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ROTHAMSTED  
RESEARCH

# Collection of Plans for the Woburn Ley-arable Experiment

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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	
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
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4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
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8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
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29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
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39	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
42	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

## 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

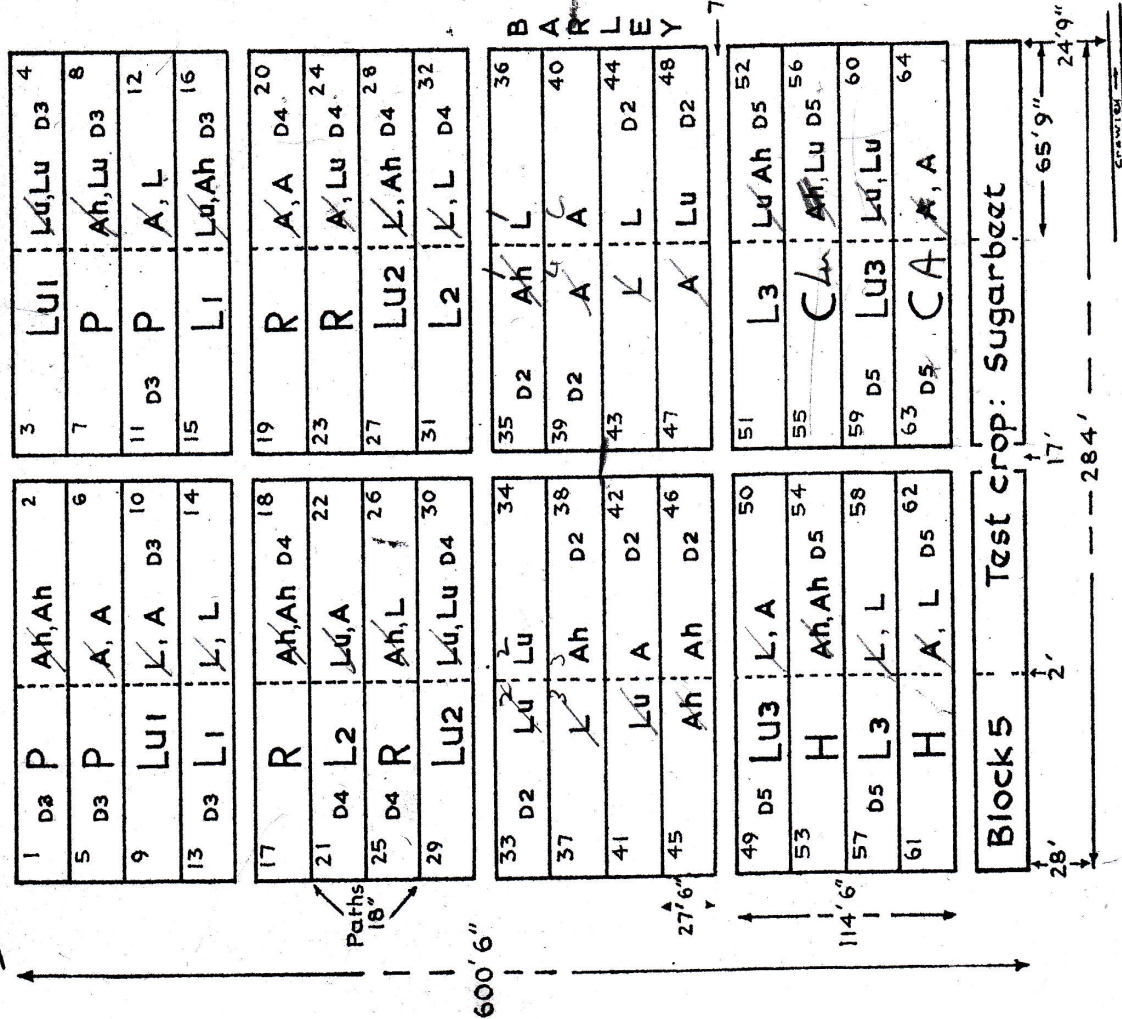
Rotation	Crops
A	Potatoes, Rye, Carrots
Ah	Potatoes, Rye (undersown) Hay (2 cuts)
Lu	Lucerne cut for hay for 3 years
L	Ley grazed for 3 years

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. K<sub>2</sub>O p.a. as muriate }

## Block 5 Test crop: Sugarbeet



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

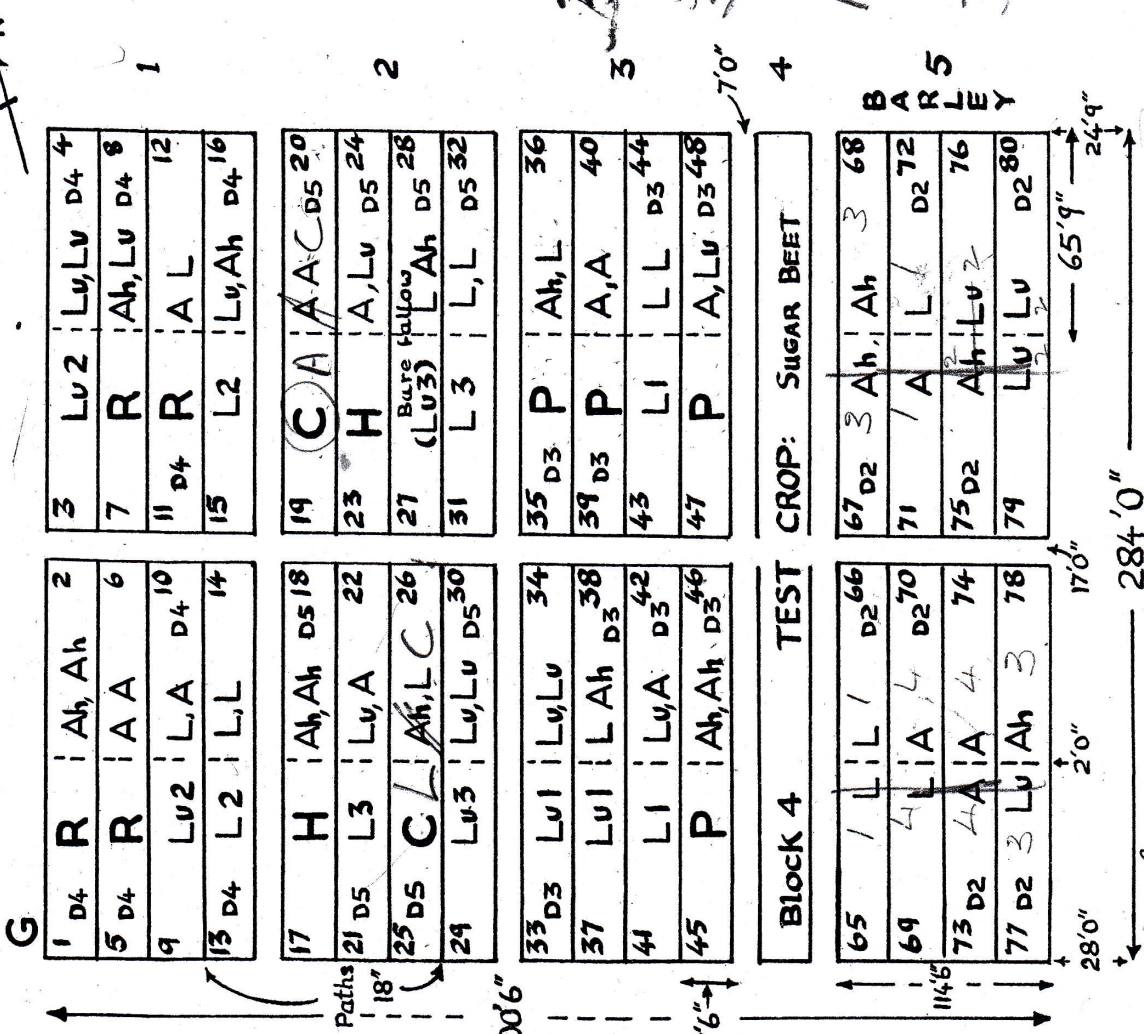
Lu, A etc. indicate last two rotations (in order)

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 K<sub>2</sub>O p.a as muriate } basal man



## Block 4 Test crop SUGAR BEET

49 DN	50 - NK	51 W	52 DNK
X DNK	- NK	X - NK	- NK
Y D	- NK	Y - NK	- NK
Z D-K	- NK	Z - NK	- NK
53 - NK	54 W	55 W	56 DNK
X - NK	Ah, Lu	X - NK	W DNK
Y - NK	Ah, Lu	Y - NK	A DNK
Z - NK	Ah, Lu	Z - NK	A DNK
57 DNK	58 W	59 W	60 W
X DNK	- NK	X DNK	- NK
Y DNK	- NK	Y DNK	- NK
Z DNK	- NK	Z DNK	- NK
61 W	62 W	63 W	64 W
X - NK	- NK	X - NK	- NK
Y - NK	- NK	Y - NK	- NK
Z - NK	- NK	Z - NK	- NK



