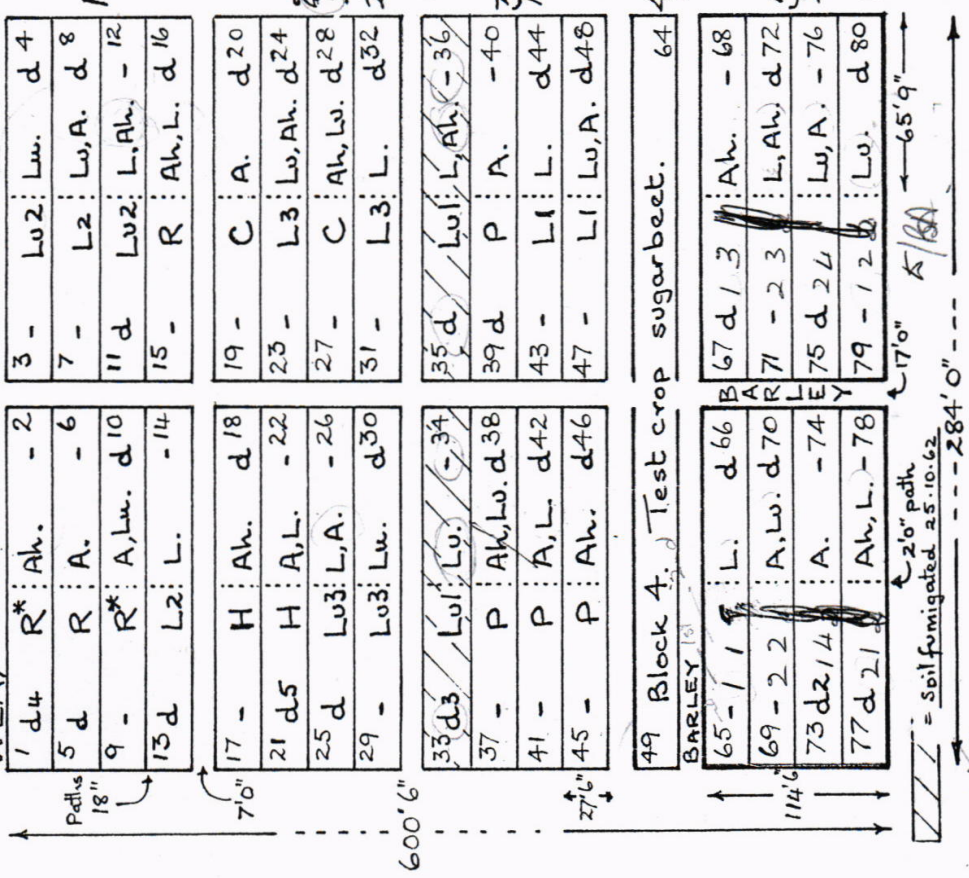
- 1 Potatoes (P)
- 2 Rye (R)
- 3 Carrots (C)
- 4 Potatoes (P)
- 5 Rye (R)
- 6 Hay (H)
- 7 Lucerne cut for hay
- 8 Ley grazed.

SYMBOLS

- Rotations: 3 years Arable (A)
- Ah Potatoes (P)
- Rye (R)
- Carrots (C)
- Hay (H)
- 3 years Ley (L)
- Lucerne cut for hay
- Ley grazed.

Test Crops: SUGAR BEET, BARLEY. (In 4th and 5th year)

TREATMENTS TO SUGAR BEET
 D FYM at 15 tons per acre [d = FYM residuals]
 N 0.72 cut N per acre as 'Nitro-Chalk 21'
 K 0.9 cut K₂ per acre as muriate of potash.
 Mg 500 lb Magnesium sulphate per acre.



TEST CROP SUGAR BEET

49 Mg	DNK	-	50 Mg	-N-	-	51 Mg	-N-	-	52 DNK	Mg
53 Mg	D-0	-	54 Mg	-	-	55 Mg	-NK	-	56 Mg	D-K
57 Mg	DN-0	Mg	58 Mg	-K	-	59 Mg	-	Mg	60 Mg	-
61 Mg	D-K	-	62 Mg	-NK	Mg	63 Mg	-	-	64 Mg	-
65 Mg	DNK	-	66 Mg	-N-	Mg	67 Mg	-	DNK	68 Mg	-
69 Mg	-	Mg	70 Mg	-NK	-	71 Mg	-	-	72 Mg	-
73 Mg	-K	-	74 Mg	D-	-	75 Mg	-	DNK	76 Mg	-
77 Mg	-N-	Mg	78 Mg	D-K	-	79 Mg	-	-	80 Mg	-
81 Mg	-NK	-	82 Mg	DN-	-	83 Mg	-	-	84 Mg	-
85 Mg	-	Mg	86 Mg	-	DNK	87 Mg	-	-	88 Mg	-
89 Mg	-	Mg	90 Mg	-	-	91 Mg	-	-	92 Mg	-
93 Mg	-	Mg	94 Mg	-	-	95 Mg	-	-	96 Mg	-
97 Mg	-	Mg	98 Mg	-	-	99 Mg	-	-	100 Mg	-

WOBURN Arable and Ley Rotations

STACKYARD 27th year. 1964

WLA/



SYMBOLS

Rotations:

- 3 years ARABLE
- 3 years LEY

Treatment CROPS

- A Potatoes (P) Rye (R) Carrots (C)
- Ah Potatoes (P) Rye v/s (R*) Hay (H)
- Lu Lucerne cut for hay. Sainfoin
- L Ley grazed.

TEST CROPS: Sugar-beet, Barley (in 4th and 5th year)

TREATMENTS TO SUGAR BEET, per acre.

- D None, 15 tons Farmyard manure. (d = FYM residuals)
- N 0.35, 0.7 cwt N after 'L' and 'Lu' N as Nitro-Chalk 2:1
- 0.7, 1.05 cwt N after 'A' and 'Ah'
- K None, 0.9 cwt K₂O as muriate of potash.
- To sub-plot (Aw, b, etc) P None, 1.5 cwt P₂O₅ as super.

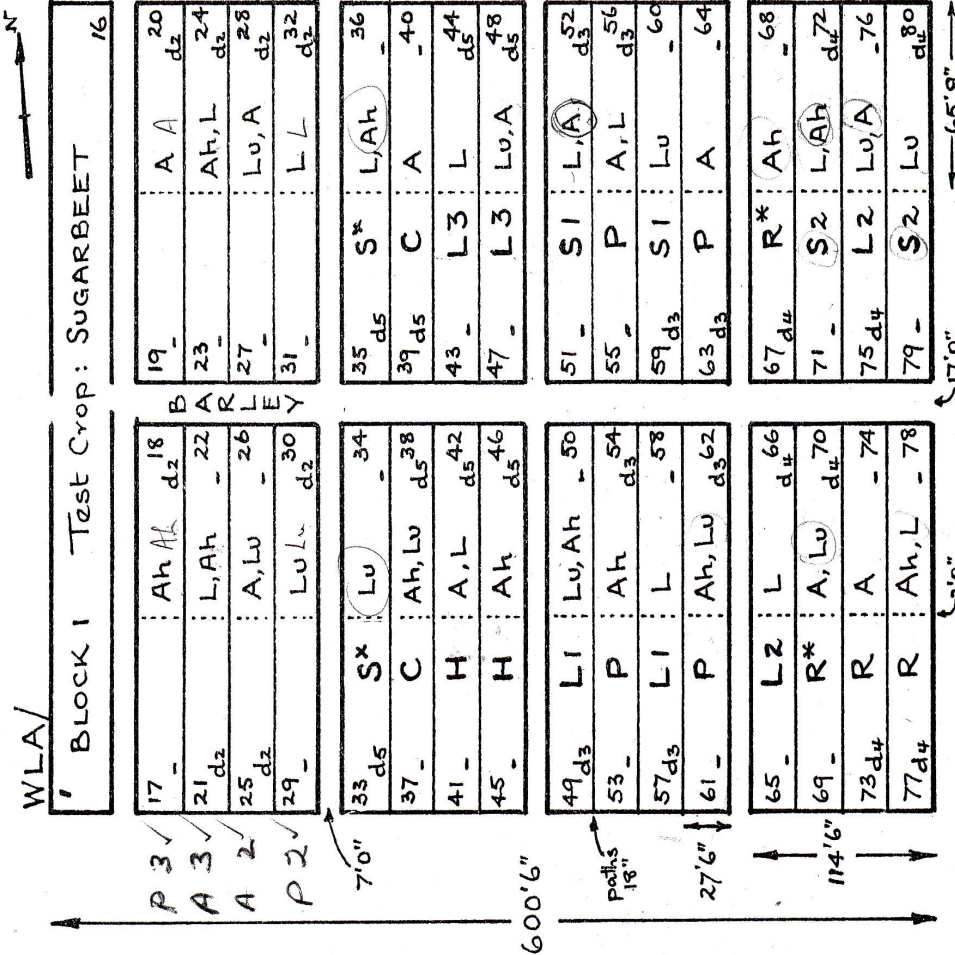
Block 2 Test Crop Sugar-beet.

17A	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK	NK

Note: Change of Ley 1964: Common Sainfoin in place of Lucerne, 1st year

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STACKYARD 28th year 1965

Woburn Arable & Ley Rotations



SYMBOLS
Rotations
3 years ARABLE: A Potatoes (P) Rye (R) Carrots (C)
Ah Potatoes (P) Rye w/s (R*) Hay (H)
3 years LEY : Lu Lucerne cut for hay. S Sainfoin (as Lu)
L Ley Grazed.

TEST CROPS: Sugar-beet, Barley (In 4th & 5th years) per acre

TREATMENTS TO SUGAR BEET

- , D None, 15 tons F.Y.M (d = residuals of F.Y.M)
To 1/8th sub-plots (Nitrogen at 4 levels, rates according to rotation)
N1, 2, 3, 4, 5, 6 0.35, 0.7, 1.05, 1.40, 1.75, 2.10 cut N as "Niko-Chalk" 21

- , K None, 0.9wt K₂O as muriate of potash
Basal manuring: per acre
2.0 cut P₂O₅ as superphosphate, 500lb magnesium sulphate.

BLOCK 1 Test Crop Sugar Beet

13	5	P	6	4	1/3	5K	-	3K	W	3	1	-	2	-	4	1	K	D	1	-										
14	4	K	P	6	K	1/3	-	6	K	X	2	K	-	3	K	4	-	P	3	-										
15	3	-	P	5	K	2	4	-	6	L	Y	1	K	-	3	-	2	-	P	4	K									
16	1	3	K	D	4	-	2	3	5	-	4	K	Z	4	K	-	4	-	3	K	D	2	K							
17	5	3	K	D	5	-	4	6	4	-	2	K	W	7	2	-	4	-	8	4	-	P	3	K						
18	3	4	-	P	4	K	3	2	3	-	5	K	X	1	K	-	3	-	2	-	P	3	-							
19	4	5	K	D	2	K	1	2	3	K	-	4	K	Y	1	-	2	K	4	K	D	2	K							
20	1	2	-	D	3	-	2	1	2	-	5	-	Z	4	K	-	3	K	1	-	D	1	K							
21	9	5	-	-	6	K	4	1	0	3	K	D	5	-	3	W	1	4	K	D	2	K	1	2	K					
22	1	3	-	-	3	K	1	1	3	-	D	4	K	X	1	-	D	2	-	2	K	-	3	-						
23	2	4	K	-	5	K	3	1	6	K	D	5	K	Y	1	K	D	3	-	4	K	-	4	-						
24	4	6	-	1	-	4	-	2	2	A	-	D	6	-	Z	4	-	D	3	K	2	-	1	-						
25	1	3	K	D	4	K	1	4	2	-	-	1	K	W	1	5	4	K	-	5	K	1	6	5	-	D	3	-		
26	4	-	D	3	-	3	K	-	3	K	-	3	-	X	1	1	2	K	-	4	-	3	Y	1	2	-	D	4	K	3
27	2	-	D	1	K	4	-	4	-	4	K	-	4	K	Y	4	5	-	2	-	1	3	4	-	D	3	K	2	-	
28	1	-	D	3	K	2	K	-	1	-	3	K	1	1	-	Z	2	3	-	3	K	2	4	5	K	D	2	K	1	-

Dimensions: 133'6" (total width), 17'0" (Block 1 width), 65'9" (Block 2 width), 284' (total length), 32'10 1/2" (Block 1 length), 6'10 1/2" (Block 2 length).

x Sainfoin in place of 3rd year Lucerne.
Plot area: 65'9" x 27'6" = 0.0415 acre
Sub-plot: 32'10 1/2" x 6'10 1/2" = 0.00519 acre

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STACKYARD 29th Year 1966

Woburn Arable & Ley Rotations

SYMBOLS
Rotations

3 years ARABLE A: Potatoes P, Rye R, Carrots C.
Ah: Potatoes P, Rye's R* Hay H.
Lu: Lucerne cut for hay S: Sainfoin (as Lu)
L: Ley grazed.

TEST CROPS: Sugarbeet, Barley (In 4th & 5th years)

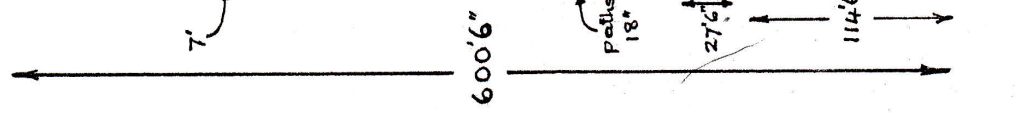
TREATMENTS to SUGARBEET per acre

- , D None, 15 tons F.Y.M. (d = Residuals of FYM)
N to 1/8th sub-plots (N at 4 levels, rates according to rotation
N1, 2, 3, 4, 5, 6 0.35, 0.7, 1.05, 1.40, 1.75, 2.10 cwt N as N/c/21
- , K None, 0.9 cwt K₂O as muriate of potash.
Basal P & Mg.



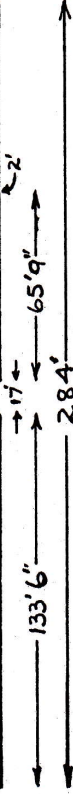
WLA/		BLK 1	
1 d ₂	P (Ah)	3 -	P Lu d ₂
5 d ₂	F AR	7 -	A A.L d ₂
9 -	A Lu, Ah d ₂	11 d ₂	A Ah, Lu -12
13 d ₂	P LE	15 -	A L.A.R d ₂
BARLEY		20	
17 -	P Ah	19 -	P A d ₃
21 d ₃	S1 L, Ah	23 -	P Ah, L d ₃
25 d ₃	P A, Lu	27 -	L1 Lu, A d ₃
29 -	S1 Lu	31 -	L1 L d ₃

BLOCK 3		TEST CROP: SUGARBEET	
49 d ₄	L2 Lu, Ah	51 -	S2 L, A d ₄
53 -	R* Ah d ₄	55 -	R* A, L d ₄
57 d ₄	L2 L	59 d ₄	S2 Lu - 60
61 -	R Ah, Lu d ₄	63 d ₄	R (A) (R) - 64
65 -	L3 L	67 d ₅	H Ah - 68
69 -	H A, Lu	71 -	S3 L, Ah d ₅
73 d ₅	A R - 74	75 d ₅	L3 Lu, A - 76
77 d ₅	Ley C Ah, L - 78	79 -	S3 Lu d ₅



BLOCK 3 Test Crop SUGARBEET

332K D	1 - 1342 -	1K	W	351K D	3 - 1363K -	4 -
1K D	2 - 4 -	3K	X	2 - D	4K	3 - 1K
4 - D	3K	4K	Y	2K D	4 - 2 -	1 -
4K D	3 - 3K -	1 -	Z	1 - D	3K	2K - 4K
372K -	3K	383 -	D	2 -	392 -	D 4 - 1404K -
3 -	4K	4K	D	5 -	3 - D	5 - 4 - 2 -
5 -	5K	4 -	D	5K	3K D	4K
2 -	4 -	2K	D	3K	5K D	2K
415 -	3K	425 -	D	6 -	433K -	4K
4K -	5K	3 -	D	4K	2 -	2K
3 -	4 -	5K	D	6K	4 -	3 -
6K -	6 -	4 -	D	3K	1K -	1 - 3 - D
453K -	4 -	463 -	D	5 -	472K -	4 - 1482K D
6 -	3 -	6 -	D	4K	1 -	2 -
5 -	6K	6K	D	5K	1K -	3 - 4 - D
5K -	4K	3K	D	4 -	4K -	3K



WOBURN Arable & Ley Rotations

6/4 STACKYARD 30th year 1967

SYMBOLS

Rotations

3 years ARABLE

3 years LEY

Treatment Crops
 A = Potatoes P, Rye R, Carrots C.
 Ah = Potatoes P, Rye 1/2 R*, Hay H.
 S = Sainfoin cut for hay (Lu: Lucerne)

L = Ley grazed.

TEST CROPS: Sugarbeet, Barley (In 4th & 5th years)

TREATMENTS to SUGARBEET per acre

- , D None, 15 tons F.Y.M. (d = Residuals of FYM)

N to 1/4 Sub-plots (Nat 4 levels, rates according to rotation)

N 1, 2, 3, 4, 5, 6 0-35, 0-7, 1-05, 1-40, 1-75, 2-10 cwt N as "N/c" 21

Basal P, K, and Mg

Note: Spring Wheat, variety Kloka replaced failed Rye in Block 3.