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.	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 K<sub>2</sub>O p.a as muriate of potash } basal NPK

1 D5 H	Ah,Ah	2
5 D5 C	A,A	6
9 D5 Lu3	L,A D5	10
13 D5 L3	L,L	14

17 Block 2	TEST	
33 D4 Lu2	Lu,Lu	34
37 Lu2	L,Ah D4	38
41 L2	Lu,A D4	42
45 R	Ah,Ah D4	46

49 D2 A	PLu	50
53 - Ah	Ah D2	54
57 D2 L	L	58
61 - L	Ah D2	62

65 LI	L,L D3	66
69 Lu1	L,A D3	70
73 D3 P	A,A Lu	74
77 D3 LI	Lu,Ah	78

35 D4 R	Ah,L	36
39 D4 R	A,A	40
43 L2	L,L D4	44
47 R	A,Lu D4	48

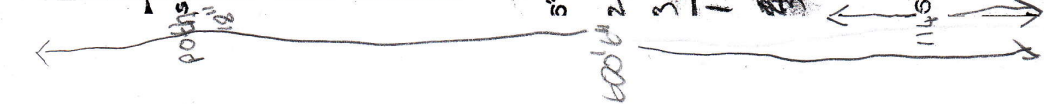
51 - Ah	L D2	52
55 - Lu	A D2	56
59 D2 Lu	Lu	60
63 D2 A	A	64

67 D3 P	Ah,Ah	68
71 P	A,L D3	72
75 D3 P	Ah,Lu	76
79 Lu1	Lu,Lu D3	80

1  
2  
3  
4  
5

Block 2

TEST CROP:	Sugar beet
19 - NK	D - K
20 - NK	D - K
21 - NK	D - K
22 - NK	D - K
23 - NK	D - K
24 - NK	D - K
25 - NK	D - K
26 - NK	D - K
27 - NK	D - K
28 - NK	D - K
29 - NK	D - K
30 - NK	D - K
31 - NK	D - K
32 - NK	D - K
33 - NK	D - K
34 - NK	D - K
35 - NK	D - K
36 - NK	D - K
37 - NK	D - K
38 - NK	D - K
39 - NK	D - K
40 - NK	D - K
41 - NK	D - K
42 - NK	D - K
43 - NK	D - K
44 - NK	D - K
45 - NK	D - K
46 - NK	D - K
47 - NK	D - K
48 - NK	D - K
49 - NK	D - K
50 - NK	D - K
51 - NK	D - K
52 - NK	D - K
53 - NK	D - K
54 - NK	D - K
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64 - NK	D - K
65 - NK	D - K
66 - NK	D - K
67 - NK	D - K
68 - NK	D - K
69 - NK	D - K
70 - NK	D - K
71 - NK	D - K
72 - NK	D - K
73 - NK	D - K
74 - NK	D - K
75 - NK	D - K
76 - NK	D - K
77 - NK	D - K
78 - NK	D - K
79 - NK	D - K
80 - NK	D - K





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, DZ etc residual in 2nd etc crop  
 N, K: 0.72 wt N, 0.9 wt K<sub>2</sub>O in addition to basal

Leg 1  
 Leg 2  
 AH3

Block	TEST CROP	Sugar beat
1	AK/Ah/3 DZ	16
3	Ah/A/4 DZ	20
17	Ah/Ah/3 DZ	24
21	Ah/Lu/2 DZ	28
25	L/L/1 DZ	32
29	Ah/Lu/2 DZ	36
33	L/L/1 DZ	40
37	Ah/Lu/2 DZ	44
41	L/L/1 DZ	48
45	Ah/Lu/2 DZ	52
49	L/L/1 DZ	56
53	Ah/Lu/2 DZ	60
57	L/L/1 DZ	64
61	Ah/Lu/2 DZ	68
65	L/L/1 DZ	72
69	Ah/Lu/2 DZ	76
73	L/L/1 DZ	80
77	Ah/Lu/2 DZ	84
81	L/L/1 DZ	88
85	Ah/Lu/2 DZ	92
89	L/L/1 DZ	96
93	Ah/Lu/2 DZ	100
97	L/L/1 DZ	104
101	Ah/Lu/2 DZ	108
105	L/L/1 DZ	112
109	Ah/Lu/2 DZ	116
113	L/L/1 DZ	120
117	Ah/Lu/2 DZ	124
121	L/L/1 DZ	128
125	Ah/Lu/2 DZ	132
129	L/L/1 DZ	136
133	Ah/Lu/2 DZ	140
137	L/L/1 DZ	144
141	Ah/Lu/2 DZ	148
145	L/L/1 DZ	152
149	Ah/Lu/2 DZ	156
153	L/L/1 DZ	160
157	Ah/Lu/2 DZ	164
161	L/L/1 DZ	168
165	Ah/Lu/2 DZ	172
169	L/L/1 DZ	176
173	Ah/Lu/2 DZ	180
177	L/L/1 DZ	184
181	Ah/Lu/2 DZ	188
185	L/L/1 DZ	192
189	Ah/Lu/2 DZ	196
193	L/L/1 DZ	200
197	Ah/Lu/2 DZ	204
201	L/L/1 DZ	208
205	Ah/Lu/2 DZ	212
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229	Ah/Lu/2 DZ	236
233	L/L/1 DZ	240
237	Ah/Lu/2 DZ	244
241	L/L/1 DZ	248
245	Ah/Lu/2 DZ	252
249	L/L/1 DZ	256
253	Ah/Lu/2 DZ	260
257	L/L/1 DZ	264
261	Ah/Lu/2 DZ	268
265	L/L/1 DZ	272
269	Ah/Lu/2 DZ	276
273	L/L/1 DZ	280
277	Ah/Lu/2 DZ	284
281	L/L/1 DZ	288
285	Ah/Lu/2 DZ	292
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293	Ah/Lu/2 DZ	300
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301	Ah/Lu/2 DZ	308
305	L/L/1 DZ	312
309	Ah/Lu/2 DZ	316
313	L/L/1 DZ	320
317	Ah/Lu/2 DZ	324
321	L/L/1 DZ	328
325	Ah/Lu/2 DZ	332
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333	Ah/Lu/2 DZ	340
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341	Ah/Lu/2 DZ	348
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349	Ah/Lu/2 DZ	356
353	L/L/1 DZ	360
357	Ah/Lu/2 DZ	364
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365	Ah/Lu/2 DZ	372
369	L/L/1 DZ	376
373	Ah/Lu/2 DZ	380
377	L/L/1 DZ	384
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385	L/L/1 DZ	392
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393	L/L/1 DZ	400
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401	L/L/1 DZ	408
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453	Ah/Lu/2 DZ	460
457	L/L/1 DZ	464
461	Ah/Lu/2 DZ	468
465	L/L/1 DZ	472
469	Ah/Lu/2 DZ	476
473	L/L/1 DZ	480
477	Ah/Lu/2 DZ	484
481	L/L/1 DZ	488
485	Ah/Lu/2 DZ	492
489	L/L/1 DZ	496
493	Ah/Lu/2 DZ	500
497	L/L/1 DZ	504
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505	L/L/1 DZ	512
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513	L/L/1 DZ	520
517	Ah/Lu/2 DZ	524
521	L/L/1 DZ	528
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529	L/L/1 DZ	536
533	Ah/Lu/2 DZ	540
537	L/L/1 DZ	544
541	Ah/Lu/2 DZ	548
545	L/L/1 DZ	552
549	Ah/Lu/2 DZ	556
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573	Ah/Lu/2 DZ	580
577	L/L/1 DZ	584
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585	L/L/1 DZ	592
589	Ah/Lu/2 DZ	596
593	L/L/1 DZ	600
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617	L/L/1 DZ	624
621	Ah/Lu/2 DZ	628
625	L/L/1 DZ	632
629	Ah/Lu/2 DZ	636
633	L/L/1 DZ	640
637	Ah/Lu/2 DZ	644
641	L/L/1 DZ	648
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681	L/L/1 DZ	688
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693	Ah/Lu/2 DZ	700
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701	Ah/Lu/2 DZ	708
705	L/L/1 DZ	712
709	Ah/Lu/2 DZ	716
713	L/L/1 DZ	720
717	Ah/Lu/2 DZ	724
721	L/L/1 DZ	728
725	Ah/Lu/2 DZ	732
729	L/L/1 DZ	736
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737	L/L/1 DZ	744
741	Ah/Lu/2 DZ	748
745	L/L/1 DZ	752
749	Ah/Lu/2 DZ	756
753	L/L/1 DZ	760
757	Ah/Lu/2 DZ	764
761	L/L/1 DZ	768
765	Ah/Lu/2 DZ	772
769	L/L/1 DZ	776
773	Ah/Lu/2 DZ	780
777	L/L/1 DZ	784
781	Ah/Lu/2 DZ	788
785	L/L/1 DZ	792
789	Ah/Lu/2 DZ	796
793	L/L/1 DZ	800
797	Ah/Lu/2 DZ	804
801	L/L/1 DZ	808
805	Ah/Lu/2 DZ	812
809	L/L/1 DZ	816
813	Ah/Lu/2 DZ	820
817	L/L/1 DZ	824
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853	Ah/Lu/2 DZ	860
857	L/L/1 DZ	864
861	Ah/Lu/2 DZ	868
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869	Ah/Lu/2 DZ	876
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885	Ah/Lu/2 DZ	892
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897	L/L/1 DZ	904
901	Ah/Lu/2 DZ	908
905	L/L/1 DZ	912
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937	L/L/1 DZ	944
941	Ah/Lu/2 DZ	948
945	L/L/1 DZ	952
949	Ah/Lu/2 DZ	956
953	L/L/1 DZ	960
957	Ah/Lu/2 DZ	964
961	L/L/1 DZ	968
965	Ah/Lu/2 DZ	972
969	L/L/1 DZ	976
973	Ah/Lu/2 DZ	980
977	L/L/1 DZ	984
981	Ah/Lu/2 DZ	988
985	L/L/1 DZ	992
989	Ah/Lu/2 DZ	996
993	L/L/1 DZ	1000

2 Reps of A rotation 560' x 7'  
 560' L x 7' x K

2 Reps of A rotation 560' x 7'  
 560' L x 7' x K

2 Reps of A rotation 560' x 7'  
 560' L x 7' x K



WOBURN Anable and Ley Rotations. Code letter G. STACKYARD FIELD 21<sup>st</sup> year 1961

TREATMENT SYMBOLS

Rotations:  
 A Potatoes  
 Ak Potatoes  
 Lu Lucerne cut for hay for 3 years.  
 L 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

3	Lu	Lu	D2
7	Lu	A	D2
11	D2	L	AL
15	AL	L	D2
19	P	A, A	D3 20
23	L1	Lu, AL	D3 24
27	P	AL, Lu	D3 28
31	L1	L, L	D3 32
35	P	AL, AL	D3 36
39	L1	Lu, Lu	D3 40

Block 3 TEST CROP Sugar Beet

49	D4	R	AL, L	D4	52
53	R	AL, AL	D4	56	
57	D4	L2	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	

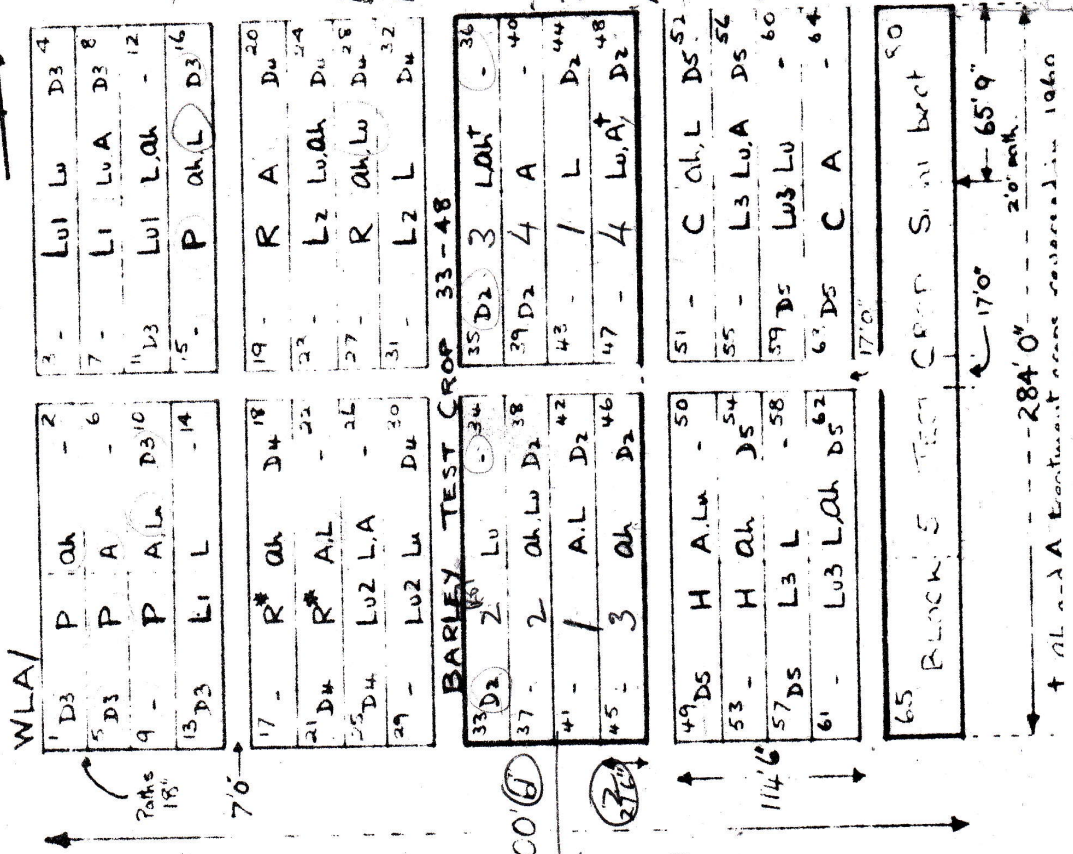
Block 3 TEST CROP Sugar Beet

35	D--	-NK
39	DK	Lu
43	DN	Lu
47	DNK	-N
51	-N	DNK
55	AK	Lu
59	-K	D--
63	-N	D-K
67	-KA	L
71	-	DNK
75	-NK	DN
79	-K	DN
83	-N	AK
87	-NK	D-K

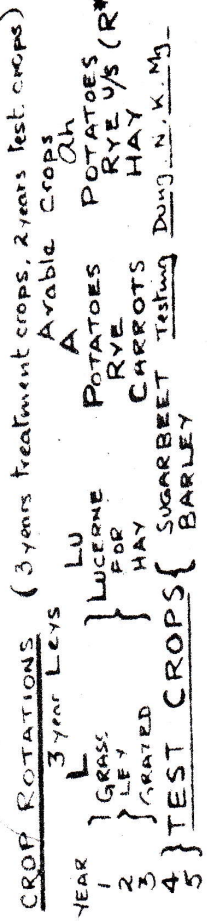
1960 Plot (35,36) and (47,48) cropping rotated in 1961. (A) to be included in planning.



WOBURN Arable and Ley Rotations

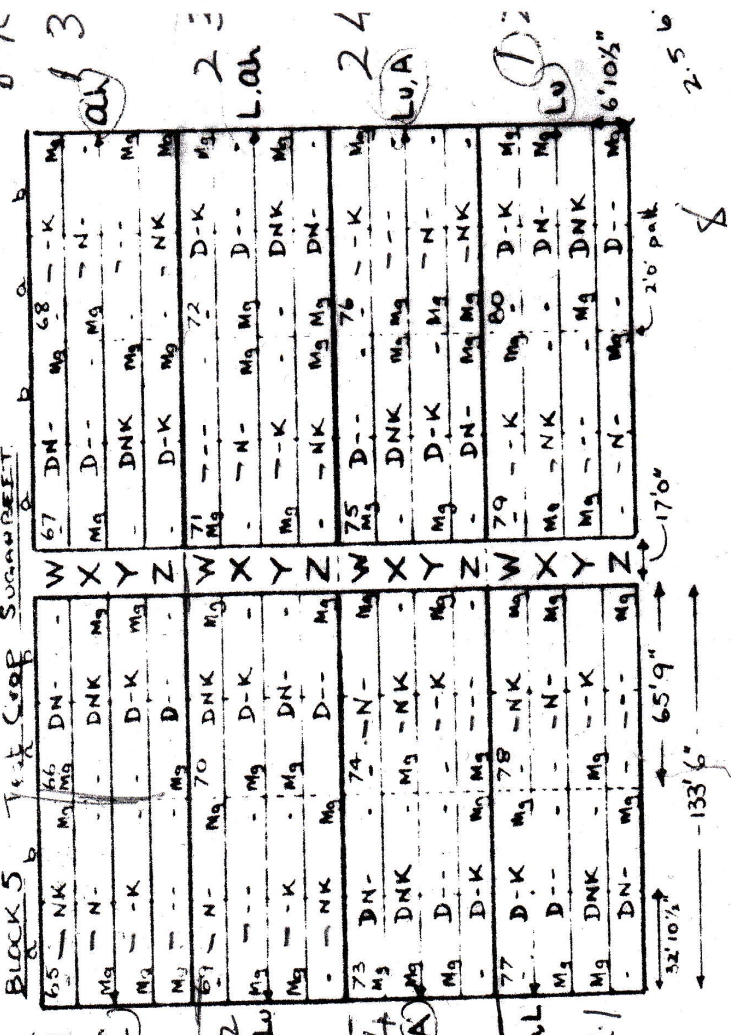


60  
GREENFIELD V.L.A. STACKYARD 25th year 1962



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. D2, D3, D5 Dung residues in 2nd, 3rd, 4th yr. N 0.72 cut N as Nitrochak 21 K 0.9 cut K20 as Nitrate of potash. Mg 600lb manganese sulphate per acre.