WLA

BLK 1

3	S1	Lu	d3	4
7	P	A, L	d3	8
11	P	Ah, Lu	-12	
15	S1	L, A	d3	16

17	R*	Ah	d4	18
21	S2	L, Ah	-	22
25	R*	A, Lu	-	26
29	S2	Lu	d4	30

BLK 2

35	Ah(SA)	-	36
39	Ah	-	40
43	L	-	44
47	A(L)	-	48

33	(SA)	-	34
37	S(Ah)	-	38
41	L(Ah)	-	42
45	(Ah)	-	46

BLK 3

51	S3	Ah	d5	52
55	H	A, L	d5	56
59	S3	Lu	-	60
63	C	A	-	64

49	L3	Lu, Ah	-	50
53	H	Ah	d5	54
57	L3	L	-	58
61	C	Ah, Lu	d5	62

BLK 4

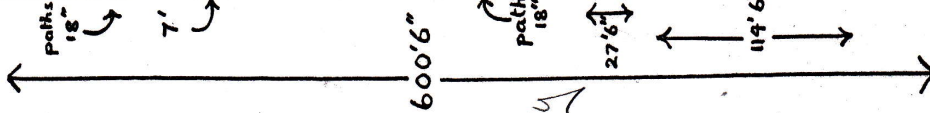
73	21	74	32	-
77	43	21	-	-
81	32	54	-	-
85	54	43	-	-

75	2	76	1	-
79	4	80	3	D
83	1	3	-	-
87	4	4	-	-

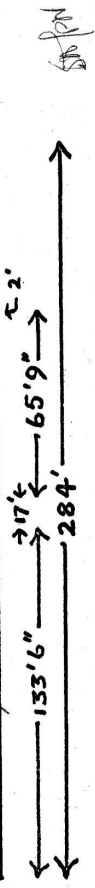
BLK 5

65	SUGARBEET	-	80
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65	SUGARBEET	-	80
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BLOCKS	Test Crop	SUGARBEET
65	1	67
66	2	4
67	3	5
68	4	6
69	5	7
70	6	8
71	7	9
72	8	10
73	9	11
74	10	12
75	11	13
76	12	14
77	13	15
78	14	16
79	15	17
80	16	18



101
STACKYARD 31st year 1968.

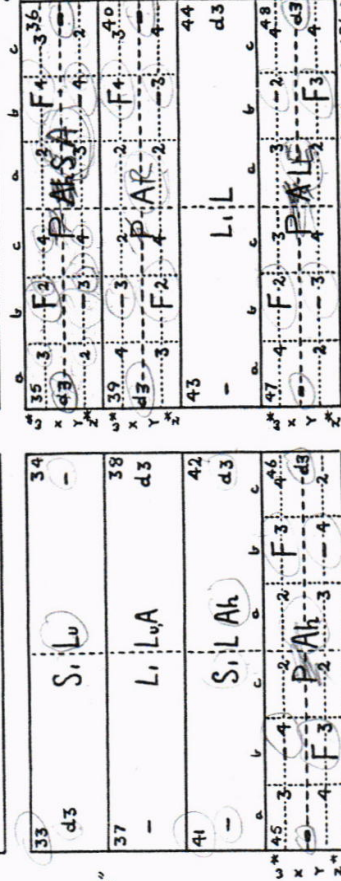
Woburn
WLA

ARABLE & LEY ROTATIONS

1 d4	R*Ah	-2
5 d4	R:A	-6
9 d4	L2:LuAh	d4
13 d4	L2:L	-14
17 d5	H:Ah	d6
21 d5	S3:LAh	-22
25 d5	H:ALu	-26
29 d5	S3:Lu	d30

3 -	S2:Lu	d4
7 -	R*AL	d8
11 d4	R:AhLu	-12
15 -	S2:LA	d16

19 -	C:AR	d20
23 -	C:AhL	d5
27 -	L3:LuA	d8
31 -	L3:L	d32



SYMBOLS

Rotations
3 years ARABLE
3 years LEY

TEST CROPS

TREATMENTS :-
Treatment potatoes 1968:
Fungicides -, F Nona, Chloropicrin in autumn 1967
Nitrogen 2,3,4 10cut, 15cut, 20cut N as Nitro-chalk
Sub-plots with 2* tubers dusted with thiram before planting

1st test crop barley 1968:
Nitrogen after arable 1,2,3,4. 0.4cut, 0.8cut, 1.2cut, 1.6cut N.
Nitrogen after ley and Sainfoin -, 1,2,3. Nona, 0.4cut, 0.8cut, 1.2cut
N as Nitro-chalk.

ALL CROPS:

FYM -, d Residuals of nona v 15 tons FYM applied
to sugar beet 1962-7. No fresh applications for 1968 crops,
but fresh test resumes for 2nd test crop potatoes in 1969.

BLOCK 4 1ST TEST

65 -	P(LE)	L	66
69 -	A(AH)	LuAh	d2
73 d2	P(AR)	A	74
77 d2	A(AL)	LA	-78

CROP BARLEY

67 d2	P(AH)	Ah	68
71 -	A(SA)	AhS	d72
75 d2	A(LE)	AL	-76
79 -	P(SA)	S	d80

BLOCK 4 1ST TEST CROP BARLEY

49 3	-	1	2	50	51	3	1	2	3	52
d6	2	1	3	-	-	-	2	-	-	d6
53 4	2	2	3	1	54	3	3	3	2	56
57 3	1	2	2	4	d6	Y	2	4	1	4
d6	2	1	2	3	58	X	59	1	2	3
61	1	3	4	3	62	X	63	1	2	1
65	2	4	1	2	d6	Y	d6	3	4	2

Treatment Crops
A = Potatoes P, Rye R, Carrots C.
Ah = Potatoes P, Rye 1/2 R*, Hay H.
S = Sainfoin cut for hay (Lu = Lucerne)
L = Ley grazed
1967, 68 Sugar Beet, Barley } In 4th
1968, 69 Barley, Potatoes } & 5th years.

WOBURN 69/W/RN/3

STACKYARD 32nd year 1969 201 A.

ARABLE & LEY ROTATIONS

01 d5	H/Ah	- 02
05 d5	C/A	- 06
09 -	L3 LuAh	d5 ¹⁰
13 d5	L3 L	- 14

03 -	S3 Lu	d6 ⁴
07 -	H/Ah	d5 ⁰⁸
11 d5	C/AhLu	- 12
15 -	S3 LA	d5 ¹⁶

171 1 2 3	1181 2	12 1 d6
3 4 2	3 3 4 4	
211 1 2 2	221 2 2	
d6 3 4	3 - 4 3	
251 1 2 3	261 4 2 3	
d6 3 2 4 4	3 1 4 2	
291 1 2 3	301 3 2 - d6	
3 2 4 2	3 1 4 2	

191 1 2 4	201 4	2 2 d6
3 2 4 3	3 1 4 3	
231 1 2 2	241 4 2 1 d6	
3 3 4 4	3 2 4 3	
271 3 2 2	281 1 2 2 d6	
3 1 4 -	3 3 4 -	
311 2 2 1	321 - 2 3 d6	
3 2 4 3	3 2 4 1	

33 d4	S2 Lu	34 -
37 -	L2 LuA	38 d4
41 -	S2 LAh	42 d4
451 -	R/Ah	461 f d4
2 -	f	d4

351 f	R/Ah	f 361
2 d4 -	-	2
391 d4	R/Ah	f 401
-	-	2
43 -	L2 L	44 d4
471 f	R/Ah	f 481
2 -	-	d4

49 d7	AhL	- 50
53 -	Ah	d7 54
57 d7	L	- 58
61 -	LUA	d7 62

51 -	AS	d7 52
55 -	LAh	d7 56
59 d7	S	- 60
63 d7	A	- 64

65 BLOCKS 1st TREATMENT

CROPS POTATOES, LEY, SAINFOIN 80

For plot treatments see 284

Separate plan 201B



SYMBOLS

Rotations

3 years ARABLE A = Potatoes P, Rye R, Carrots C.
Ah = Potatoes P, Rye R*, Hay H.
S = Sainfoin cut for hay (Lu = Lucerne)
L1 & L2 = Ley cut, L3 = Ley grazed

TEST CROPS In 4th and 5th years.

1967	Sugar beet	1 st Test Crop
1968	Barley	2 nd Test Crop
1969	Barley	Barley

TREATMENTS :-

1st Test crop barley 1969 0.8 cut
Nitrogen after arable 1,2,3,4 0.4 cut / 1.2 cut, 1.6 cut N.
Nitrogen after ley and sainfoin -, 1,2,3 None, 0.4 cut
0.8 cut, 1.2 cut N as 'Nitro-chalk'.
Residues of fumigant applied to potatoes 1968 now rye.
-, f None, chloropicrin in autumn 1967.
BASAL MANURING per acre for test crops and rye.
1st test crop barley - 0.5 cut P₂O₅, 0.5 cut K₂O as (0:20:20).
2nd test crop barley - 0.5 cut N, 0.5 cut P₂O₅, 0.5 cut K₂O as (15:15:15).
Rye - 0.3 cut N as 'Nitro-chalk', 0.3 cut P₂O₅, 0.6 cut K₂O as (0:14:28)

ALL CROPS:-

FYM -, d Residuals of none v 15 tons FYM applied to Sugar beet 1962-67.
Varieties Barley: Moris Badger, Potatoes: Moris Piper

STACKYARD 'D' 33rd year 1970 201 A

ARABLE AND LEY ROTATIONS

W OBURN

70/M/RN/3

011 Ah	4	2	101	2	3	1	2	3	1	2	3	1	2	3
051 A	3	1	101	3	1	4	4	4	3	1	4	4	4	4
091 AhL	2	4	101	3	1	4	2	2	3	1	4	2	2	2
131 L	2	4	101	3	3	4	2	2	3	3	4	2	2	2

17	19	21	23	25	27
Ah	Ah	AhS	LuAh	S	

33	35	37	41	451
S3:Lu	L3:LuA	S3:LAh	H:Ah	H:Ah

49	51	53	55	57	59	61	63	65	67	69	71	73	75	77	79
CROPS POTATOES, LEY, SAINFOIN															

65	69	73	77
L2:L	L2:LuAh	R:AR	S2:LA

→ N

SYMBOLS
Rotations

3 years ARABLE A = Potatoes P, Rye R, Carrots C.
Ah = Potatoes P, Rye 1/2 R, Hay H.
3 years LEY S = Sainfoin cut for hay (Lu = Lucerne)
L = Ley cut (No more grazing)

TEST CROPS In 4th and 5th years
1st Test Crop Barley
2nd Test Crop Barley

1969 Barley
1970 Barley @ 140lb Barley @ 156lb sown: 25 Mar

TREATMENTS:-

1st Test crop barley 1970

Nitrogen after arable 1, 2, 3, 4. 0-4, 0-8, 1-2, 1-6 cut N
Nitrogen after ley and sainfoin -1, 2, 3. None, 0-4, 0-8, 1-2 cut N
as Nitro-chalk 2i.

Residues of fumigant applied to potatoes 1968, now carrots or
hay (-), (F). None, Chloropicrin in autumn 1967.

Residues of fumigant applied to potatoes 1969, now FYM
(-), (C) None, Chloropicrin in autumn 1968

BASAL MANURING per acre for test crops and Rye

1st test crop barley - 0.5 cut P₂O₅, 0.5 cut K₂O as (0:20:20)
2nd test crop barley - 0.5 cut N, 0.5 cut P₂O₅, 0.5 cut K₂O as (15:15:15)
Rye - 0.3 cut N as Nitro-chalk, 0.3 cut P₂O₅, 0.6 cut K₂O as (0:14:28)

ALL crops:-

FYM -, d Residuals of none v 15 tons FYM applied to
sugar beet 1962-67

Varieties: Barley: Moris Badger, Potatoes: Moris Piper,
2nd test crop Barley: Julia

Blk. P SA

A(AH)

A(AH)

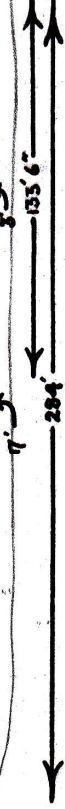
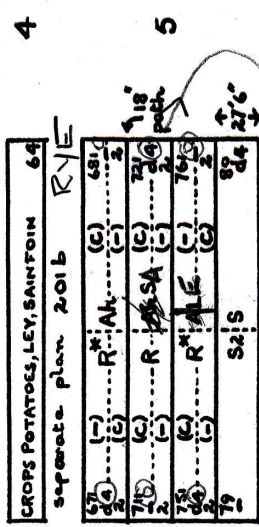
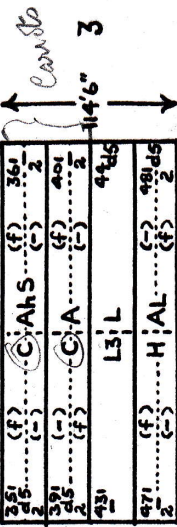
A SA

2

3

4

5



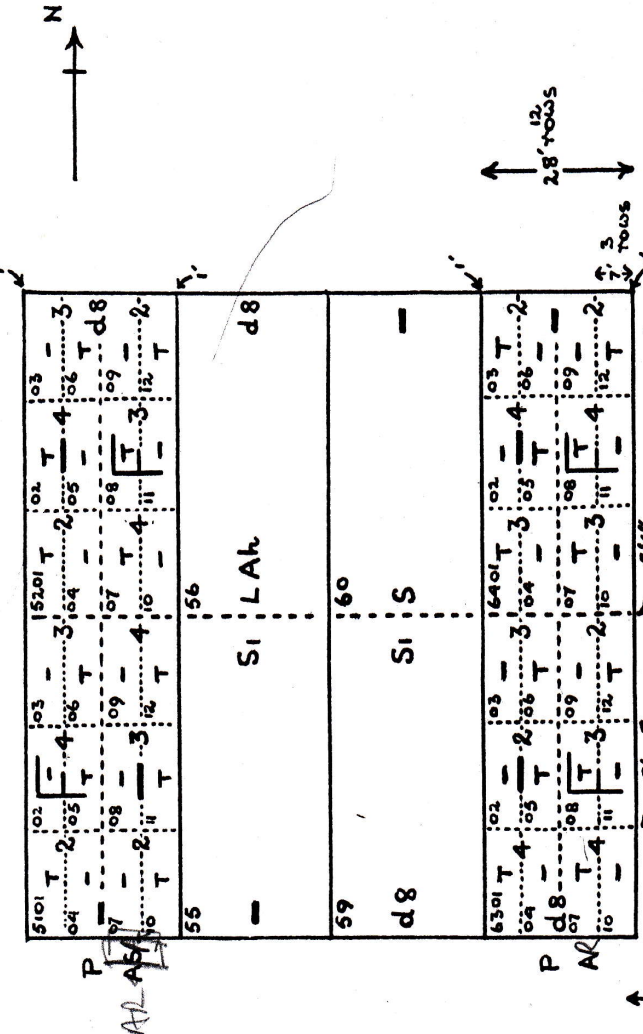
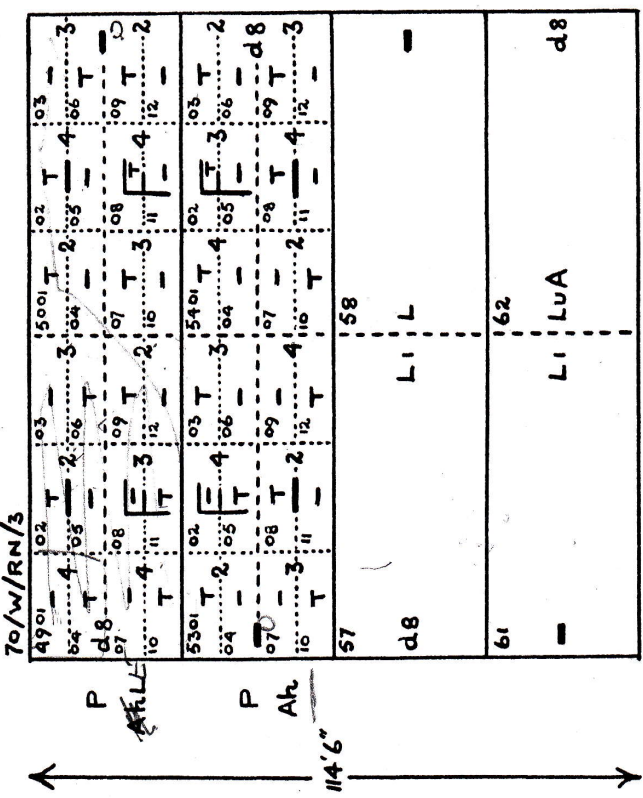
WOBURN

ARABLE & LEY ROTATIONS
Potato Treatments Block 4

33rd year

STACKYARD D 1970

2018



TREATMENTS per acre

- Whole plots
- , d8 None, FYM residues applied 1963
- Half plots - Fumigant
- , F None, chloropicrin at 400lb
- 1/6 plots - Nitrogen rates
- 2,3,4 1.0, 1.5, 2.0 cwt Nas 'Nitro-chalk' 21
- 1/2 plots - Nematicide
- , T None, Temik at 100lb of 10% granules.

BASAL MANURING per acre

0.9 cwt P₂O₅, 1.8 cwt K₂O as compound fertiliser (0:14:28)
336 lb Epsom salts

VARIETY: Maris Piper

Planted: 22 Apr.

PLOT AREA 18' x 7' = 0.0029 acre

harvested one row 2' 4" x 18' = 0.0010 acre

STACKYARD "D" 34th year 1971 201A

ARABLE AND LEY ROTATIONS

WOBURN

→ N

T1/W/RN/3

01	Ah	02	Ah	03	S	04	
05	A	06	LAh	07	LAh	08	
09	AhL	10	LuA	11	LuA	12	
13	L	14	AS	15	AS	16	

17	PAh	18	PA	19	PA	20	
21	PAhS	22	S1LA	23	S1LA	24	
25	L1LuAh	26	PAAL	27	PAAL	28	
29	S1S	30	L1L	31	L1L	32	

Block 3 1st Test

33	Crop Potatoes	48	
----	---------------	----	--

For plot treatments

48	(F) R	49	(F) R	50	(F) R	51	(F) R
52	(F) R	53	(F) R	54	(F) R	55	(F) R
57	L2L	58	L2L	59	S2LAh	60	S2LAh
61	L2LuA	62	L2LuA	63	(F) R	64	(F) R

see separate plan 201b

51	(F) R	52	(F) R	53	(F) R	54	(F) R	55	(F) R
57	(F) R	58	(F) R	59	(F) R	60	(F) R	61	(F) R
63	(F) R	64	(F) R	65	(F) R	66	(F) R	67	(F) R

65	L3L	66	L3L	67	H1Ah	68	H1Ah
69	LuAh	70	LuAh	71	(C) C-AhS	72	(C) C-AhS
73	(F) R	74	(F) R	75	H1AL	76	H1AL
77	S3LA	78	S3LA	79	S3S	80	S3S

67	(F) R	68	(F) R	69	(F) R	70	(F) R	71	(F) R
73	(F) R	74	(F) R	75	(F) R	76	(F) R	77	(F) R
79	(F) R	80	(F) R	81	(F) R	82	(F) R	83	(F) R

SYMBOLS

Rotations

3 years ARABLE A = Potatoes P, Rye R, Carrots C.

Ah = Potatoes P, Rye 1/2*, Hay H.

S = Sainfoin cut for hay (Lu: Lucerne).

L = Ley cut (No more grazing)

TEST CROPS In 4th and 5th years

1st Test Crop

Barley

Potatoes

2nd Test Crop

Barley

Barley @ 150lb (168kg)

TREATMENTS: Planted: 30 Mar. Sown: 10 Mar.

Residues of Fumigant applied to potatoes 1969 now carrots

(-), (C) None, Chloropicrin in autumn 1968

Residues of Fumigant applied to potatoes 1970 now rye

(-), (F) None, Chloropicrin in autumn 1969

BASAL MANURING per acre (hectare) for 2nd test crop & treatment

2nd test crop Barley - Julia.