All crops receive basal fertilizers.





45

# WOBURN Arable and Ley Rotations

# STACKYARD 26th year 1963

WLA/

TREATMENT CROPS

- A Potatoes (P)
- Ah Potatoes (P)
- Lu Lucerne cut for hay
- L Ley grazed.

Rotations: 3 years Arable

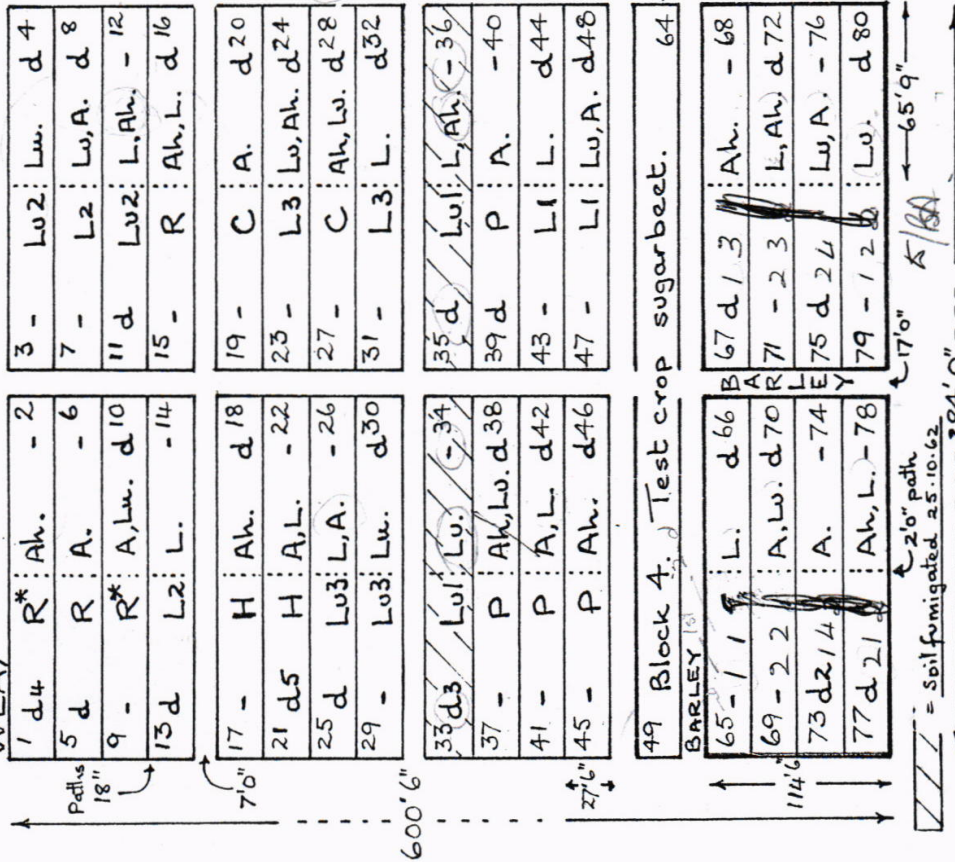
3 years Ley

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 K<sub>2</sub> per acre as muriate of potash.
- Mg 500lb Magnesium sulphate per acre.

BLOCK 4 TEST CROP SUGAR BEET.



Plot	Treatment	Soil	Path
51	Mg - N	- 52	DNK Mg
X	- NK	Mg	- D-K Mg
Y	- -	Mg	Mg D - -
Z	Mg - K	- -	DN- Mg
55	Mg - -	- 56	D-K -
W	- -	Mg	Mg D - -
X	- N	Mg	Mg DN - -
Y	Mg - NK	- Mg	D - -
Z	Mg - - K	- -	DNK Mg
59	Mg D-K	- 60	- - -
W	Mg DN -	-	- NK Mg
X	- DNK	Mg	- - N- Mg
Y	Mg D - -	-	- - K Mg
Z	63 - DNK	Mg	64 - N- Mg
W	Mg D - -	-	- - K Mg
X	Mg D - -	-	- - K Mg
Y	- D-K	Mg	- - -
Z	Mg - - -	-	- - -
57	D - -	Mg	58 - - -
-	D-K	Mg	Mg - - -
Mg	DNK	- - -	- N- Mg
-	DN -	Mg	Mg - NK
61	- - K	- 62	D - -
-	- N -	Mg	Mg D - K
Mg	- NK	- Mg	DN - -
-	- - -	Mg	- DNK Mg

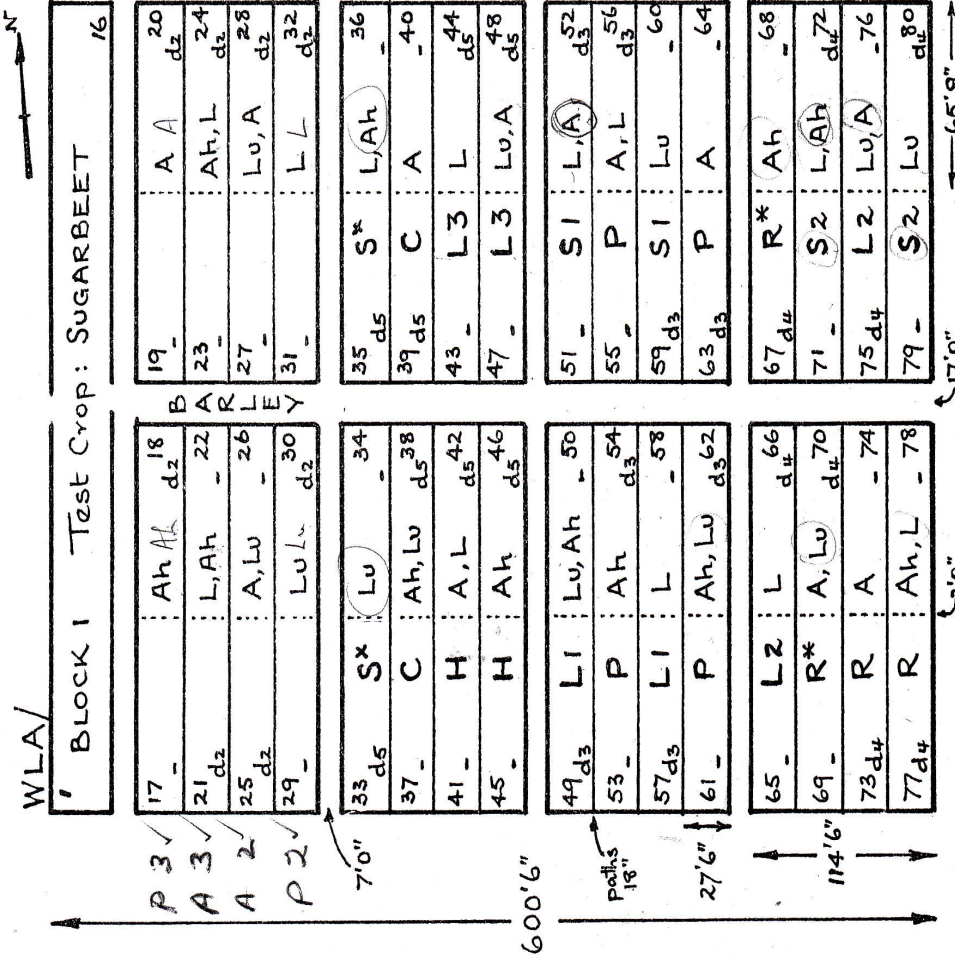






103  
STACKYARD 28th year 1965

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 K<sub>2</sub>O as muriate of potash  
Basal manuring: per acre  
2.0 cut P<sub>2</sub>O<sub>5</sub> as superphosphate, 500lb magnesium sulphate.

**BLOCK 1 Test Crop Sugar Beet**

135 -	P 6-4 1/2/5K	- 3K1	W	31 -	- 2 -	41K D	1 -
24K P	6K4 1/3 -	- 6K4	K	2K -	- 3K -	4 -	P 3 -
13 -	P 5K3 2/4 -	- 6-4	W	1K -	- 3 -	2 -	P 4K
13K D	4-2 1/3 5 -	- 4K3	Z	4K -	- 4 -	3K D	2K
53K P	5-4 1/6 4 -	- 2K1	W	72 -	- 4 -	8 4 -	P 3K
34 -	P 4K3 2/3 -	- 5K4	K	1K -	- 3 -	2 -	P 3 -
45K D	2K1 2/3 K -	- 4K3	Y	1 -	- 2K -	4K D	2K
12 -	D 3-2 1/2 -	- 5 -	Z	4K -	- 3K -	1 -	D 1K
9, 5 -	- 6K4 1/10 3K D	- 5-3	W	114K D	2K 121K -	3K	
13 -	- 3K1 1/3 -	- D 4K3	X	1 -	- D 2 -	2K -	3 -
24K -	5K3 1/6 K D	5K3	Y	1K D	3 -	4K -	4 -
46 -	- 4-2 1/2 A -	- D 6-4	Z	4 -	- D 3K -	2 -	- 1 -
132K P	4K 1/4 2 -	- 1K	W	154K -	5K4 1/6 5 -	D 3-2	
4 -	D 3 -	- 3K -	X	1/2 K -	- 4-3 1/2 -	D 4K3	
2 -	D 1K -	- 4 -	Y	4/5 -	- 2-1 3/4 -	D 3K2	
1 -	D 3K -	- 2K -	Z	2 3/4 -	- 3K2 1/4 5K D	2 K1	

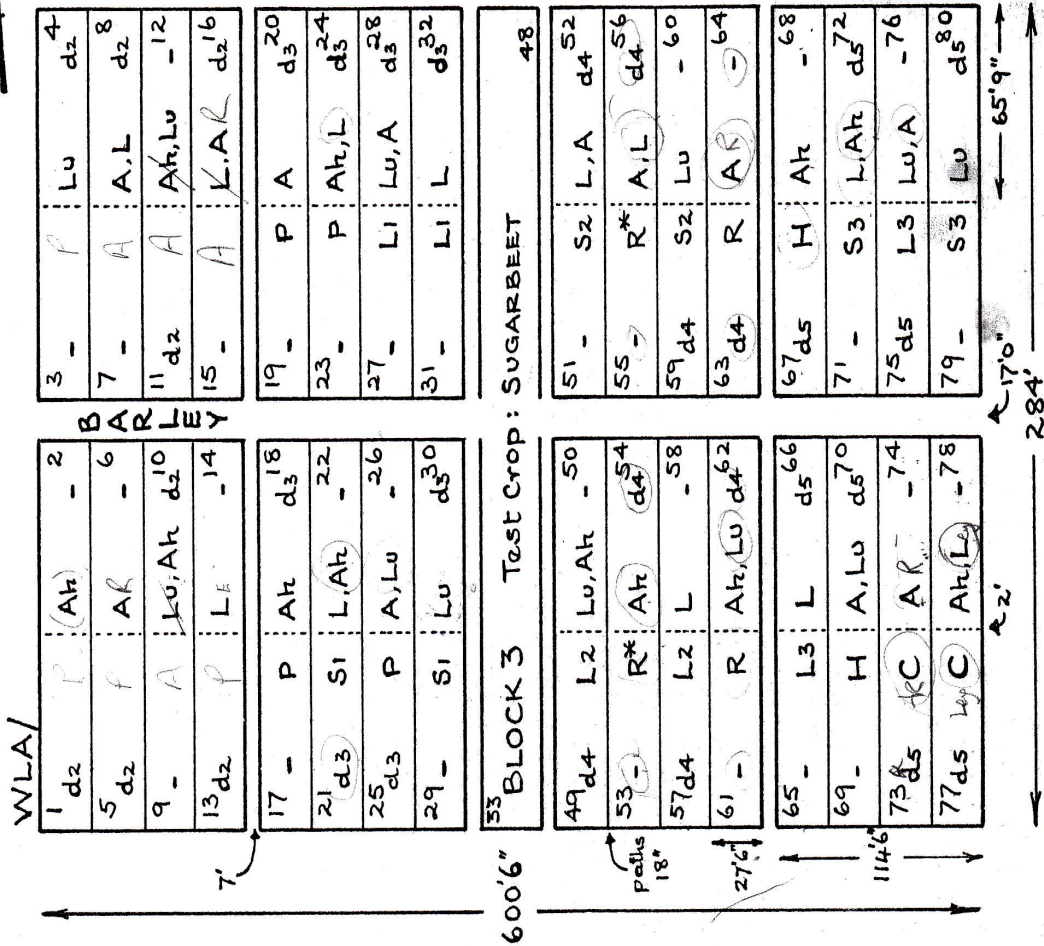
Dimensions: 133'6" (total width), 17'0" (Block 1 width), 65'9" (Block 2 width), 32'10 1/2" (Block 3 width), 284' (Block 4 width), 32'10 1/2" (Block 5 width).

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



103  
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.

3 years LEY

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.

BLOCK 3 Test Crop SUGARBEET

a	b	a	b	a	b
332K D	1- 1342-	1K	W 351K D	3- 1363K	4- 4-
1K D	2- 4-	3K	X 2- D	4K 3-	1K
4- D	3K 4K	2K	Y 2K D	4- 2-	1-
4K D	3- 3K	1-	Z 1- D	3K 2K	4K
372K	- 3K 383-	D 2-	W 392-	D 4- 1404K	- 3K
3-	- 4K 4K	D 5-	X 3- D	5- 4-	2-
5-	- 5K 4-	D 5K	Y 3K D	4K 2K	5-
2-	- 4- 2K	D 3K	Z 5K D	2K 3-	5K
415-	- 3K 425-	D 6-	W 433K	- 4K 441-	D 4K
4K	- 5K 3-	D 4K	X 2-	- 2K 1K	D 2K
3-	- 4- 5K	D 6K	Y 4-	- 3- 2-	D 3K
6K	- 6- 4-	D 3K	Z 1K	- 1- 3-	D 4-
453K	- 4- 463-	D 5-	W 472K	- 4- 482K	D 3K
6-	- 3- 6-	D 4K	X 1-	- 2- 2-	D 1-
5-	- 6K 6K	D 5K	Y 1K	- 3- 4-	D 1K
5K	- 4K 3K	D 4-	Z 4K	- 3K 3-	D 4K

Dimensions: 133'6", 65'9", 284', 17', 18"



WOBURN Arable & Ley Rotations

6/4 STACKYARD 30<sup>th</sup> 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.

Woburn Arable & Ley Rotations

WLA

1 d3	P	Ah	2
5 d3	P	A	6
9	L1	Lu, Ah	10 d3
13 d3	L1	L	14
17	R*	Ah	18 d4
21 d4	S2	L, Ah	22
25 d4	R*	A, Lu	26
29	S2	Lu	30 d4

35 d2	Ah(SA)	36
39 d2	(AR)	40
43	(LE)	44
47	A(LF)	48 d2

51	S3	Ah	52 d5
55	H	AL	56 d5
59 d5	S3	Lu	60
63 d5	C	A	64

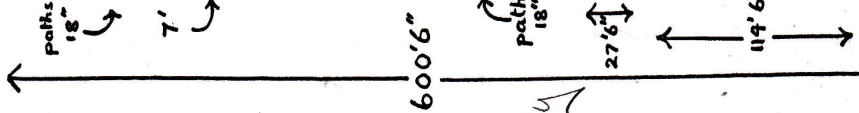
SUGARBEET			
80			

1 d3	P	Ah	2
5 d3	P	A	6
9	L1	Lu, Ah	10 d3
13 d3	L1	L	14
17	R*	Ah	18 d4
21 d4	S2	L, Ah	22
25 d4	R*	A, Lu	26
29	S2	Lu	30 d4

35 d2	(SA)	34
37	S1(AR)	38 d2
41	L(Ah)	42 d2
45	(Ah)	46 d2

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

SUGARBEET			
80			



BLK 1

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

19	R	A	20 d4
23	R	Ah, L	24 d4
27	L2	Lu, A	28 d4
31	L2	L	32 d4

35	Ah(SA)	36
39	(AR)	40
43	(LE)	44
47	A(LF)	48 d2

51	S3	Ah	52 d5
55	H	AL	56 d5
59 d5	S3	Lu	60
63 d5	C	A	64

SUGARBEET			
80			

Rotations

3 years ARABLE

3 years LEY

Treatment Crops

TREATMENTS to SUGARBEET per acre

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.