0.5 cut (45kg) N, 0.5 cut (63kg) P2O5, 0.5 cut (63kg) K2O as (15:15:15)

1st treatment crop potatoes - Maris Piper

2.0 cut (252kg) N, 2.0 cut (252kg) P2O5, 3.0 cut (376kg) K2O as (15:15:20)

2nd treatment crop rye - King II

0.5 cut (38kg) N as Nitro-chalk 2:1, 0.3 cut (38kg) P2O5, 0.6 cut (76kg) K2O as (0:14:28).

3rd treatment crop carrots - Autumn King

0.6 cut (76kg) N as Nitro-chalk 2:1, 0.6 cut (76kg) P2O5 as superphosphate

1.8 cut (226kg) K2O as muriate of potash

All crops :-

FYM -, d. Residues of none v 15 tons FYM applied

to sugar beet 1962-67

↑ A

600'6"

↑ N

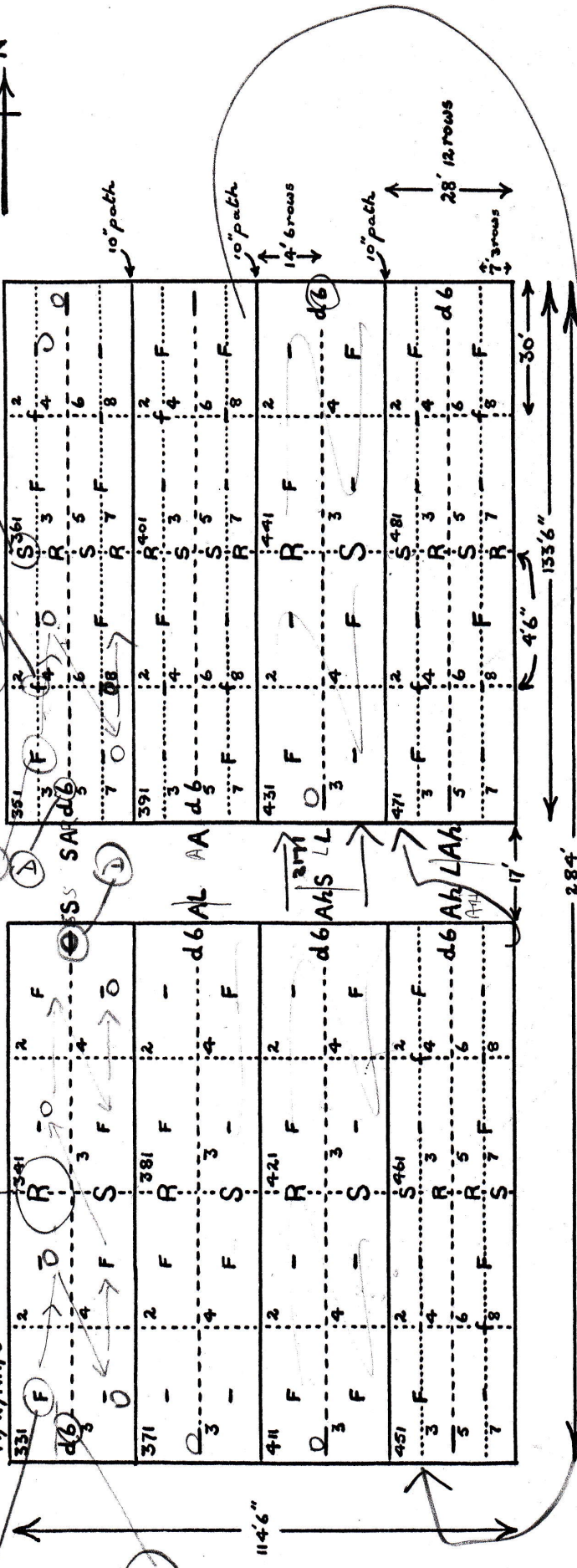
284'

WOBURN 3171
71/W/RN/3

ARABLE AND LEY ROTATIONS
Potatoes Block 3

33rd year

STACKYARD D 1971 2018



TREATMENTS potatoes (hectare)

Dung residues

- , d6 None, FYM residues - last applied 1966.

Chloropicrin residues

- , f None, 400lb (448kg) Chloropicrin in 1968.

Fresh chloropicrin and temik

- None

F 400lb (448kg) chloropicrin in autumn 1970
+ 100lb (112kg) of 10% granules of temik
in spring 1971.

Varieties Planted 30 March.

R resistant to *H. rostochianensis* Maris Piper

S susceptible to *H. rostochianensis* Pentland Crown

BASAL MANURING per acre (hectare)

1752lb (1964kg) compound fertiliser (13:13:20) broadcast 26 Mar.

PLOT AREA

Plots without chloropicrin residues 14' x 30' = 0.0096 acre (0.0039 ha)

Plots with chloropicrin residues 7' x 30' = 0.0048 acre (0.0048 ha)

201 A

STACKYARD "D" 35th year 1972

SYMBOLS

Rotations

3 years ARABLE A = Potatoes P, Barley B, Barley B.

Ah = Potatoes P, Barley B 1/2, Hay H.

3 years LEY C = Red Clover cut for hay (S = Sainfoin, Lu = Lucerne).

L = Ley Cut

TEST CROPS In 4th and 5th years

1st Test Crop: Potatoes

2nd Test Crop: Barley

Winter Wheat (W)

planted: 29 Mar. Sown: Wheat: 22 Oct. Barley: 15 Nov

TREATMENTS:-

2nd Test Crop W/Wheat - Coppella dressed diadrin & fungicide

Nitrogen Rates/and Residues of Fungicides to Potatoes 1971

N0, N1, N2, N3 None, 0.5 cut (65kg), 1.0 cut (126kg), 1.5 cut (189kg) N as Nitro-chalk 21

(-), (f) None, 400lb (448kg) chloropicrin + 100lb (112kg) of 10% granules of temik

BASAL MANURING per acre (hectare)

2nd Test crop W/Wheat - 260lb (291kg) of compound fertiliser (0:20:20) c.d.

2nd & 3rd Test crop Barley - Julia at 137lb (154kg)

370 lb of compound fertiliser (415kg) (15:15:15) c.d.

3rd Test crop Hay 28 1971 in Ry

1.0 cut (126kg) N as Nitro-chalk 21, 0.6 cut (75kg) P₂O₅, 1.2 cut (151kg) K₂O as (0:14:28)

in spring. 0.6 cut (75kg) N, 0.4 cut (50kg) K₂O as (26:0:16) after 1st cut.

TREATMENT & BASAL MANURING per acre (hectare) 1st Test crop - potatoes

- F None, 400lb (448kg) chloropicrin in autumn 1971 + 50lb (56kg) Temik in spring.

2.0 cut (252kg) N, 2.0 cut (252kg) P₂O₅, 3.0 cut (376kg) K₂O as (33:13:20). (56kg old (ca 16)

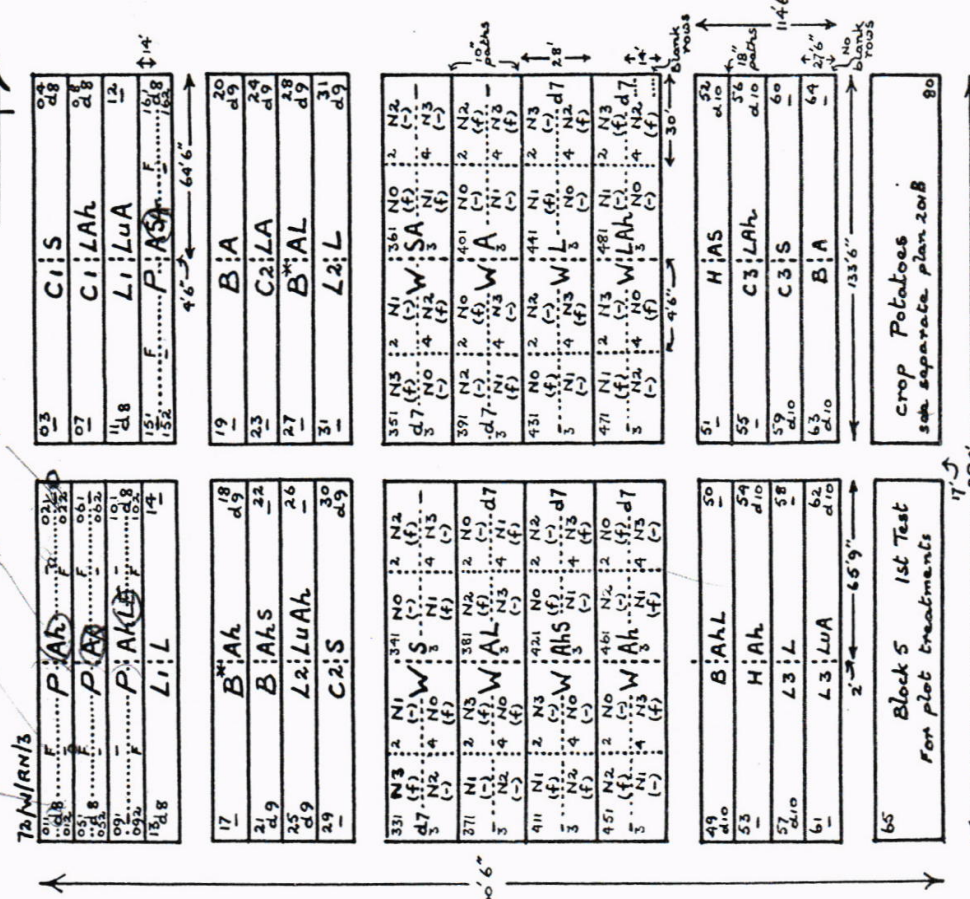
Variety - Maris Piper planted: 29 March

All Crops:- FYM - d Residuals of None v. 15 tons (38 tonnes) FYM

applied to sugar beet 1962-67 (1st test crop).

ARABLE AND LEY ROTATIONS

WOBBURN



2018

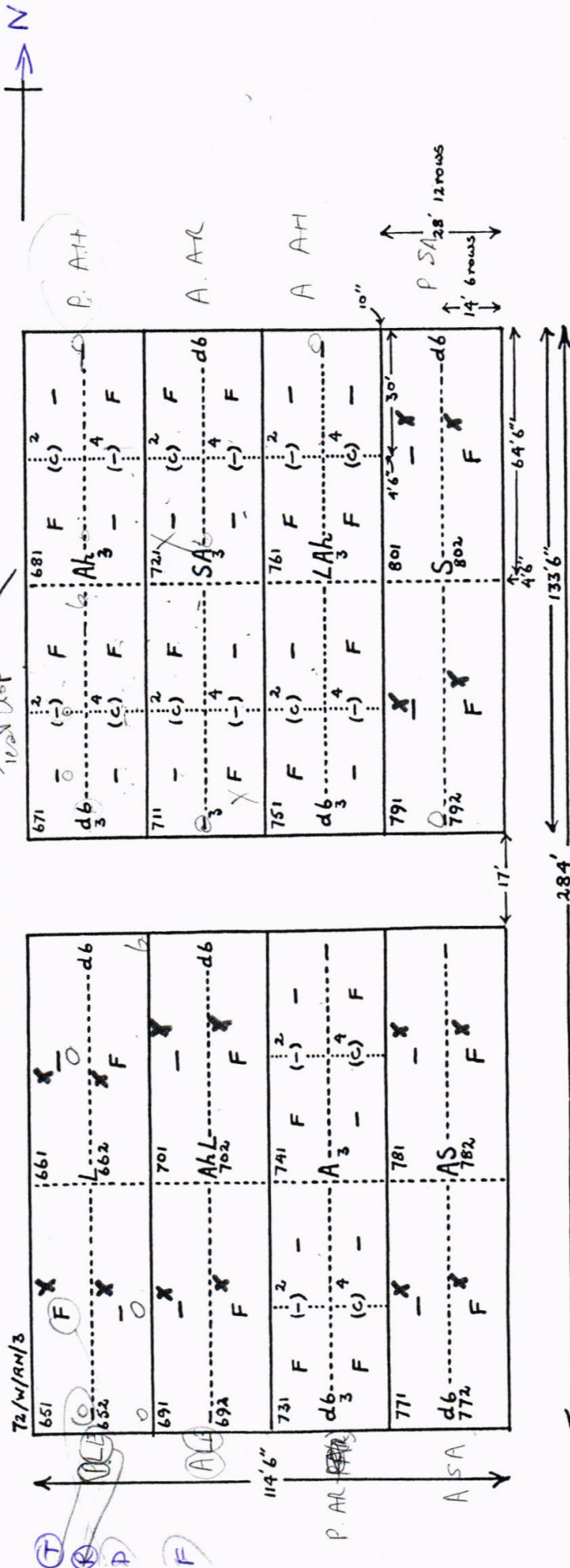
STACKYARD D 1972

35th year

ARABLE AND LEY ROTATION

Potatoes Blocks

WOUBURN



TREATMENTS per acre (hectare)

- Dung residues
- , d6 None, FYM residues last applied 1967
- Chloropicrin residues
- (-), (c) None 400lb (448kg) chloropicrin in 1969
- Fresh chloropicrin and temik
- None
- F 400lb (448kg) chloropicrin in autumn 1971 + 50lb (56kg) of 10% granules of temik in Spring 1972

VARIETY 'Resistant' to H.rostochianis Maris Piper

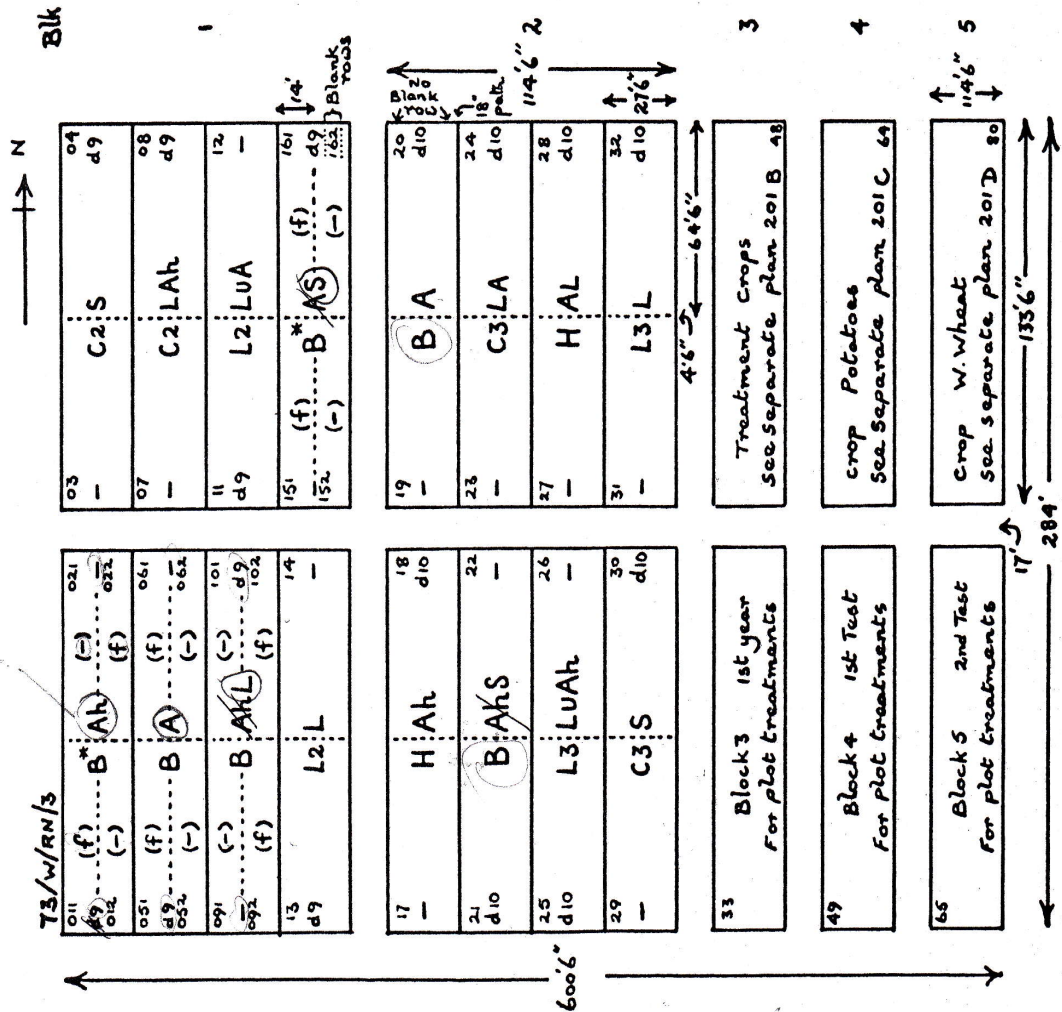
Planted: 29 Mar.
 BASAL MANURING per acre (hectare)
 1752 lb (1964 kg) compound fertiliser (13:13:20)

PLOT AREA

Plots with chloropicrin residues 14' x 30' = 0.0096 acre (0.0039 ha)
 Plots without chloropicrin residues 14' x 64'6" = 0.0207 acre (0.0084 ha)

36th year STACKYARD 'D' 1973 201A

WOBURN ARABLE AND LEY ROTATION



SYMBOLS
Rotations

3 years ARABLE A = Potatoes P, Barley B, Barley B.
Ah = Potatoes P, Barley B ^{1/2}, Hay H.
3 years LEY C = Red Clover cut for hay (S: Sainfoin, L: Lucerne)
L = Ley, cut.

2nd and 3rd TREATMENT CROPS
2nd treatment Barley

Residues of fumigants applied to potatoes 1972
(-) (f) None, 400lb (448kg) chloropicrin + 5lb (6kg) Aldicarb.
2nd & 3rd treatment Barley (Julio, dressed athermal) sown: 12 Mar
355lb of compound fertiliser (409kg) (15:15:15) e.d.
3rd treatment crop Hay ^{1/2} 1972 in Barley
1st cut (126kg) N as 'Nitro-chalk' 2.5, 0.6 cut (75kg) P₂O₅, 1.2 cut (151kg) K₂O as (0:14:28) in spring. 0.6 cut (75kg) N, 0.4 cut (50kg) K₂O as (25:0:16) after 1st cut.

2nd and 3rd year cut Ley

1.2 cut (151kg) N, 0.9 cut (118kg) K₂O as (25:0:16) in three equal dressings.
Any dressing may be omitted or reduced in a wet season.

2nd and 3rd year clover

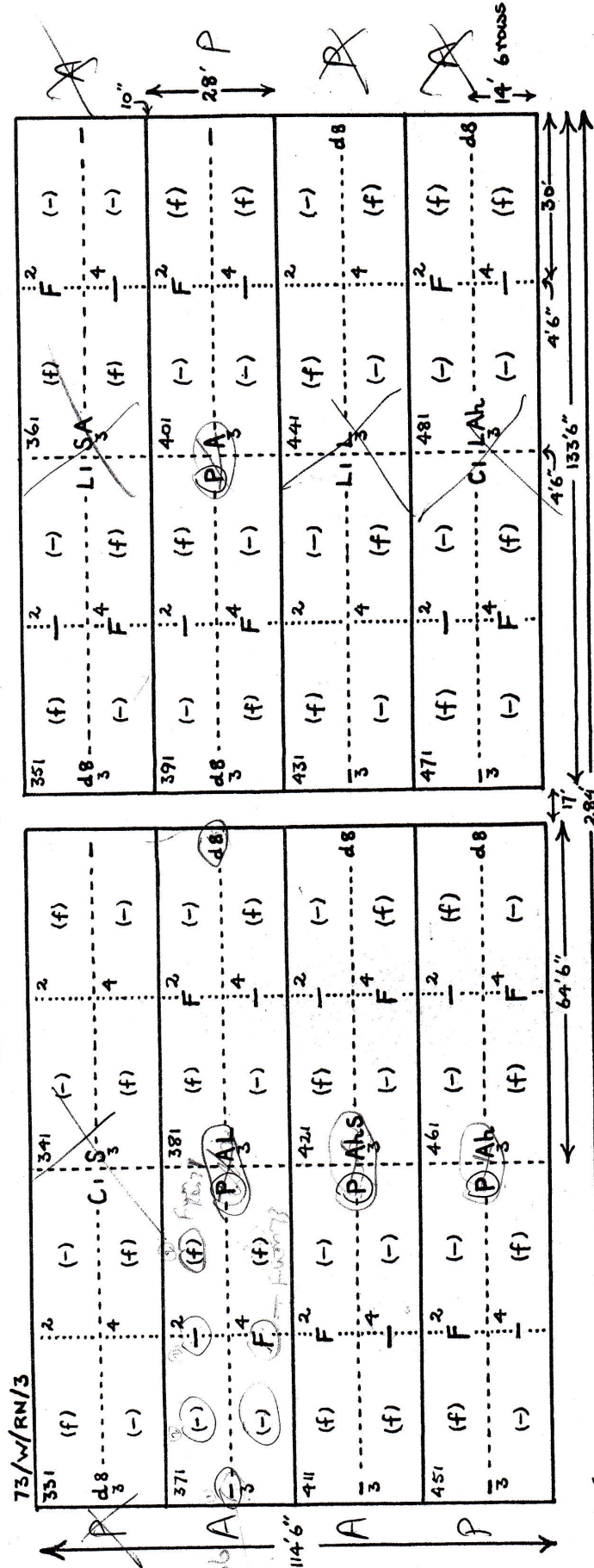
0.6 cut (65kg) N as 'Nitro-chalk' 2.5, 1.5 cut (188kg) K₂O as muriate of potash, in spring.

ALL CROPS :-

FYM

- , d Residual of none v. 15 tons (38 tonnes). FYM applied to sugar beet 1962-67 (1st test crop).

WOBURN 36th year STACKYARD 'D' 1973 201 B
 ARABLE AND LEY ROTATION Block 3
 1st treatment crops



SYMBOLS
Rotations

3 years ARABLE A = Potatoes P, Barley B, Barley B.
 Ah = Potatoes P, Barley B 4's, Hay H
 3 years LEY C = Red Clover cut for hay (S = Sainfoin)
 L = Ley Cut

TREATMENTS per acre (hectare) Fumigant
 - F None 400lb (448kg) chloropicrin + 60lb (67kg)
 of aldicarb (applied to plots 35/36 & 47/48 in error)

Residues of Fumigants applied to Potatoes 1971
 (-), (f) None, 400lb (448kg) chloropicrin + 10 lb (112kg) of aldicarb

VARIETY Potatoes - Morris Piper Planted: 17 Apr
BASAL MANURING per acre (hectare) - Potatoes
 1750 lb (1939kg) compound fertiliser (15:15:20)

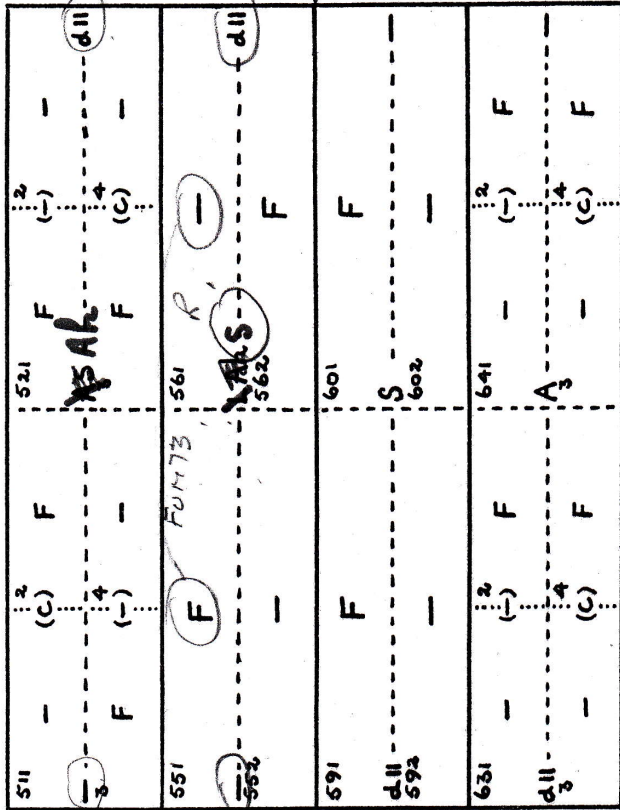
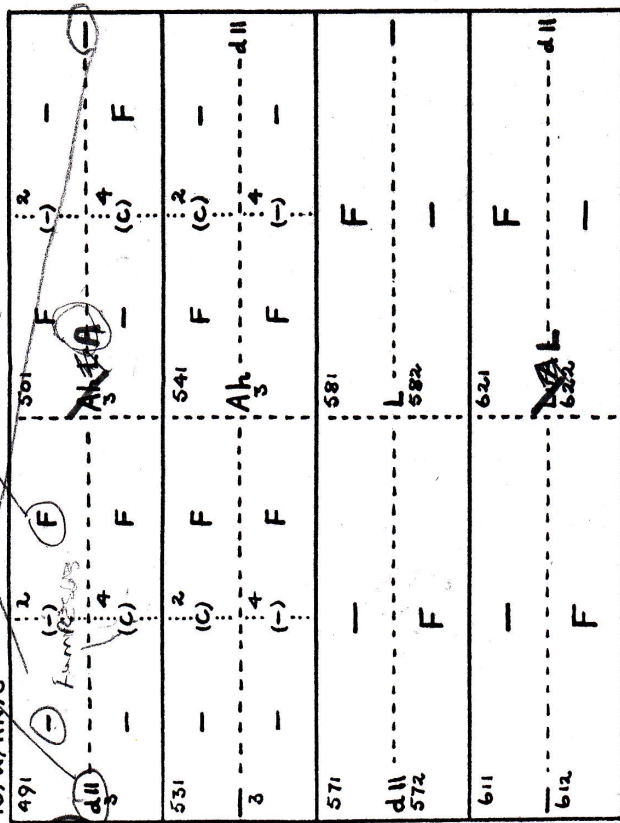
SUB-PLOT AREA 14' x 30' = 0.0096 acre (0.0039 ha)

WOBURN 36th year STACKYARD D 1973 201c

ARABLE AND LEY ROTATION
Block 4
1st Test Crop

→ N

Amended Jan 3d/1/73



Type
A P P A
14' 6" 64' 6"

Type
Rotation
FYM RES 6
FYM RES 70
FYM 73

VARIETY Mavis Piper Planted: 9 Apr.

TREATMENTS per acre (hectare)

- F.Y.M. residues
 -, d II None, F.Y.M. residues - last applied 1963
chloropicrin residues
 (-), (c) None, 400lb (448kg) chloropicrin for potatoes 1970
Fresh Fumigant
 - None
 F 400lb (448kg) chloropicrin in early spring 1975
 + 6.4lb (67 kg) of aldicarb

BASAL MANURING per acre (hectare)
 1730 lb (1939 kg) compound fertiliser (13:13:20)

PLOT AREA
 Plots with chloropicrin residues 14' x 30' = 0.0096 acre (0.0089ha)
 Plots without chloropicrin residues 14' x 64' = 0.0207 acre (0.0084ha)

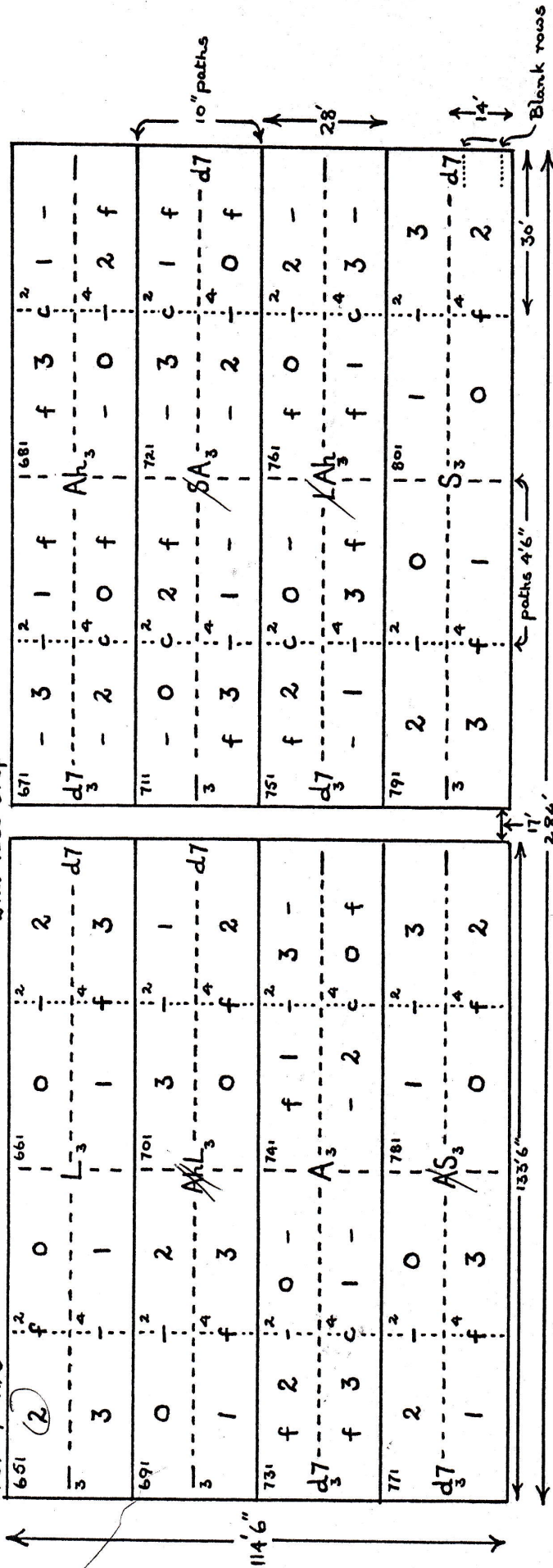
201 D

STACKYARD D 1973

36th year

ARABLE ANDLEY ROTATION

W. Wheat
2nd Test Crop
Block 5



TREATMENTS per acre (hectare)

F.Y.M. residues

- , d7 None, F.Y.M. residues - last applied 1967.

Chloropicrin + aldicarb residues

- , f None, 400lb (448kg) chloropicrin in autumn
1971 + 10lb (11kg) aldicarb in spring 1972.

chloropicrin residues

- , c None, 400lb (448kg) chloropicrin in 1969

Nitrogen

0, 1, 2, 3 None, 0.5, 1.0, 1.5 cwt N (63, 126, 189 kg) as 'Nitro-chalk' 25

BASAL MANURING per acre (hectare)

265lb (297kg) compound fertiliser (0:20:20).

VARIETY

Cappelle (dressed dieldrin) sown at 175lb (196 kg) Date: 24 Nov.

PLOT AREA

14' x 30' = 0.0096 acre (0.0039 ha).
Harvested 9'4" x 30' = 0.0064 acre (0.0026 ha).

37th year → N **STACKYARD 'D' 1974 201A**

Sponsors: D.A. Boyd, J.M. Hirst, A.E. Johnston, F.G.W. Jones

SYMBOLS

Rotations

3 years ARABLE A = Potatoes P, Barley B, Barley B, Barley B.
Ah = Potatoes P, Barley B 1/2, Hay H.

3 years LEY C = Red clover cut for hay (S:Saintfoin, Lu:Lucerne)
L = Ley, cut.

2nd and 3rd TREATMENT CROPS

Residues of fumigants applied to Potatoes 1971-2nd treatment crops 1974

(-), (f) None, 400lb (498kg) chloropicrin + 10lb (11kg) Aldicarb.

Residues of fumigants applied to 1st treatment crops 1973-2nd treatment crops 1974

(-), (F) None, 400lb (498kg) chloropicrin + 6lb (67kg) Aldicarb. (Applied to plots 35/36 & 47/48 in error.)

Residues of fumigants applied to Potatoes 1972-3rd treatment crops 1974.

(-), (f) None, 400lb (498kg) chloropicrin + 5lb (6kg) Aldicarb.

2nd and 3rd treatment Barley (Julia dressed ethionol) sown:

337lb (418kg) compound fertiliser (15:15:15) C.D.

3rd treatment crop Hay 1/2 1973 in Barley

1.0 cut (126kg) N as Nitro-chalk 2.5, 0.6 cut (75kg) P₂O₅, 1.2 cut (151kg) K₂O as (0:14:28) in Spring. 0.6 cut (75kg) N, 0.4 cut (50kg) K₂O as (25:0:16) after 1st cut.

2nd and 3rd year cut Ley

1.2 cut (151kg) N, 0.9 cut (113kg) K₂O as (25:0:16) in three equal dressings.

Any dressing may be omitted or reduced in a wet season.

2nd and 3rd year clover

0.5 cut (63kg) N as Nitro-chalk 2.5, 1.5 (188kg) K₂O as muriate of potash, in Spring.

ALL CROPS :- FYM

- , d Residual of none v. 15 tons (38 tonnes). FYM applied to

Sugar beet 1962-67 (1st test crop).

ARABLE AND LEY ROTATION

WOUBURN

74/W/RN/3

011	(f)	H Ah	(-)
012	(-)		(f)
051	(f)	B A	(f)
052	(-)		(-)
091	(-)	B Ah L	(-)
092	(f)		(f)
13		L3 L	
d10			

03		C3 S	
07		C3: LAh	
11		L3: LUA	
d10			
151	(f)	H AS	(f)
152	(-)		(-)

17 Crop Potatoes
See separate plan 201B 32

17 Block 2 1st Test
For plot treatments

331	(f)	C2 S	(-)
d9	(-)		(f)
371	(-)	B A L	(f)
372	(f)		(-)
411	(f)	B AKS	(-)
412	(-)		(f)
451	(f)	B Ah	(f)
452	(-)		(-)

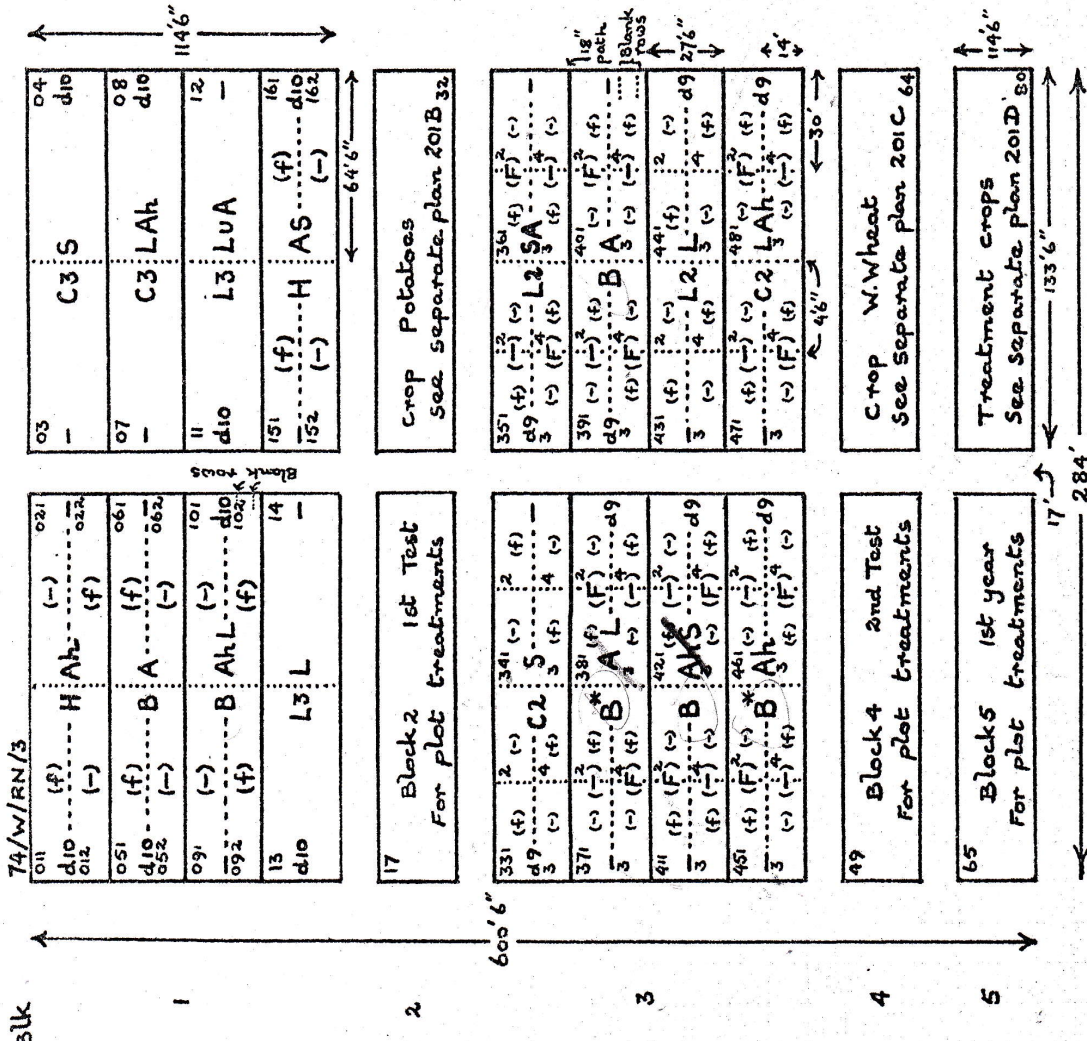
351	(f)	L2 SA	(f)
d9	(-)		(-)
391	(-)	B A	(f)
d9	(f)		(-)
431	(f)	L2 L	(f)
432	(-)		(-)
471	(f)	C2: LAh	(f)
472	(-)		(-)