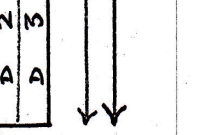
BLOCKS

65	1	66	4	2	67	4	2	68	5	3
-	4	2	D	D	X	D	5	3	3	1
-	2	1	D	D	Y	D	3	1	6	4
-	3	3	D	D	Z	D	6	4	4	2

69	3	1	70	5	3	D	71	2	72	3	D
-	4	2	6	4	D	X	-	4	1	D	
-	6	4	3	1	D	Y	-	3	4	D	
-	5	3	4	2	D	Z	-	1	2	D	

73	D	2	1	74	3	2	75	D	2	76	1
D	4	3	2	1	-	X	D	3	2	2	-
D	3	2	5	4	-	Y	D	1	3	3	-
D	5	4	4	3	-	Z	D	4	4	4	-

77	D	4	3	78	2	1	79	-	4	80	3
D	5	4	3	2	-	X	-	2	4	4	D
D	2	1	5	4	-	Y	-	1	1	1	D
D	3	2	4	3	-	Z	-	3	2	2	D





101  
STACKYARD 31st year 1968.

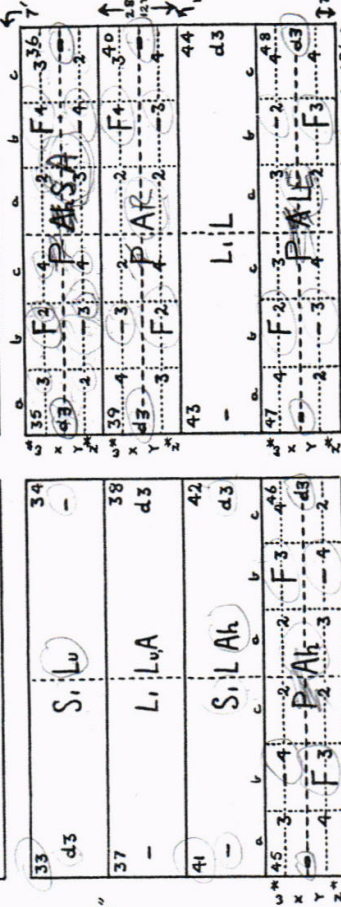
Woburn  
WLA

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





WOBURN 69/W/RN/3

STACKYARD 32<sup>nd</sup> year 1969 201A.

ARABLE & LEY ROTATIONS

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

03 -	S3 Lu	d6 <sup>4</sup>
07 -	H AL	d5 <sup>8</sup>
11 d5	C AhLu	- 12
15 -	S3 LA	d5 <sup>16</sup>

TEST CROP BARLEY

171	1 2 3	1181	2	12	1	d6
173	4 2	3	3	4	4	
211	1 2 2	221	2	1	2	
213	3 4	3	-	4	3	
251	1 2 3	261	4	2	3	
253	2 4 4	3	1	4	2	
291	1 2 3	301	3	2	-	d6
293	- 4 2	3	1	4	2	

1<sup>st</sup> TEST CROP

191	1 2 4	201	4	2	2	d6
193	3 2	3	1	4	3	
231	1 2 2	241	4	2	1	d6
233	3 4 4	3	2	4	3	
271	3 2 2	281	1	2	2	d6
273	3 1 4	3	3	4	-	
311	2 2 1	321	-	2	3	d6
313	- 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
453	- f	463 -

351	f	R Ah	f	361
353	-	-	-	363
391	d4	- R A	f	401
393	-	-	-	403
43 -	-	L2 L	-	44 d4
471	f	R AL	f	481
473	-	-	-	483

BARLEY

49 d7	Ah L	- 50
53 -	Ah	d7 <sup>54</sup>
57 d7	L	- 58
61 -	LUA	d7 <sup>62</sup>

51 -	AS	d7 <sup>52</sup>
55 -	L Ah	d7 <sup>56</sup>
59 d7	S	- 60
63 d7	A	- 64

65 BLOCKS 1<sup>st</sup> TREATMENT

CROPS POTATOES, LEY, SAINFOIN 80

For plot treatments see

Separate plan 201B

284'

Blk 1

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.

1<sup>st</sup> TEST CROP  
1967 Sugar beet  
1968 Barley  
1969 Barley sown: Mar 24. Barley sown: Mar 24

TREATMENTS :-

1<sup>st</sup> 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.  
1<sup>st</sup> test crop barley - 0.5 cut P<sub>2</sub>O<sub>5</sub>, 0.5 cut K<sub>2</sub>O as (0:20:20).  
2<sup>nd</sup> test crop barley - 0.5 cut N, 0.5 cut P<sub>2</sub>O<sub>5</sub>, 0.5 cut K<sub>2</sub>O as (15:15:15)  
Rye - 0.3 cut N as 'Nitro-chalk', 0.3 cut P<sub>2</sub>O<sub>5</sub>, 0.6 cut K<sub>2</sub>O 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	Ah	Ah	Ah	Ah
19	21	23	25	27	29
Ah	Ah	Ah	Ah	Ah	Ah

33	35	37	39	41	43	45	47	49
S3:Lu	L3:LuA	S3:LAh	H:Ah	H:Ah	H:Ah	H:Ah	H:Ah	H:Ah

49	51	53	55	57	59	61	63	65
L2:L	L2:LuAh	R:AR	S2:LA	S2:LA	S2:LA	S2:LA	S2:LA	S2:LA

67	69	71	73	75	77	79	81	83	85	87	89	91	93	95	97	99	101	103	105	107	109	111	113	115	117	119	121	123	125	127	129	131	133	135	137	139	141	143	145	147	149	151	153	155	157	159	161	163	165	167	169	171	173	175	177	179	181	183	185	187	189	191	193	195	197	199	201	203	205	207	209	211	213	215	217	219	221	223	225	227	229	231	233	235	237	239	241	243	245	247	249	251	253	255	257	259	261	263	265	267	269	271	273	275	277	279	281	283	285	287	289	291	293	295	297	299	301	303	305	307	309	311	313	315	317	319	321	323	325	327	329	331	333	335	337	339	341	343	345	347	349	351	353	355	357	359	361	363	365	367	369	371	373	375	377	379	381	383	385	387	389	391	393	395	397	399	401	403	405	407	409	411	413	415	417	419	421	423	425	427	429	431	433	435	437	439	441	443	445	447	449	451	453	455	457	459	461	463	465	467	469	471	473	475	477	479	481	483	485	487	489	491	493	495	497	499	501	503	505	507	509	511	513	515	517	519	521	523	525	527	529	531	533	535	537	539	541	543	545	547	549	551	553	555	557	559	561	563	565	567	569	571	573	575	577	579	581	583	585	587	589	591	593	595	597	599	601	603	605	607	609	611	613	615	617	619	621	623	625	627	629	631	633	635	637	639	641	643	645	647	649	651	653	655	657	659	661	663	665	667	669	671	673	675	677	679	681	683	685	687	689	691	693	695	697	699	701	703	705	707	709	711	713	715	717	719	721	723	725	727	729	731	733	735	737	739	741	743	745	747	749	751	753	755	757	759	761	763	765	767	769	771	773	775	777	779	781	783	785	787	789	791	793	795	797	799	801	803	805	807	809	811	813	815	817	819	821	823	825	827	829	831	833	835	837	839	841	843	845	847	849	851	853	855	857	859	861	863	865	867	869	871	873	875	877	879	881	883	885	887	889	891	893	895	897	899	901	903	905	907	909	911	913	915	917	919	921	923	925	927	929	931	933	935	937	939	941	943	945	947	949	951	953	955	957	959	961	963	965	967	969	971	973	975	977	979	981	983	985	987	989	991	993	995	997	999
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Blk. P SA

SYMBOLS Rotations

3 years ARABLE 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 cut (No more grazing)

TEST CROPS In 4th and 5th years

1st Test Crop Barley

2nd Test Crop Barley

1969 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 P<sub>2</sub>O<sub>5</sub>, 0-5 cut K<sub>2</sub>O as (0:20:20)

2nd test crop barley - 0-5 cut N, 0-5 cut P<sub>2</sub>O<sub>5</sub>, 0-5 cut K<sub>2</sub>O as (15:15:15)

Rye - 0-3 cut N as Nitro-chalk, 0-3 cut P<sub>2</sub>O<sub>5</sub>, 0-6 cut K<sub>2</sub>O as (0:14:28)