49 Block 4 2nd Test
For plot treatments

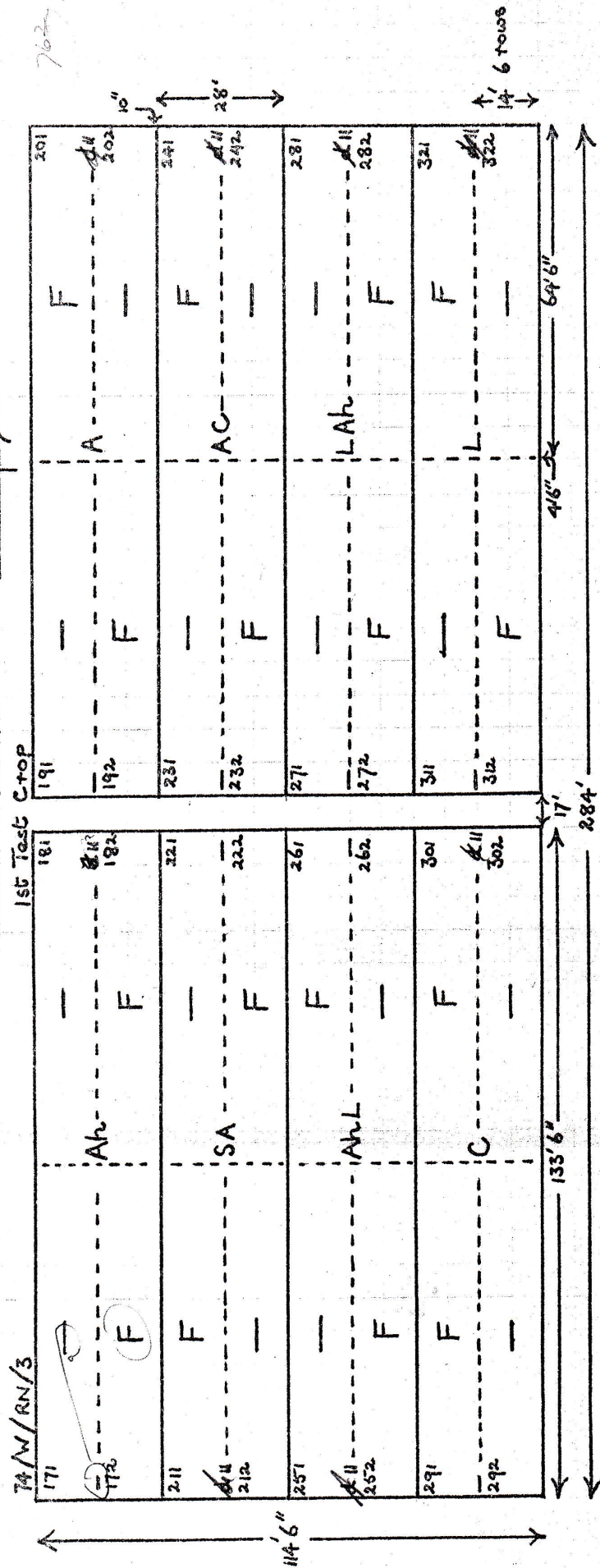
49 Block 4 2nd Test
For plot treatments

65 Blocks 1st year
For plot treatments

65 Blocks 1st year
For plot treatments



WOBURN
74 W/RN/3
ARABLE AND LEY ROTATION 3 1/2 year
Block 2
Stackyard D 19/4



TREATMENTS per acre (hectare)

FYM residues

- , d.11 None, FYM residues - last applied 1964

FUMIGANTS

- None
- F 200lb (224kg) Telone in autumn + 6lb (6.7kg) aldicarb in spring

VARIETY Maris Piper Planted: 10 Apr

BASAL MANURING per acre (hectare)

1730lb (199kg) compound fertiliser (13:13:20).

PLOT AREA

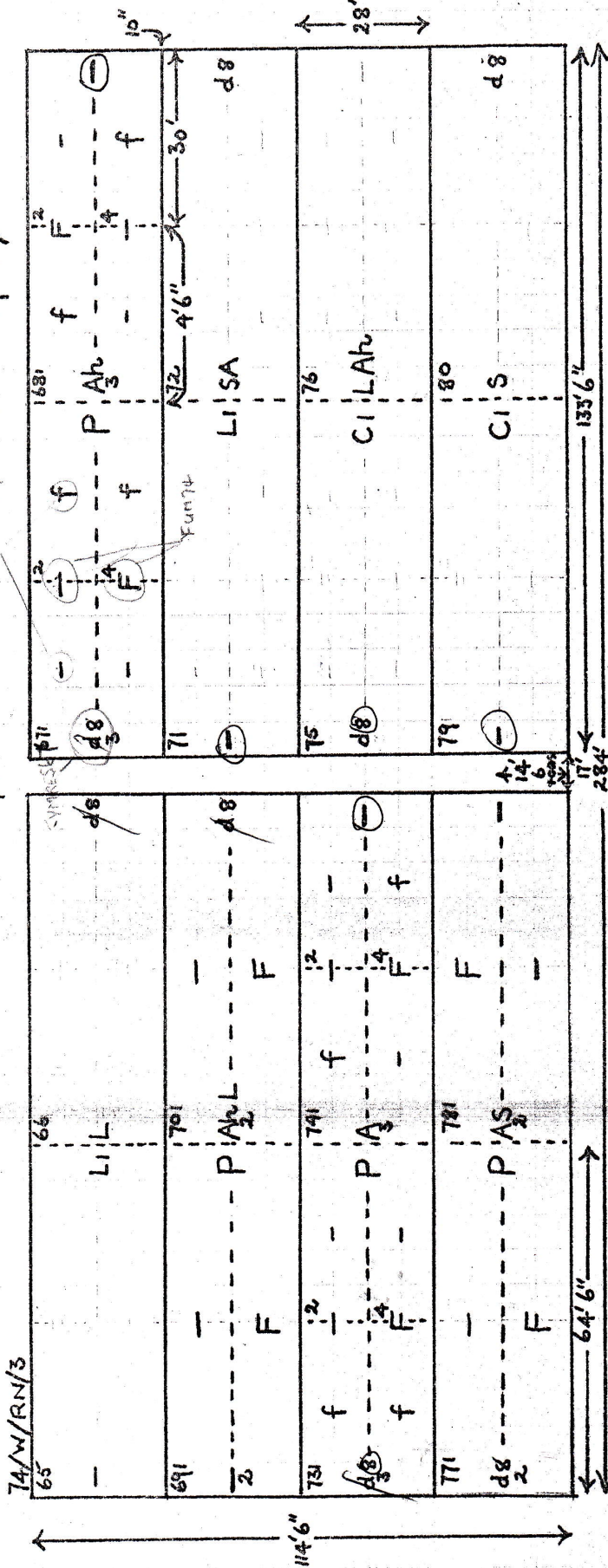
14' x 64'6" = 0.0207 acre (0.0084 ha)

WOBURN
74/W/RN/3

ARABLE AND LEY ROTATION
1st treatment crops Block 5

37th year STACKYARD D 1974 201D

FURRES 72



SYMBOLS
Rotations

3 years ARABLE A= Potatoes P, Barley B, Barley B.
Ah= Potatoes P, Barley B, Hay H.

3 years LEY C = Red Clover cut for hay (S = Sainfoin) Sown: 5 Apr
L = Ley Cut. Sown: 5 Apr

TREATMENTS per acre (hectare) Fumigants cumulative on 1969
-, F. None, 200lb (224kg) Telone applied: 22 Nov, plus
6lb (6.7kg) aldicarb applied: 9 Apr

Chloropicrin + aldicarb residues applied to potatoes 1972
-, f None, Chloropicrin + aldicarb

FYM residues

-, d8 None, FYM residues - last applied 1967
VARIETY Potatoes - Maris Piper Planted: 10 Apr

BASAL MANURING per acre (hectare)
1730lb (1939kg) compound fertiliser (13:13:20)

SUB-PLOT AREA
14' x 30' = 0.0096 acre (0.0039 ha)

38th year → N Sponsors: D.A. Boyd, J.M. Hirst, A.E. Johnston, F.G.W. Jones

WOUBURN ARABLE AND LEY ROTATION

STACKYARD 'D' 1975 201A

75/W/RM/3

01 Block 1 1st Test For plot treatments

17 Block 2 2nd Test For plot treatments

3rd TREATMENT CROPS

331 d10 3	(f) (-) ² (-) (f)	341 S	(-) (-) ² (f) (-)	361 SA	(f) (-) ² (-) (-)
371 5	(-) (-) ² (f) (-)	381 AL	(f) (-) ² (-) (-)	401 B	(-) (-) ² (f) (-)
411 3	(f) (-) ² (-) (-)	421 AhS	(f) (-) ² (-) (-)	441 L3	(f) (-) ² (-) (-)
451 3	(f) (-) ² (-) (-)	461 Ah	(-) (-) ² (f) (-)	481 LAh	(-) (-) ² (f) (-)

49 Block 4 1st year For plot treatments

2nd TREATMENT CROPS

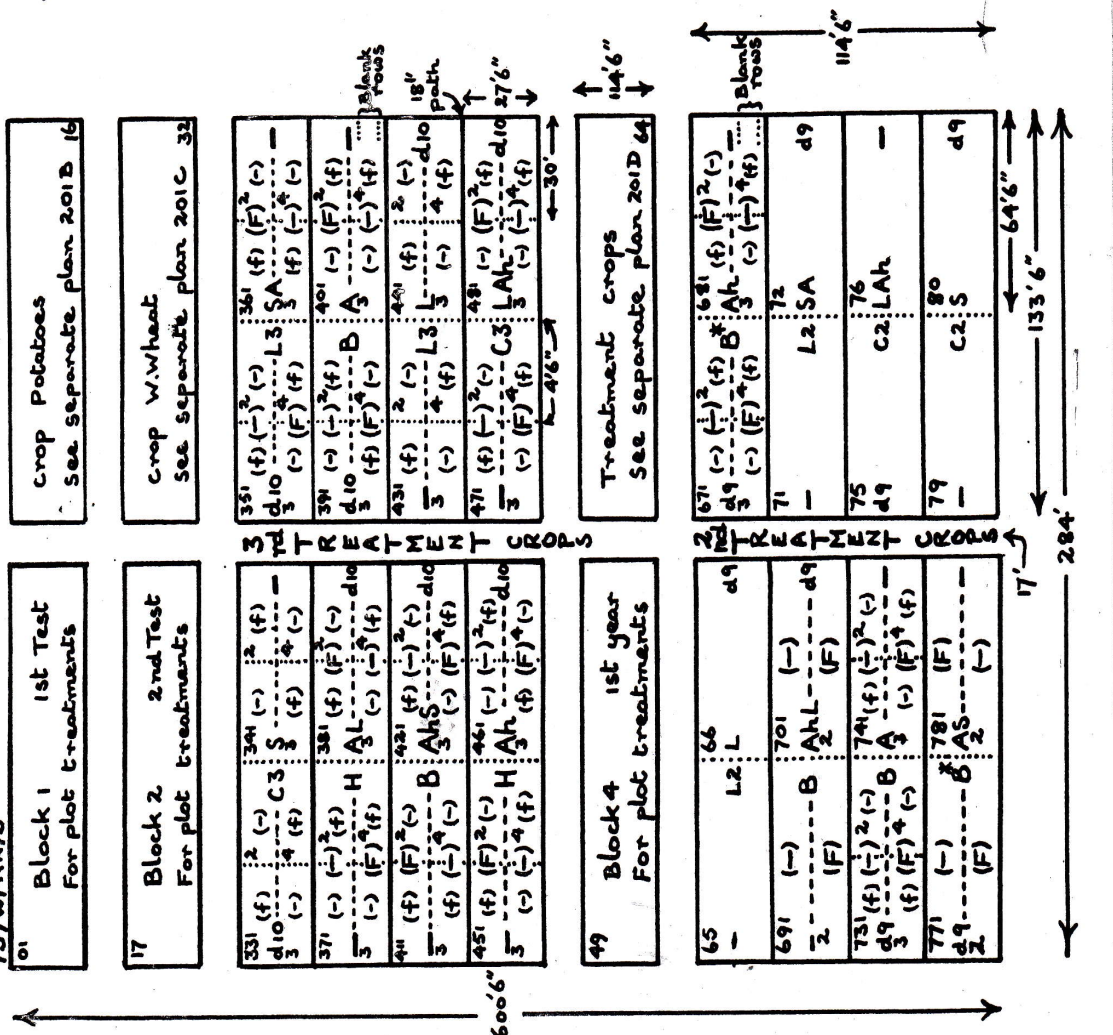
65 -	66 L2: L	681 L2: SA	(-) (-) ² (f) (-)	701 AhL	(-) (-) ² (f) (-)
691 2	(-) (-) ² (f) (-)	711 B	(f) (-) ² (-) (-)	731 A	(-) (-) ² (f) (-)
711 2	(-) (-) ² (f) (-)	741 B	(f) (-) ² (-) (-)	761 C2: LAh	(-) (-) ² (f) (-)
771 2	(-) (-) ² (f) (-)	781 AS	(-) (-) ² (f) (-)	801 C2: S	(-) (-) ² (f) (-)

SYMBOLS

Rotations
3 years ARABLE A=Potatoes P, Barley B, Barley B, Barley B.
Ah=Potatoes P, Barley B 2/3, Hay H.
3 years LEY C=Red clover cut for hay (S=Sainfoin)
L=Ley, cut

2nd and 3rd year TREATMENT CROPS
Residues of fumigants applied to potatoes 1972 - 2nd treatment crop 1975
(-) (f) None, 400lb (448kg) chloropicrin + 10lb (112kg) aldicarb.
Residues of fumigants applied to potatoes 1974 - 2nd treatment crop 1975
(-) (f) None, 200lb (224kg) Telone + 6lb (6.7kg) aldicarb.
Residues of fumigants applied to 1st Test crop rotations 1971 - 3rd treatment crop 1975
(-) (f) None, 400lb (448kg) chloropicrin + 10lb (112kg) aldicarb.
Residues of fumigants applied to 1st treatment crop 1973 - 3rd treatment crop 1975
(-) (f) None, 400lb (448kg) chloropicrin + 6lb (6.7kg) aldicarb (applied to plots 35/36 & 47/48 in error).

2nd and 3rd treatment Barley (Julia dressed ethirimol) Resown: 1 May
365lb (409kg) compound fertiliser (15:15:15) c.p.
3rd treatment crop Hay 1974 in Barley
1.0 cut (126kg) N as Nitro-chalk 2.5, 0.6 cut (75kg) P₂O₅, 1.2 cut (151kg) K₂O as (0:14:28) in spring. 0.6 cut (75kg) N, 0.4 cut (50kg) K₂O as (25:0:16) after 1st cut.
2nd and 3rd year cut Ley
1.2 cut (151kg) N, 0.9 cut (113kg) K₂O as (25:0:16) in three equal dressings.
Any dressing may be omitted or reduced in a wet season.
2nd and 3rd year clover
0.5 cut (63kg) N, as Nitro-chalk 2.5, 1.5 (138kg) K₂O as muricite of potash, in spring.
ALL CROPS :- FYM
- , d Residual of none v. 15 tons (38 tonnes). FYM applied to Sugar beet 1962-67 (1st test crop).



201 B

WOBBURN

75/w/RN/3

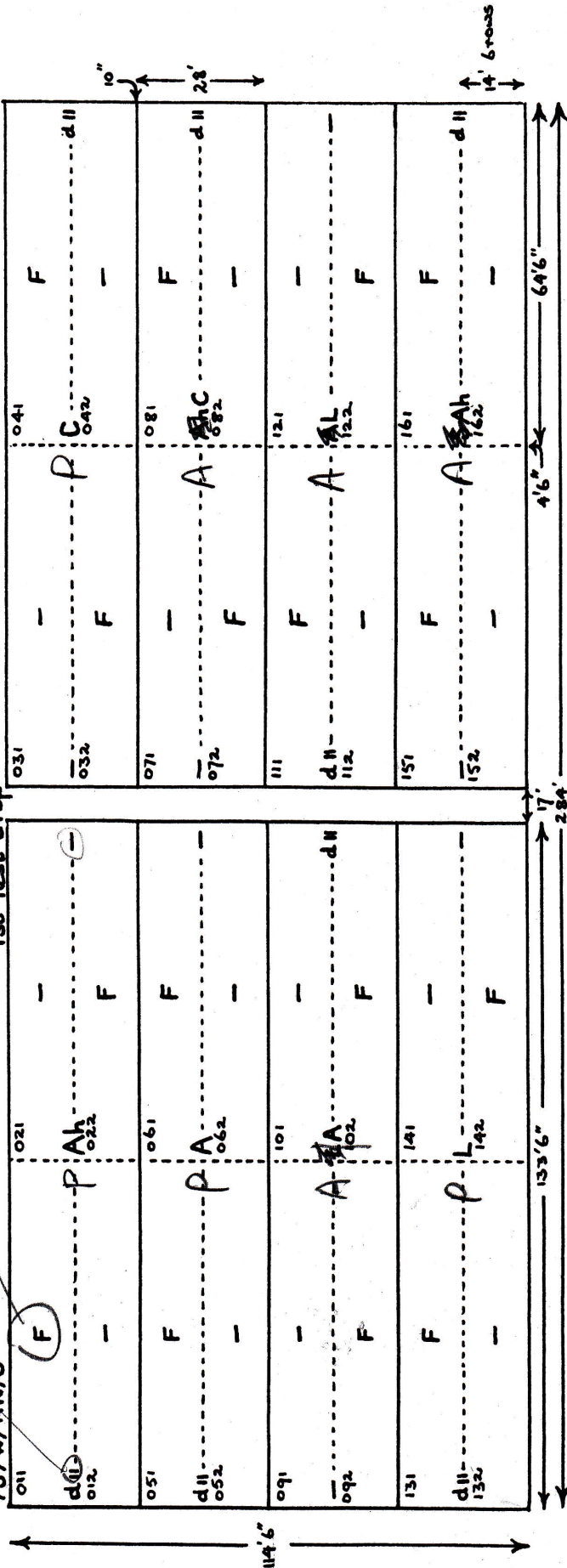
ARABLE AND LEY ROTATION

38th year

STACKYARD D 1975

Potatoes Block 1 → N Sponsors: D.A. Boyd, J.M. Hirst, A.E. Johnston, F.M. Jones

1st Test Crop



TREATMENTS per acre (hectare)

FYM residues

- , d || None, FYM residues - last applied 1965.

FUMIGANTS

- None
 F 200lb (224kg) 'Telone' in autumn +
 10lb (11.2kg) aldicarb in spring

VARIETY Mavis Piper

Planted: 5 May

BASAL MANURING per acre (hectare)

1730lb (1939kg) compound fertiliser (13:13:20)

PLOT AREA

14' x 64'6" = 0.0207 acre (0.0084 ha)

201 C

STACKYARD D 1975

38th year

ARABLE AND LEY ROTATION

Winter Wheat Block 2

2nd Test Crop

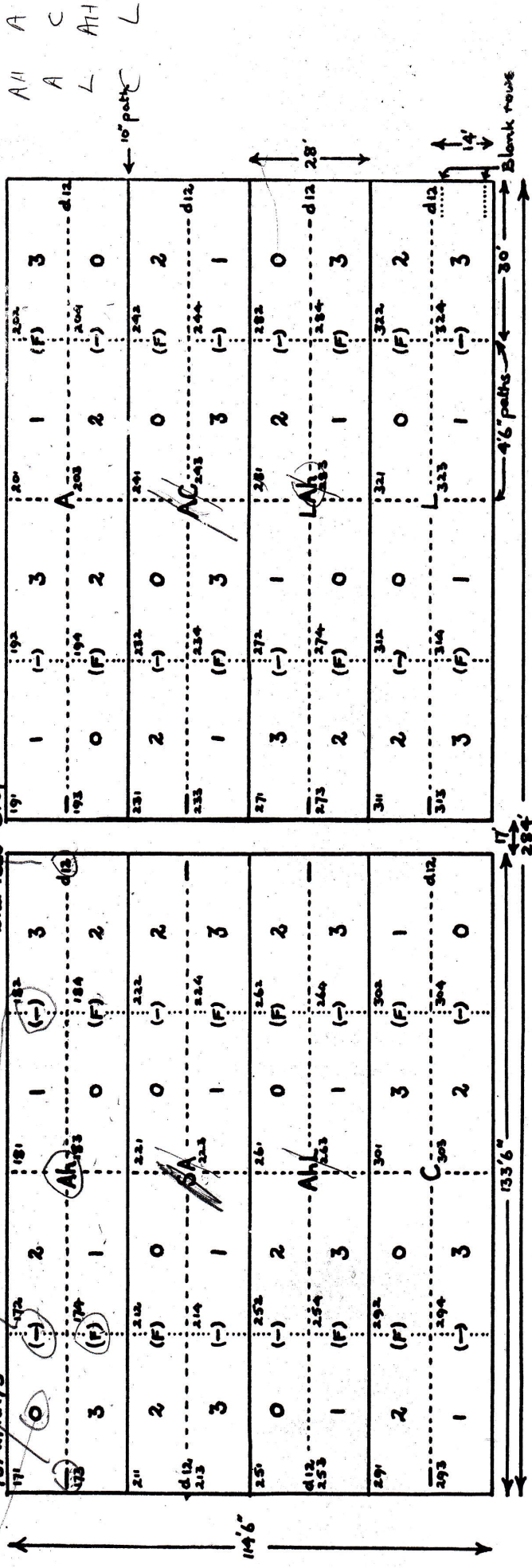
1974 FUMRES 74

FYM RES 64

WOBURN

75

N Sponsors: D.A. Boyd, J.M. Hirst, A.E. Dunston, J.G.M. Jones



TREATMENTS per acre (hectare)

FYM residues

-, d 12 None, FYM residues - last applied 1964

Fumigants - applied for potatoes 1974

(-) None

(F) Residues of 200lb (22.4kg) Telone

+ 6lb (6.7kg) aldicarb.

PERM ALI

Nitrogen

0, 1, 2, 3 None, 0.5, 1.0, 1.5 cut N (63, 126, 189 kg) as Nitro-chalk 2.5

BASAL MANURING per acre (hectare)

260 lb (290kg) of (0:20:20) C.D.

VARIETY

Cappelle dressed die/drain

PLOT AREA

14' x 30' = 0.0096 acre (0.0039 ha.)

Harvested: 9'4' x 30' = 0.0064 acre (0.0026 ha.)

Sown @ 1175 lb (196kg) Date: 8 Nov 1974

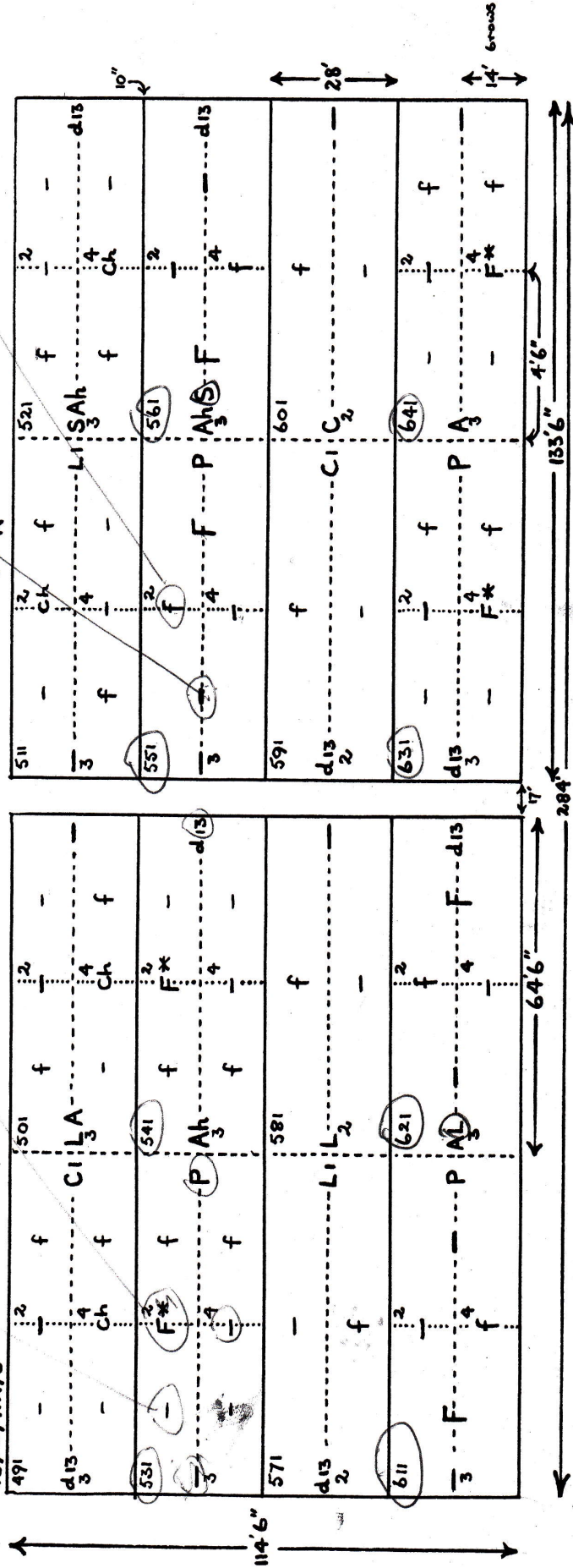
Woburn 75/M/RN/3 (1) Fumigant 73 (2) Fumigant 75

Arable and Ley Rotation 38th year (3) Fumigant 75 (4) Fumigant 73

Block 4

Sponsors: DA. Boyd, J.M. Hirst, A.E. Johnston, F. G. Jones

Stackyard D 1975



SYMBOLS

Rotations

3 years ARABLE A = Potatoes P, Barley B, Barley B.

Ah = Potatoes P, Barley 1/3, Hay H. Sown: 1 May

3 years LEY C = Red Clover cut for hay. Sown: 2 May

L = Ley Cut. sown 2 May

TREATMENTS per acre (hectare) Fumigants cumulative on 1970 (5)

and 1973 (f)

- None

F 200 lb (22.4 kg) Talone in autumn + 10 lb (11.2 kg) aldicarb in spring

Chloropicrin residues applied for potatoes 1970

- , Ch None, 400 lb (400 kg) chloropicrin

chloropicrin + aldicarb residues applied for 1st test crop potatoes 1973

- f None, 400 lb (400 kg) chloropicrin + 6 lb (6.7 kg) aldicarb.

FYM residues -, d13 None, FYM residues - last applied 1963.

VARIETY Potatoes - Maris Piper Planted: 5 May

BASAL MANURING per acre (hectare)

1730 lb (1939 kg) compound fertiliser (13:13:20)

SUB-PLOT AREA 14' x 30' = 0.0096 acre (0.0039 ha)

WOBURN ARABLE AND LEY ROTATION

Block 1 For Plot Treatments	2nd Test	Crop	Winter Wheat	See Separate Plan 201 B
17 d10	(A) B	19	(A) F	d10
21 d10	(SA) LLC1	23	(AC) LLC1*	d13
23 d13	(AhL) LLn1*	27	(LAb) LLn1	d13
29 d10	(C) Lc1	31	(L) Ln1	d13

Block 3 For Plot Treatments	1st Test	Crop	Winter Wheat	See Separate Plan 201 C
51 d14	(LA) LLC2	51	(SAH) LLn2	d14
53 d14	(Ah) B	55	(AhS) LLC2*	d14
57 d14	(L) LLn2	59	(C) Lc2	-
61 d14	(AL) LLn2*	63	(A) F	-

Block 5 For Plot Treatments	1st Test	Crop	Winter Wheat	See Separate Plan 201 D
65 d10	(L) LLn3	67	(Ah) O	-
69 d10	(AhL) LLn3*	71	(SA) LLn3	d10
73 d10	(A) O	75	(LAN) LLC3	-
77 d10	(AS) LLC3*	79	(C) Lc3	d10



59th year → N

Sponsors: ~~Barbey~~, K. Evans, A.E. Johnston, F.M. Jones, G.A. Salt.

SYMBOLS

From 1976 major revisions have been made: -

Previous Rotations: (R), (Ah), (C), (L), (S) not defined on this plan.

From 1976 AH Barley B, Barley S, Oats O.

A Follow F, Follow F, Oats O.

Lc 3 years clover/grass ley (no N)

Ln 3 years all grass ley (with N)

LLc & LLn 3 year leys treated as above. * = ploughed up in less than 8 years initially during phasing in.

Normally followed by Test Crops. Wheat and Barley (Wheat in 1976 to complete previous cycle).

NOTE: Lc & Ln 2 & 3 are all fresh sowings 1976.

To all crops: -, dn Residues of none v 15 tons/acre (88t/ha) FYM last applied n years ago.

BASAL MANURES per acre (hectare)

Barley - Julia. (dressed with abtimal) } 360B (400 kg) compound fertiliser @ 145 lb (65 kg)

Oats - Mamed @ 170 lb (190 kg)

ALL - grass ley.

1st year: 75 kg (67 lb) N as Nitro-chalk 2.5, 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in the seedbed. 75 kg (67 lb) N, 48 kg (43 lb) K₂O as (25:0:16) after each cut except the last.

2nd + years: 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in winter. 75 kg (67 lb) N, 48 kg (43 lb) K₂O as (25:0:16) in spring and after each cut except the last.

Clover/grass ley - as Ln but omitting N. K per cut as muricide of potato.

1st year: 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in the seedbed. 48 kg (43 lb) K₂O as Muricide of potato after each cut except the last.

2nd + years: 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in winter. 48 kg (43 lb) K₂O as Muricide of potato in spring and after each cut except the last.

Leys drilled: 22 Apr.

Sown: 22 Apr

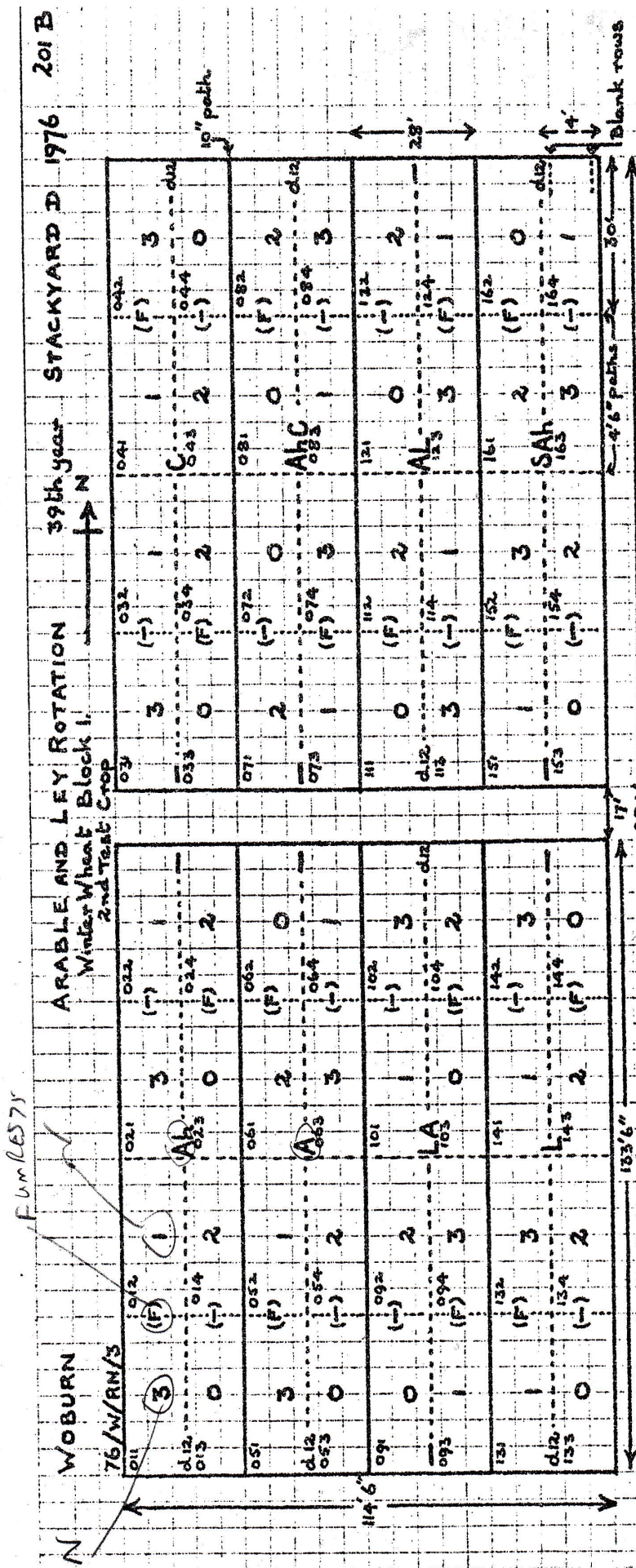
1st year: 75 kg (67 lb) N as Nitro-chalk 2.5, 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in the seedbed. 75 kg (67 lb) N, 48 kg (43 lb) K₂O as (25:0:16) after each cut except the last.

2nd + years: 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in winter. 75 kg (67 lb) N, 48 kg (43 lb) K₂O as (25:0:16) in spring and after each cut except the last.

Clover/grass ley - as Ln but omitting N. K per cut as muricide of potato.

1st year: 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in the seedbed. 48 kg (43 lb) K₂O as Muricide of potato after each cut except the last.

2nd + years: 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in winter. 48 kg (43 lb) K₂O as Muricide of potato in spring and after each cut except the last.



WOBURN

76 W/RN/3

ARABLE AND LEY ROTATION

Winter Wheat Block 1

2nd Year Crop

19' path

Blank rows

FYM (257)

39th year STACKYARD D 1976 201 B

Nitrogen
0, 1, 2, 3 None, 0.5, 1.0, 1.5 cat N (65, 126, 189 kg) as Nitro-chalk 25

BASAL MANURING per acre (hectare)
270 lb (303 kg) of compound fertiliser (0:20:20) C.D.

VARIETY
Cappelle
Sown: 15 Oct at : 190 lb (213 kg)

PLOT AREA
14' x 30' = 0.0096 acre (0.0039 ha)

Harvested 9'4" x 30' = 0.0064 acre (0.0026 ha)

TREATMENTS per acre (hectare)

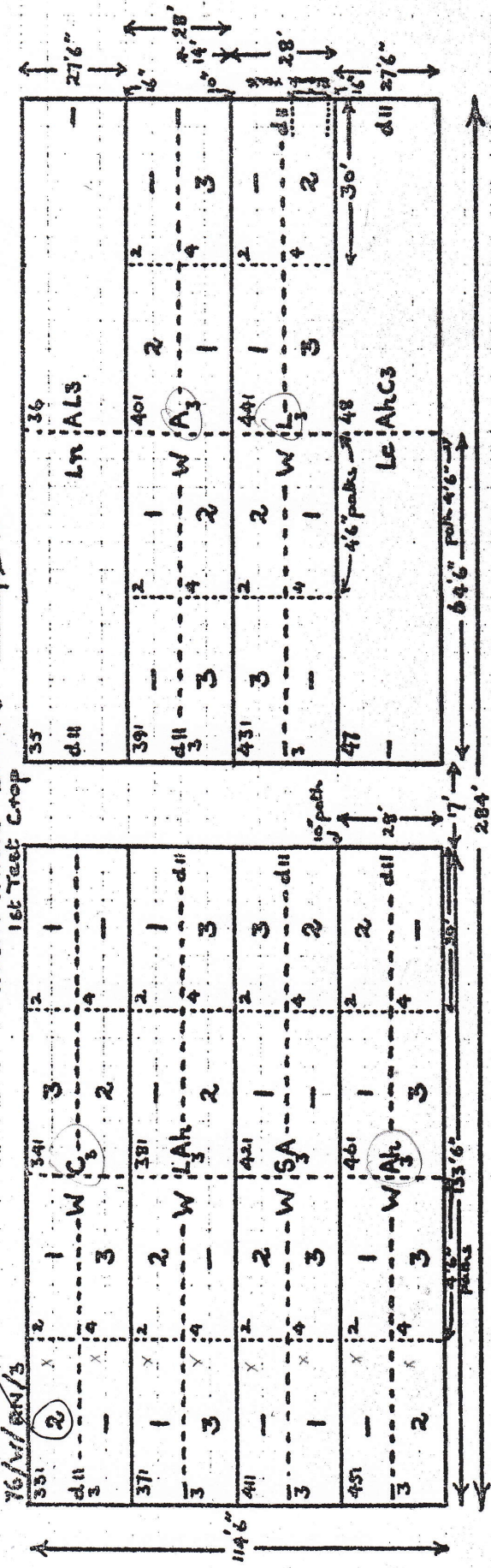
FYM residues
-, d 12 None, FYM residues - last applied 1965

FUMIGANTS - applied for potatoes 1975
None.
200 lb (22.4 kg) 'Telone' in autumn +
10 lb (1.12 kg) aldicarb in spring

WOBURN 1976/1977

ARABLE AND LEY ROTATION 39th year STACKYARD 'D' 1976 201 C

Winter Wheat Block 3 → N



TREATMENTS per acre (ha/acre)

FYM residues
 - d II None, FYM residues - last applied 1966

Cropping
 W Winter Wheat Variety: Cappella Sown: 10 Nov (dressed Friti Bull fly & fungicide seed dressing)
 LN Ley with N } sown in spring 1976 without
 LC Ley with Clover } ploughing previous L&R C3