ALL crops:-

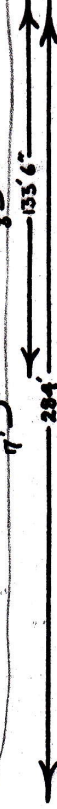
FYM -, d Residuals of none v 15 tons FYM applied to

sugar beet 1962-67

Varieties: Barley: Moris Badger, Potatoes: Moris Piper,

2nd test crop Barley: Julia

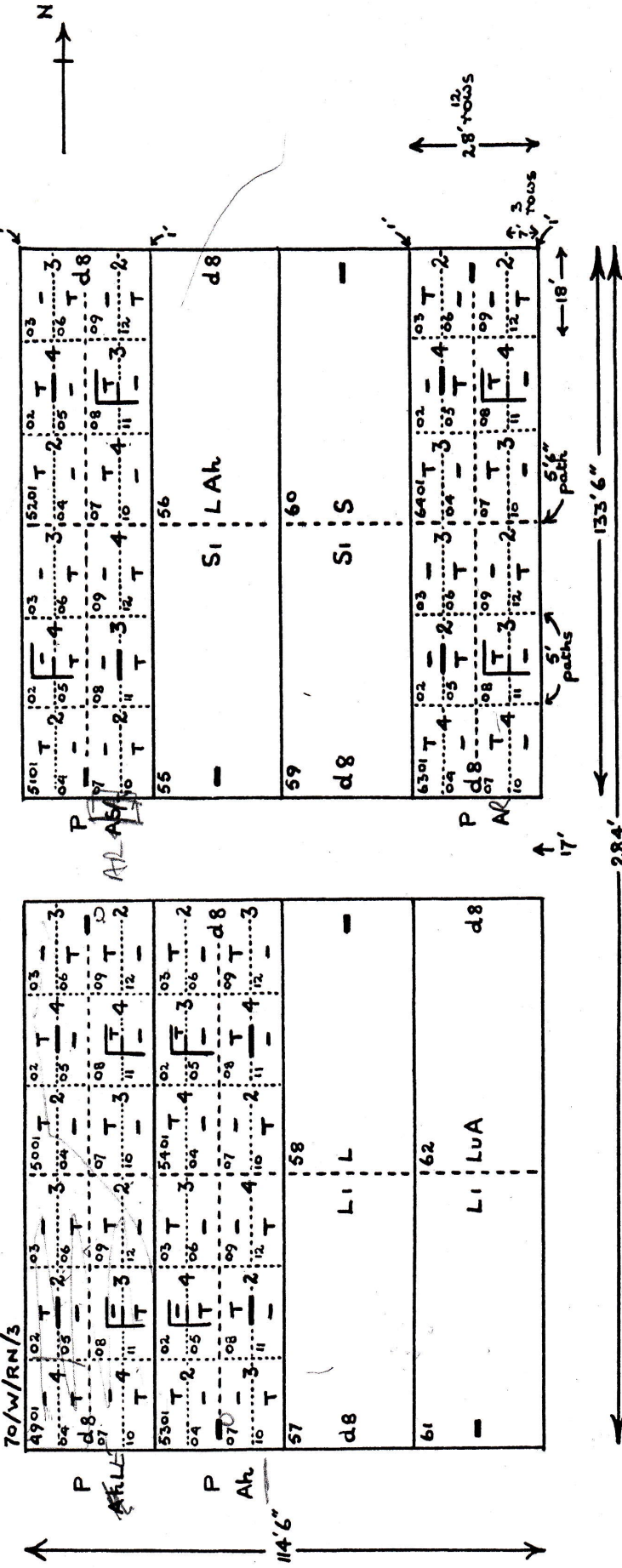
600'6"





WOBURN ARABLE & LEY ROTATIONS 33<sup>rd</sup> year STACKYARD D 1970 201B

Potato Treatments Block 4



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 P<sub>2</sub>O<sub>5</sub>, 1.8 cwt K<sub>2</sub>O 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

WOBURN ARABLE AND LEY ROTATIONS

→ N

T1/W/RN/3

01	02	03	04
d7	Ah	S	d7
05	A	LAh	d7
07	AhL	LuA	12
09	L	AS	15
13			d7
17			

19	20	21	22	23	24	25	26	27	28	29	30
	PAh	PA	PAhS	LAh	LAh	LAh	LAh	LAh	LAh	LAh	LAh
31											

33	34	35	36	37	38	39	40
	PAh	PAhS	LAh	LAh	LAh	LAh	LAh
41							

43	44	45	46	47	48	49	50
	PAh	PAhS	LAh	LAh	LAh	LAh	LAh
51							

Block 3 1st Test

Crop Potatoes 48

For plot treatments

51	52	53	54	55	56	57	58	59	60	61	62
(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)
63	64	65	66	67	68	69	70	71	72	73	74
(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)

see separate plan 2016

51	52	53	54	55	56	57	58	59	60	61	62
(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)
63	64	65	66	67	68	69	70	71	72	73	74
(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)

65	66	67	68	69	70	71	72	73	74	75	76	77	78
L3	L	L	L	L	L	L	L	L	L	L	L	L	L
79	80	81	82	83	84	85	86	87	88	89	90	91	92
(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

65	66	67	68	69	70	71	72	73	74	75	76	77	78
H:Ah	H:Ah	H:Ah	H:Ah	H:Ah	H:Ah	H:Ah	H:Ah	H:Ah	H:Ah	H:Ah	H:Ah	H:Ah	H:Ah
79	80	81	82	83	84	85	86	87	88	89	90	91	92
(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

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

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 (53kg) P<sub>2</sub>O<sub>5</sub>, 0.5 cut (53kg) K<sub>2</sub>O as (15:15:15)

1st treatment crop potatoes - Maris Piper

2.0 cut (252kg) N, 2.0 cut (252kg) P<sub>2</sub>O<sub>5</sub>, 3.0 cut (376kg) K<sub>2</sub>O as (15:15:20)

2nd treatment crop rye - King II

0.5 cut (38 kg) N as Nitro-chalk 2:1, 0.3 cut (38kg) P<sub>2</sub>O<sub>5</sub>, 0.6 cut (76kg) K<sub>2</sub>O as (0:14:28).

3rd treatment crop carrots - Autumn King

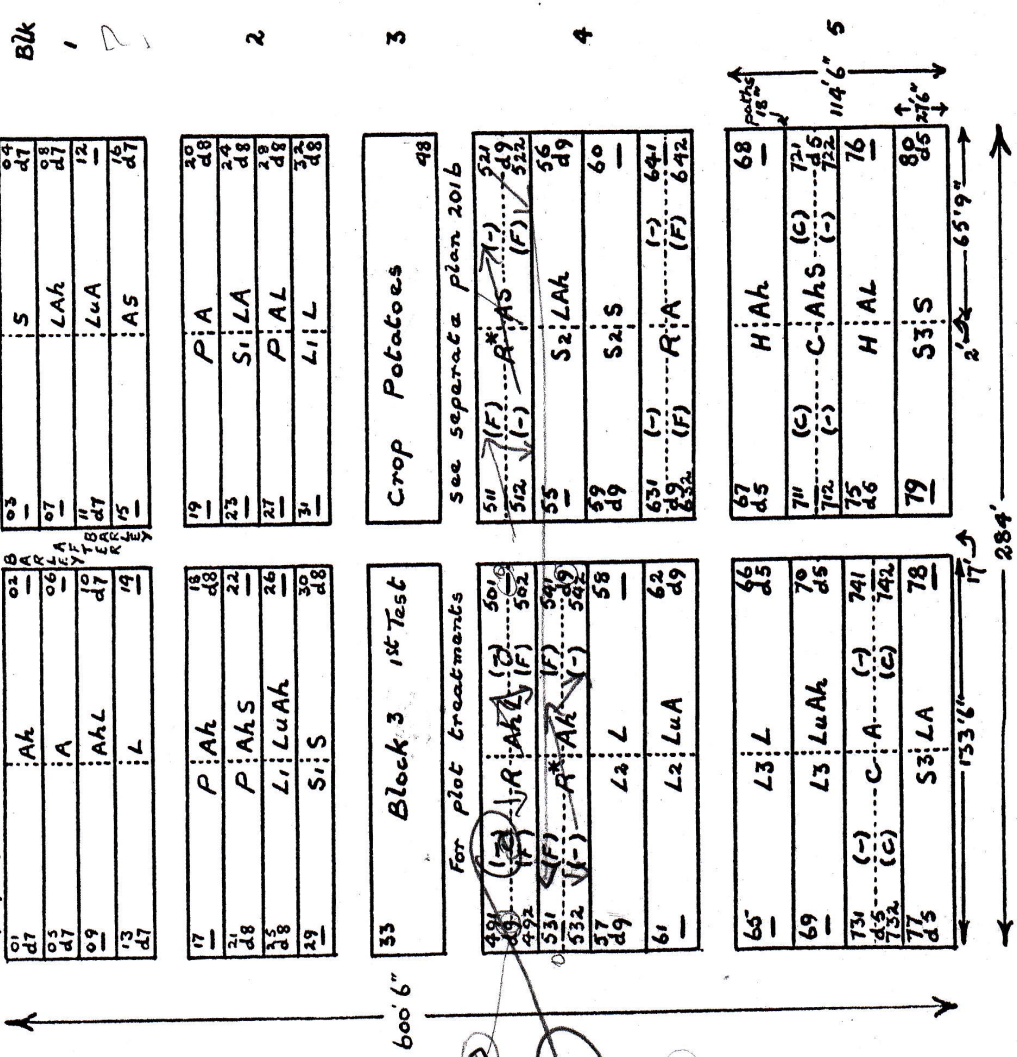
0.6 cut (76kg) N as Nitro-chalk 2:1, 0.6 cut (76kg) P<sub>2</sub>O<sub>5</sub> as superphosphate