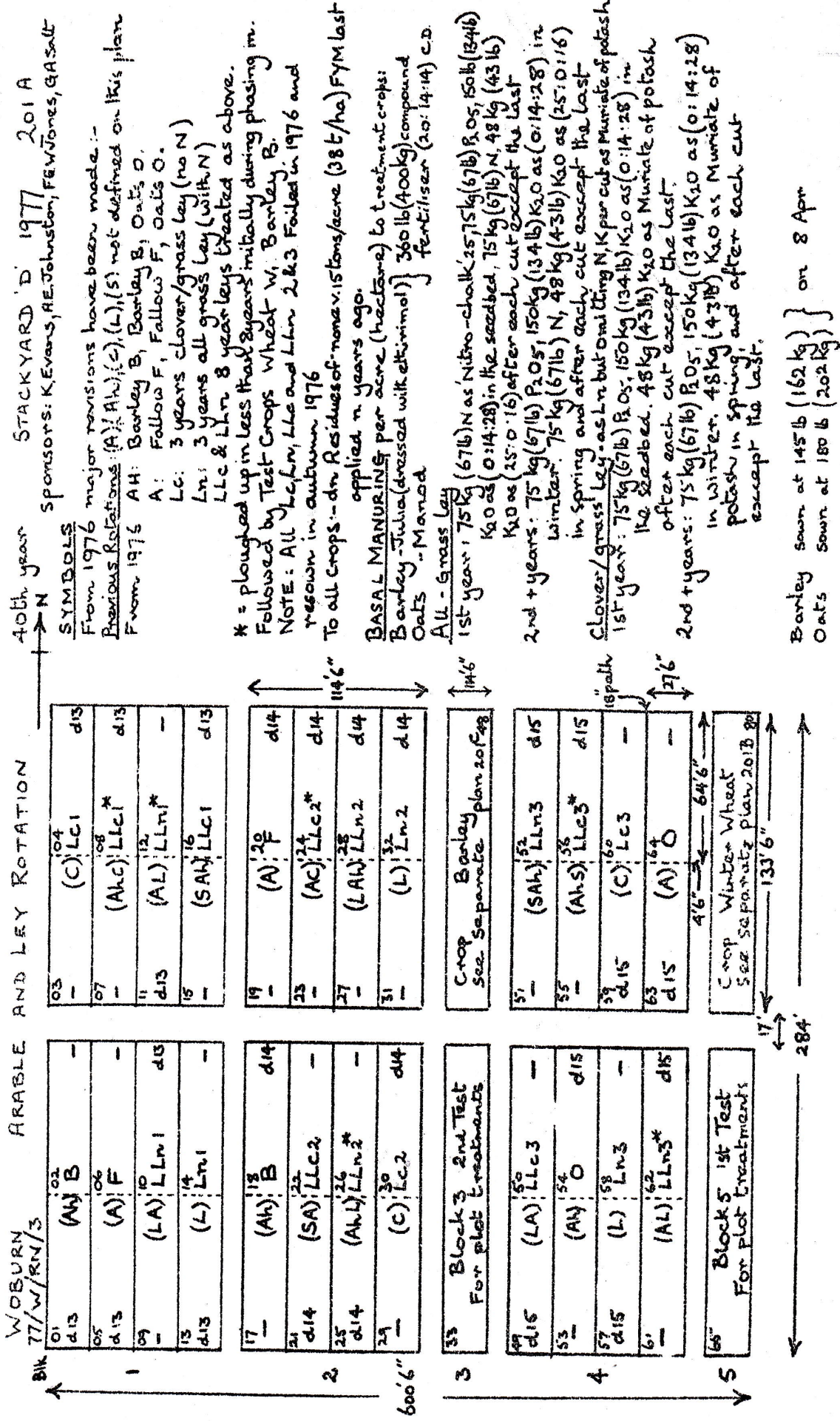
Nitrogen to Winter Wheat
 1, 2, 3 None, 0.5, 1.0, 1.5 cat N (63, 126, 189 kg) as Nitro-chalk 25

BASAL APPLICATION to Winter Wheat only
 Aldicarb at 10kg/ha (9lb/acre)

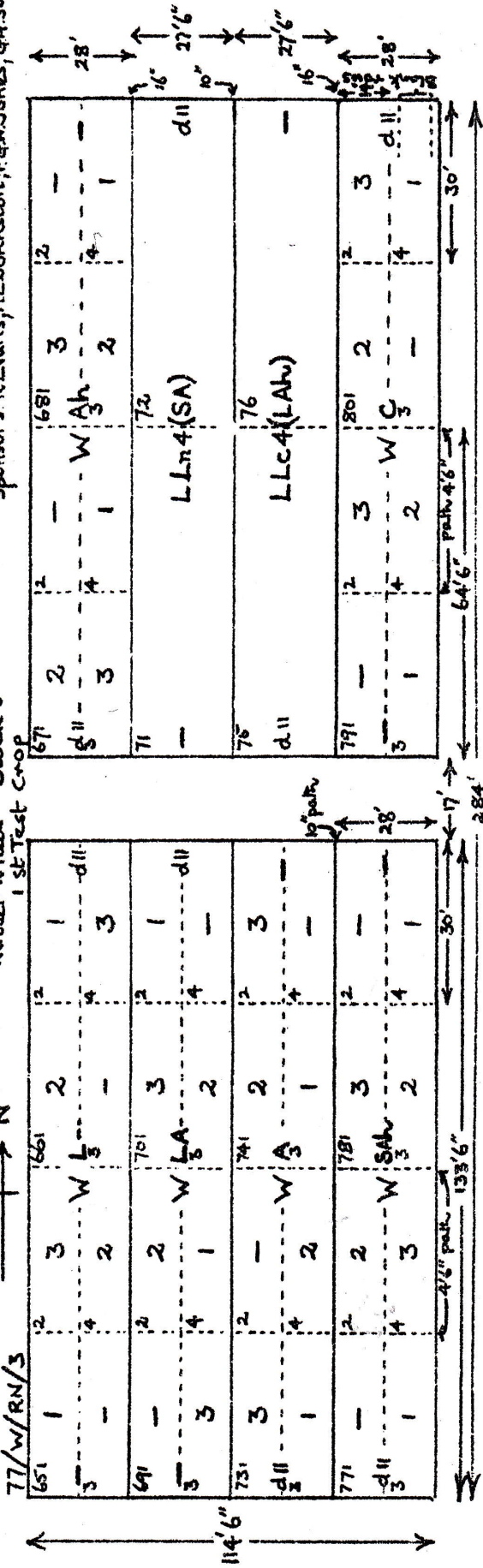
BASAL MANURING per acre (ha/acre)

Winter Wheat: 270 lb (300kg) compound fertilizer (0:20:20) C.D.
 Ley with N: 490 lb (538kg) of (0:14:28) 500 lb (550kg) of (25:0:16) after + 265 lb (300kg) of each cut except the last.
 Ley with Clover: Nitro-chalk 25 folay 60 lb (67kg) of muriate of with N only in its seedbed, patch after each cut except the last.

PLOT AREA
 Winter Wheat: 14' x 30' = 0.0096 acre (0.0029 ha)
 Harvested: 9'4" x 30' = 0.0064 acre (0.0026 ha)
 Ley with N and
 Ley with Clover: 2 1/2' x 64'6" = 0.0407 acre (0.0165 ha)



WOBURN → N → **ARABLE AND LEY ROTATION 40th year** **STACKYARD 'D' 1977** 201 B
 Winter Wheat Block 5
 1st Test Crop
 Sponsors: K.Evans, A.E. Johnston, F.G.M. Jones, G.A. Salt



TREATMENTS per acre (hectare)
 FYM residues
 - 1, d. 11 None, FYM residues - last applied 1967

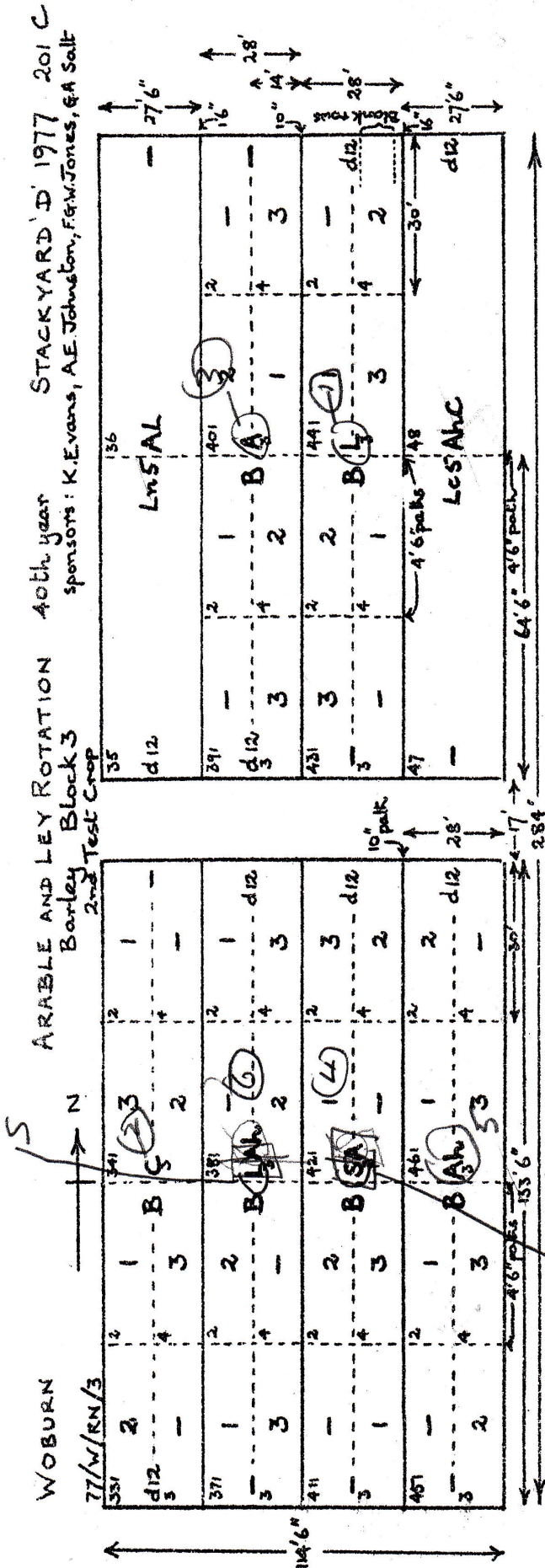
Cropping
 W Winter wheat Variety: Cappelle, (dressed)
 Anti Bulb-fly & Fungicide seed dressing.
 Sown at 190 lb (215 kg) Date: 24 Nov
 Ley with N } reason 30 lb (34 kg)
 Ley with Clover } 15 Oct 35 lb (39 kg)

Nitrogen to Winter wheat
 - 1, 2, 3 None, 0.5, 1.0, 1.5 cwt N
 (63, 126, 189 kg) as Nitro-chalk '25

STANDARD APPLICATION to winter wheat only
 Aldicarb at 10 kg/ha (9 lb/acre) applied: 24 Nov

BASAL MANURING per acre (hectare)
 Winter Wheat: 300 kg (270 lb) compound fertiliser (0.20:20) c D.
 Ley with N 74 kg (66 lb) N, 4 kg (42 lb) K₂O as (25:0:16) applied in the Spring and after each cut except the last.
 Ley with clover: 48 kg (43 lb) K₂O as muriate of potash in the Spring and after each cut except the last.

PLOT AREA
 Winter Wheat: 14' x 30' = 0.0096 acre (0.0039 ha)
 Harvested: 9'4" x 30' = 0.0064 acre (0.0026 ha)
 Ley with N and
 Ley with clover: 27'6" x 6'4" = 0.0407 acre (0.0165 ha)



BASAL MANURING per acre (hectare)
 Barley: 270lb (300kg) compound fertiliser (0:20:20) a.d.
 Ley with N: 74kg (66lb) N, 47kg (42lb) K₂O as (25:0:16) applied in the spring and after each cut except the last

Ley with clover: 48kg (43lb) K₂O as muriate of potash in the spring and after each cut except the last.

PLOT AREA
 Barley: 14' x 30' = 0.0096 acre (0.0039 ha)
 Harvested: 9'4" x 30' = 0.0064 acre (0.0026 ha)
 Ley with N and
 Ley with clover: 27'6" x 6'6" = 0.0407 acre (0.0165 ha)

41st year → N
 STACKYARD D 1978 201A
 Sponsors: A.E. Johnston, F.G.W. Jones, G.A. Salt

SYMBOLS

From 1976 major revisions have been made:-

Previous Rotations: (A), (Ah), (C), (L), (S) not defined on this plan
 From 1976 AH: Barley B, Barley B, Oats O.
 A: Follow F, Follow F, Oats O.
 L: 3 years clover/grass ley (no N)
 Ln: 3 years all grass ley (with N)
 LLC & LLn 8 year leys treated as above.

* = ploughed up in less than 8 year initially during phasing
 Followed by Test Crops Wheat W, Barley B.

NOTE: All Lc, Ln, LLC and LLn 2 & 3 failed in 1976 and resown in autumn 1976.
 To all crops: - dr. Residues of none v.15 tons/acre (38t/ha) FYM last applied n years ago.
BASAL MANURING per acre (hectare) to treatment crops:
 Barley - Porthos (dressed with ethinmal), 360lb (400kg) compound fertiliser (20:14:14) CD
 Oats - Manod
 All - Grass ley

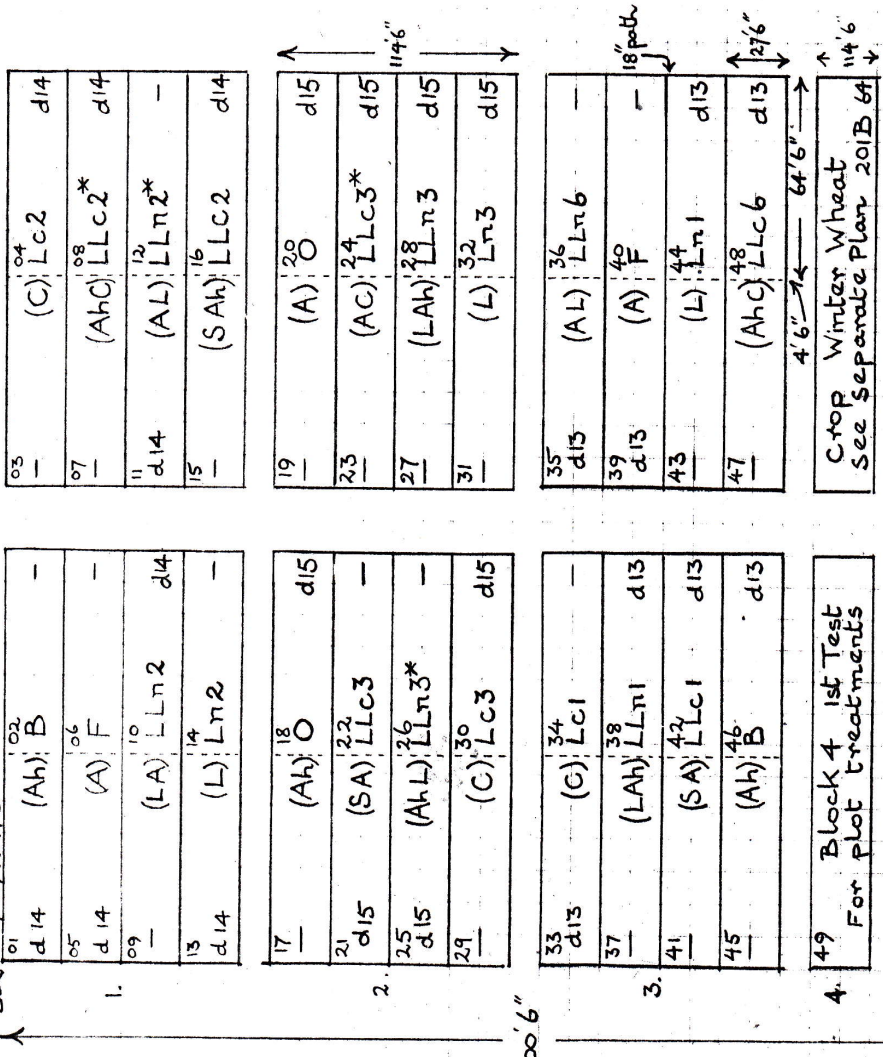
1st year: 75kg (67lb) N as Nitro-chalk 25, 75kg (67lb) P₂O₅, 150kg (134lb) K₂O as (0:14:28) in the seedbed, 75kg (67lb) N, 48kg (43lb) K₂O as (25:0:16) after each cut except the last.
 2nd+ years: 75kg (67lb) P₂O₅, 150kg (134lb) K₂O as (0:14:28) in winter and after each cut except the last.
 Clover/grass ley as Ln but omitting N. K per cut as Muriate of potash
 1st year: 75kg (67lb) P₂O₅, 150kg (134lb) K₂O as (0:14:28) in the seedbed. 48kg (43lb) K₂O as Muriate of potash after each cut except the last.
 2nd+ years: 75kg (67lb) P₂O₅, 150kg (134lb) K₂O as (0:14:28) in winter. 48kg (43lb) K₂O as Muriate of potash in spring, and after each cut except the last.

Barley sown at 145lb (162kg) Date: Redrilled 7 Apr
 Oats sown at 180lb (202kg) Date: 13 Mar

ARABLE AND LEY ROTATION

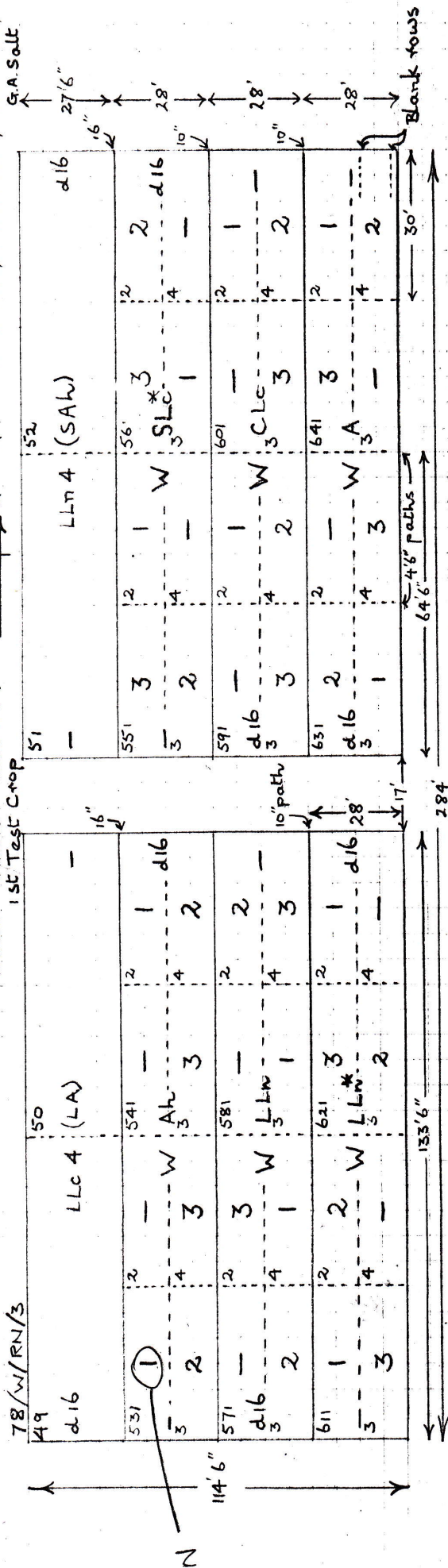
WOBUEN

BK 78/W/RN/3



Crop Winter Wheat See Separate Plan 201B 64
 Crop Barley Plan 201C 80
 17' ←
 284' ←

WOBURN 78/W/RN/3 ARABLE AND LEY ROTATION 41ST year STACKYARD 'D' 1978 201B
 Winter Wheat Block 4 1ST Test Crop N sponsors: KEVANS, A.E. JOHNSTON, F.G.W. JONES, G.A. SALT



TREATMENTS per acre (hectare)
 - d16 None, FYM residues - last applied 1962

CROPPING Winter wheat Variety: Cappella
 sown at: 1906 (213kg) Date: 25 Oct

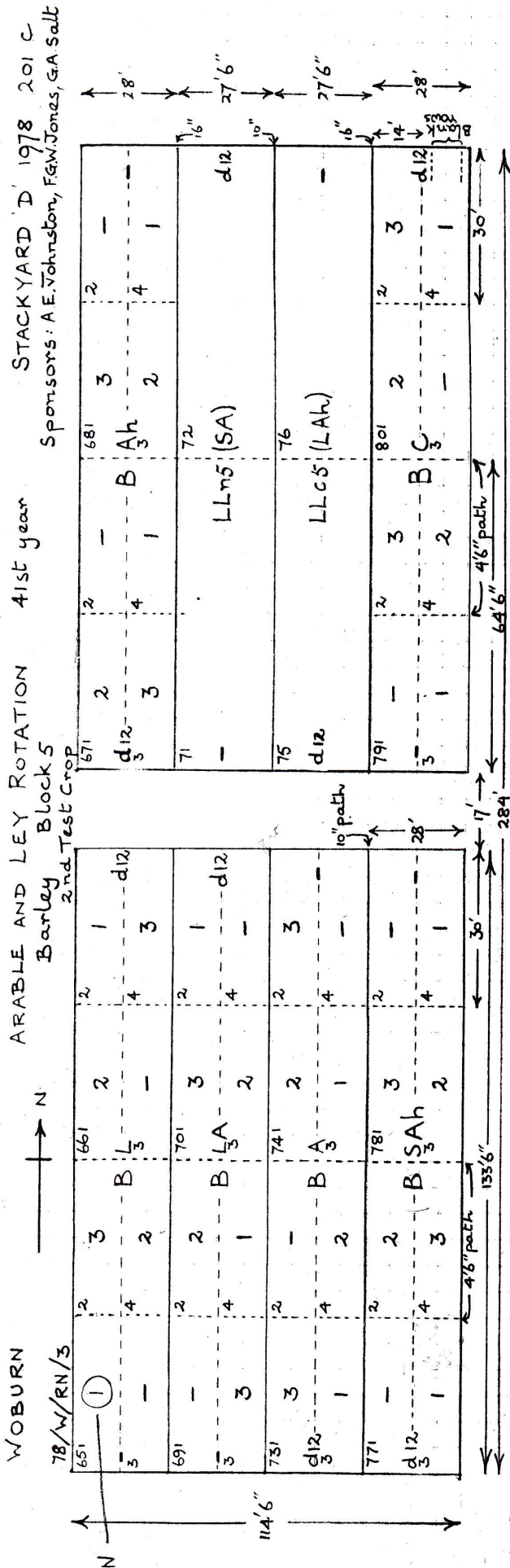
Other crop symbols - see main plan

Nitrogen to Winter wheat
 - 1, 2, 3 None, 0.5, 1.0, 1.5 cwt N
 (63, 126, 189 kg) N as Nitro-chalk 25

STANDARD APPLICATION to winter wheat only
 Aldicarb at 10kg/ha (9lb/acre) applied by farm

BASAL MANURING per acre (hectare)
 Winter wheat: 314 kg (280 lb) compound fertiliser (0:20:20) CD
 Ley with N 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in winter
 75 kg (67 lb) N, 48 kg (43 lb) K₂O as (25:0:16) applied in spring and after each cut except the last.
 Ley with clover: 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in winter.
 48 kg (43 lb) K₂O as muriate of potash in the spring and after each cut except the last.

PLOT AREA
 Winter wheat: 14' x 30' = 0.0096 acre (0.0039 ha)
 Harvested: 9'4" x 30' = 0.0064 acre (0.0026 ha)
 Ley with N and Ley with clover: 27'6" x 64'6" = 0.0407 acre (0.0165 ha)



TREATMENTS per acre (hectare)

FYM residues

- 1, d12 None, FYM residues - last applied 1967

Cropping

B Barley Variety: Porthos (dressed with abtanimol)

LLn5 Ley with N Sown at 145 lb (16 kg) Date: 3 Apr

LLc5 Ley with clover Resown

Nitrogen to Barley 13 Oct 1976

Nitrogen to Barley

- 1, 2, 3 Nema, 0.4, 0.8, 1.2 cut N/acre (50, 100, 150 kg/ha) N as Nitro-chalk 25

STANDARD APPLICATION to Barley only

A dicarb at 10 kg/ha (9 lb/acre)

BASAL MANURING per acre (hectare)

Barley: 270 lb (300 kg) compound fertiliser (0:20:20) C.D.

Ley with N: 75 kg (67 lb) N, 48 kg (43 lb) K₂O as (25:0:16) applied in the

Spring and after each cut except the last.

Ley with clover: 48 kg (43 lb) K₂O as muriate of potash in the spring

and after each cut except the last.

PLOT AREA

Barley: 14' x 30' = 0.0096 acre (0.0039 ha)

Harvested: 9'4" x 30' = 0.0064 acre (0.0026 ha)

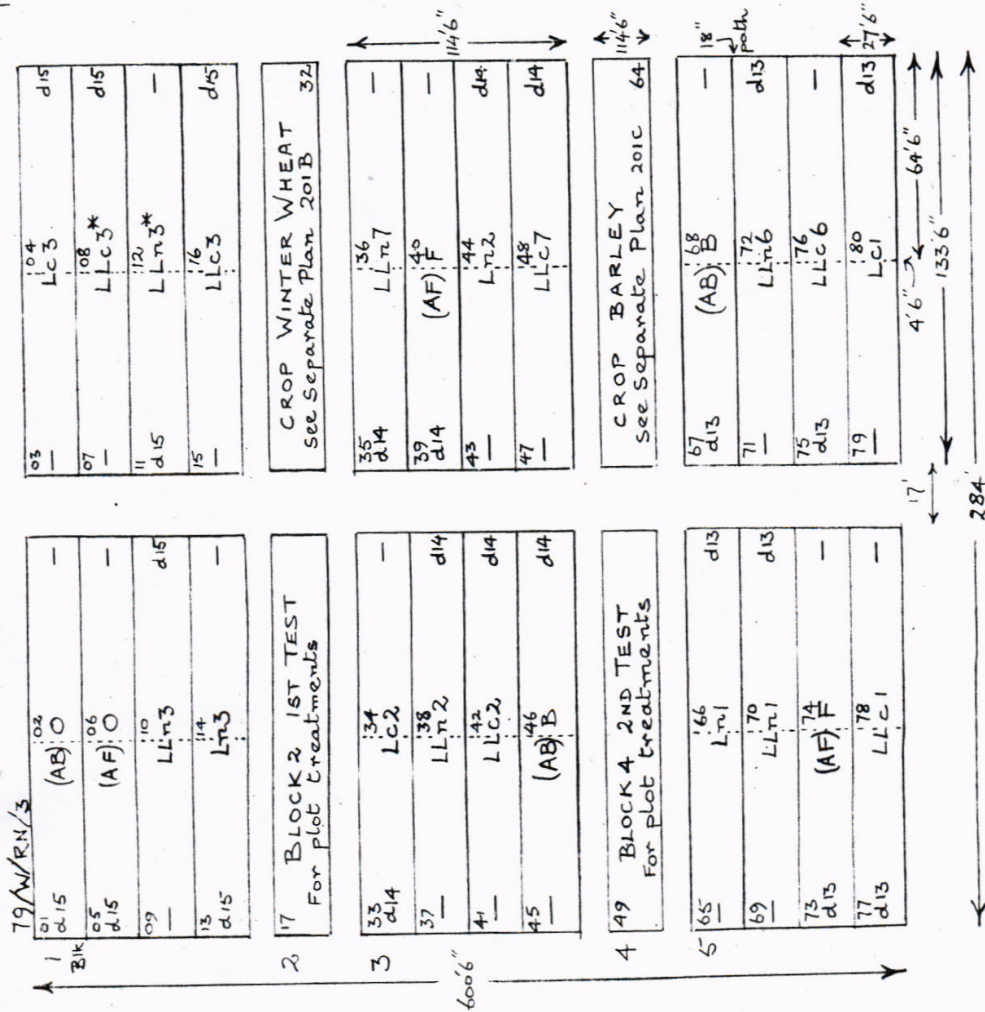
Ley with N and

Ley with clover 27'6" x 64'6" = 0.0407 acre (0.0165 ha)

WOBURN
42nd year
N

ARABLE AND LEY ROTATION

STACKYARD D 1979 201A
Sponsors: AE. Johnston, FGW Jones, GA. Salt.



SYMBOLS

3 year treatment crops before w.wheat (1st), Barley (2nd) test crops
 AB: Barley B, Barley B, Oats O.
 AF: Follow F, Follow F, Oats O.
 LC: 3 years clover/grass ley (No N)
 Ln: 3 years all grass ley (with N)
 8 year Leys
 LLC: clover/grass ley (No N)
 LLn: All grass ley (with N)
 * = ploughed up in less than 8 years initially, during phasing in.
 To all crops: - d n Residues of none v. 15 tons/acre (38 t/ha)
 FYM last applied n years ago.

VARIETIES

Barley (dressed with ethirimol): Porthos sown at 140 lb (157 kg) Date: 3 May
 Oats - Manrod Sown at Date:

BASAL MANURING per acre (hectare) to treatment crops

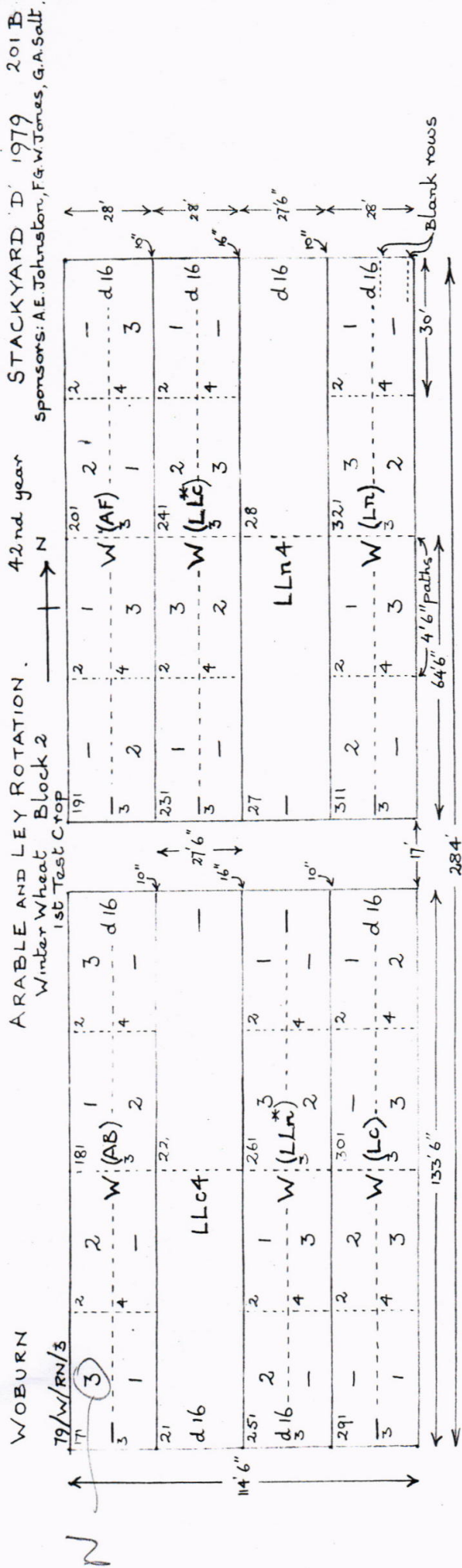
Barley and Oats 360 lb (400 kg) compound fertiliser (20:14:14) c.d.

ALL Grass Ley

1st year: 75 kg (67 lb) N as Nitro-chalk, 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in the seedbed, 75 kg (67 lb) N, 48 kg (43 lb) K₂O as (25:0:16) after each cut except the last.
 2nd + years: 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in winter 75 kg (67 lb) N, 48 kg (43 lb) K₂O as (25:0:16) in spring, and after each cut except the last.

Clover/grass ley

1st year: 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in the seedbed, 48 kg (43 lb) K₂O as muriate of potash after each cut except the last.
 2nd + years: 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in winter, 48 kg (43 lb) K₂O as muriate of potash in spring, and after each cut except the last.



TREATMENTS per acre (hectare)
- d 16 None, FYM residues - last applied 1963

Cropping
W Winter wheat Variety: Flanders
Sown at: 160lb (180kg) Date: 9 Nov.
Other crop symbols - see main plan

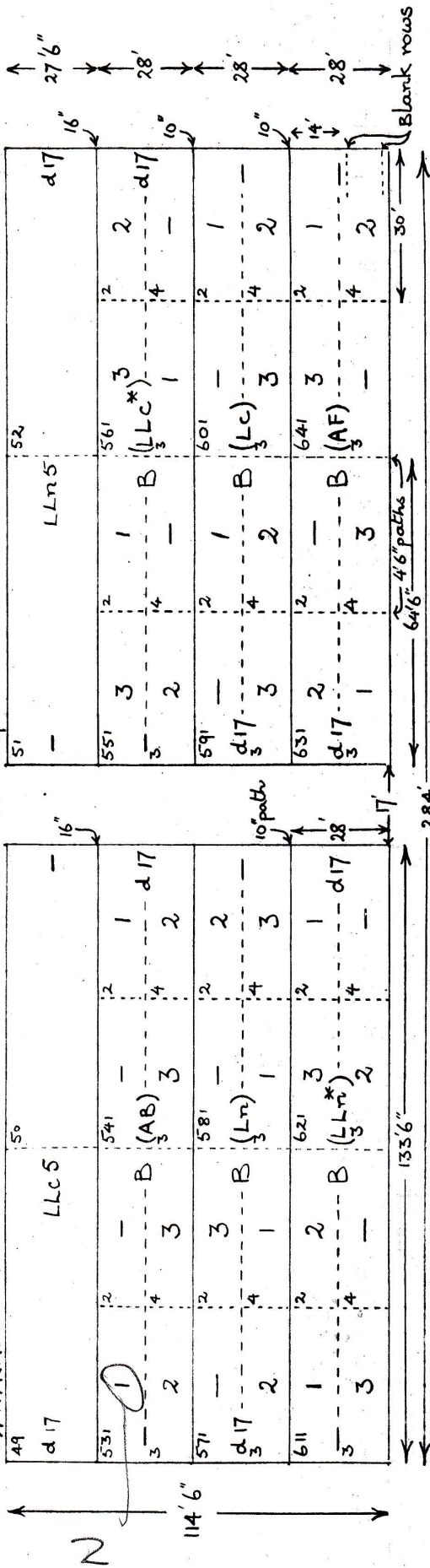
Nitrogen to Winter Wheat
- 1, 2, 3 None, 0.5, 1.0, 1.5 cwt N
(63, 126, 189kg) N
* Previously in the alternating rotation

STANDARD APPLICATION to winter wheat only
Aldicarb at 10 kg/ha (9 lb/acre) applied by farm

BASAL MANURING per acre (hectare)
Winter wheat: 314 kg (280 lb) compound fertiliser (0:20:20) CD
Ley with N : 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in winter.
75 kg (67 lb) N, 48 kg (43 lb) K₂O as (25:0:16) applied in spring and after each cut except the last.
Ley with clover: 75 kg (67 lb) P₂O₅, 150 kg (134 lb) K₂O as (0:14:28) in winter.
48 kg (43 lb) K₂O as muriate of potash in the spring and after each cut except the last.

PLOT AREA
Winter Wheat : 14' x 30' = 0.0096 acre (0.0039 ha)
Harvested : 9'4" x 30' = 0.0064 acre (0.0026 ha)
Ley with N and
Ley with clover: 27 1/2' x 64 1/2' = 0.0407 acre (0.0165 ha)

WOBURN ARABLE AND LEY ROTATION 42nd year STACKYARD D 1979 201C
 Barley Block 4 Sponsors: A.E. Johnston, F.G.W. Jones, G.R. Salt
 2nd Test Crop



TREATMENTS per acre (hectare)
 -, d17 None, FYM residues - last applied 1962

Cropping
 B Barley Variety: Perthos (dressed with ethirimol)
 Sown at: 40lb (157kg) Date: 3 May
 8 year Grass/Ley with N } Resown
 8 year Grass/clover Ley, No N } 13 Oct 1976
 3 year treatment cropping: Barley, Barley, Oats
 3 year treatment cropping: Fallow, Fallow, Oats
 Ley with N } Previous alternating rotations.
 Ley with clover } ultimately 8yr leys-treated as 3yr leys (1:4:1)
 during phasing in:
 3 year grass Ley with N
 3 year grass/clover Ley, No N.

Nitrogen to Barley
 -, 1, 2, 3 None, 0.4, 0.8, 1.2 cut N/acre
 (None, 50, 100, 150 kg/ha) N as Nitro-chalk 26

STANDARD APPLICATION to Barley only
 Aldicarb at 10kg/ha (9lb/acre)

BASAL MANURING per acre (hectare)
 Barley: 270lb (300kg) compound fertilizer (0:20:20) C.D.
 Ley with N: 75kg (67lb) N, 48kg (43lb) K₂O as (25:0:16) applied in the Spring and after each cut except the last
 Ley with clover: 48kg (43lb) K₂O as muriate of potash in the Spring and after each cut except the last.

PLOT AREA
 Barley = 14' x 30' = 0.0096 acre (0.0039 ha)
 Harvested = 9'4" x 30' = 0.0064 acre (0.0026 ha)
 Ley with N and
 Ley with clover 27'6" x 64'6" = 0.0407 acre (0.0165 ha)