1.8 cut (226kg) K<sub>2</sub>O as muriate of potash

All crops :-

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

to sugar beet 1962-67



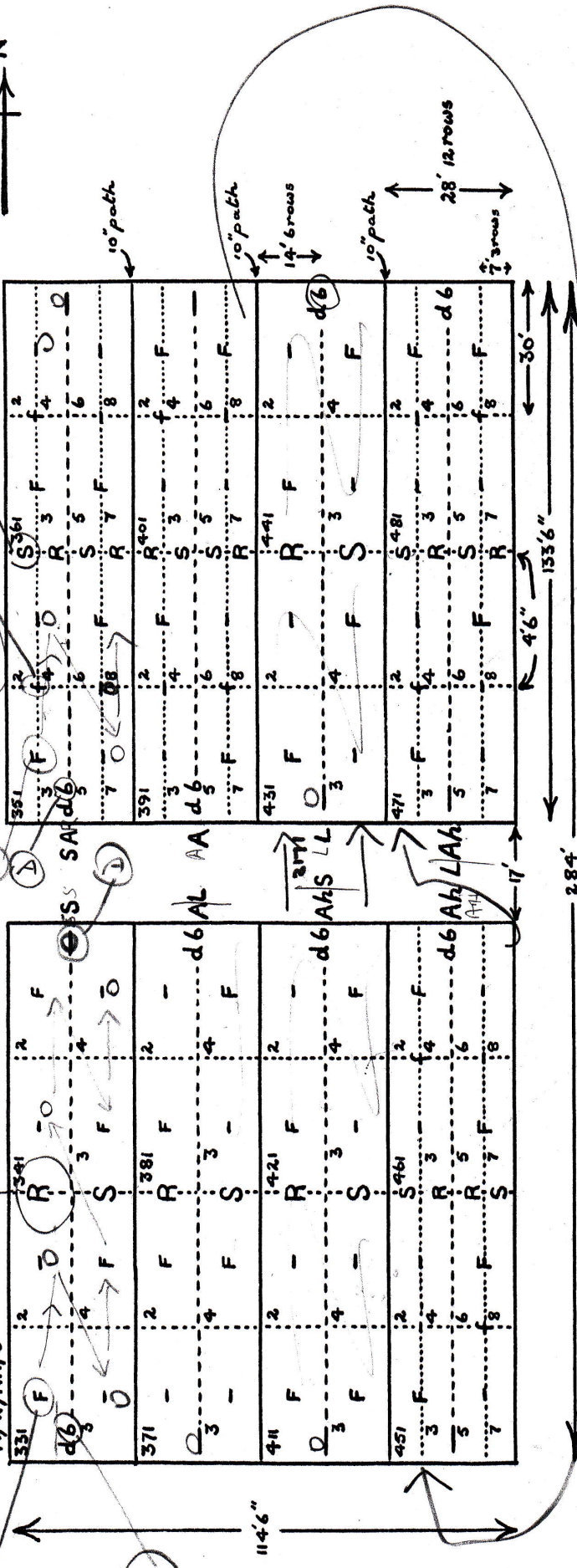


WOBURN 3171  
71/W/RN/3

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.

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 diadlin & 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) Nas 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 Treatment crop Barley - Julia at 137lb (154kg)

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

3rd Treatment crop Hay 28 1971 in Ry

1.0 cut (126kg) Nas 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 Treatment crop - potatoes

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

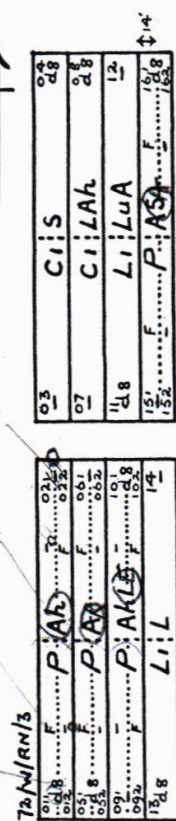
2.0 cut (252kg) N, 2.0 cut (252kg) P2O5, 3.0 cut (376kg) K2O as (33:13:20). (56kg old (ca 16)

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).

WOBURN ARABLE AND LEY ROTATIONS



17	B <sup>1</sup> Ah	d9
21	B <sup>2</sup> AhS	22
25	L2:LuAh	26
29	C2:S	30
		d9

33	N3	2	N1	34	N0	2	N2
d7	(f)	(-)	(-)	W	S	(f)	(-)
37	N1	2	N3	40	N2	2	N0
d7	(f)	(-)	(f)	W	A	(f)	(-)
41	N1	2	N3	42	N0	2	N2
d7	(f)	(-)	(f)	W	AhS	(f)	(-)
45	N2	2	N0	46	N2	2	N0
d7	(f)	(-)	(f)	W	Ah	(f)	(-)

49	d10	B	AhL	50	-
53	d10	H	Ah	54	d10
57	d10	L3	L	58	-
61	d10	L3	LuA	62	d10

51	d10	H	AhS	52	-
55	d10	C3	Lah	56	d10
59	d10	C3	S	60	-
63	d10	B	A	64	-

65	Block 5 1st Test				
	For plot treatments				
	crop Potatoes				
	see separate plan 201B				
	80				



2018

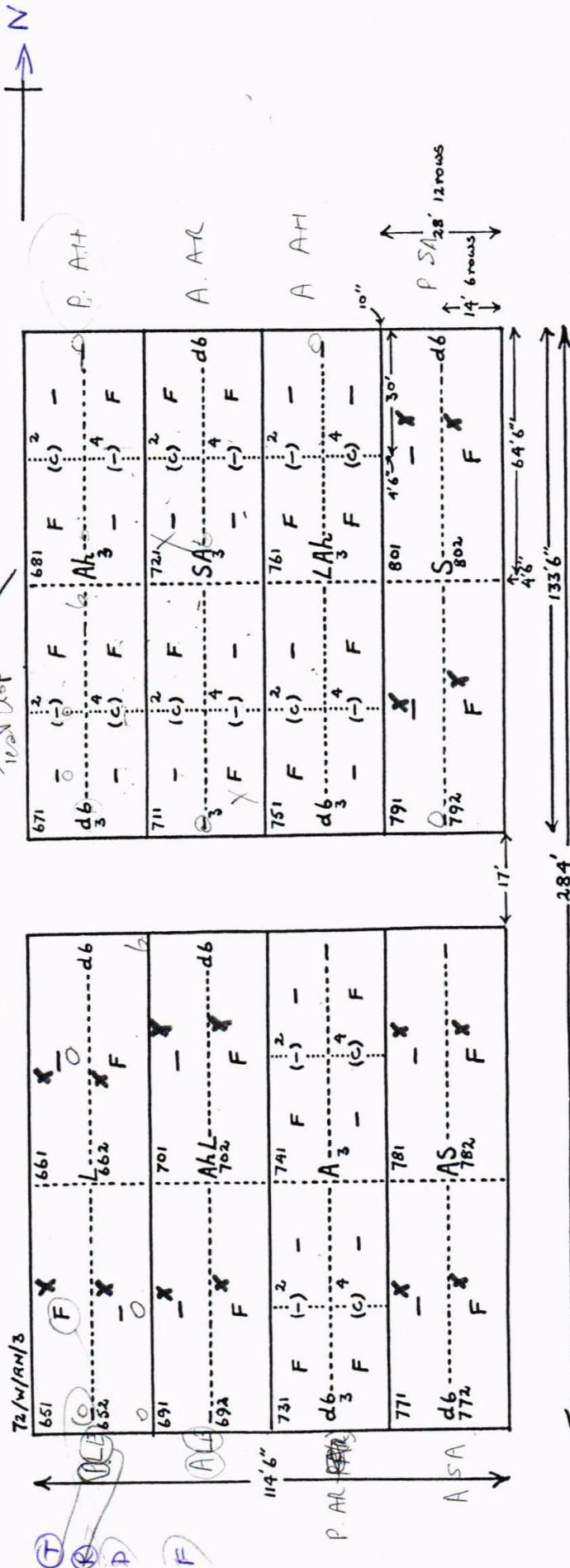
STACKYARD D 1972

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)

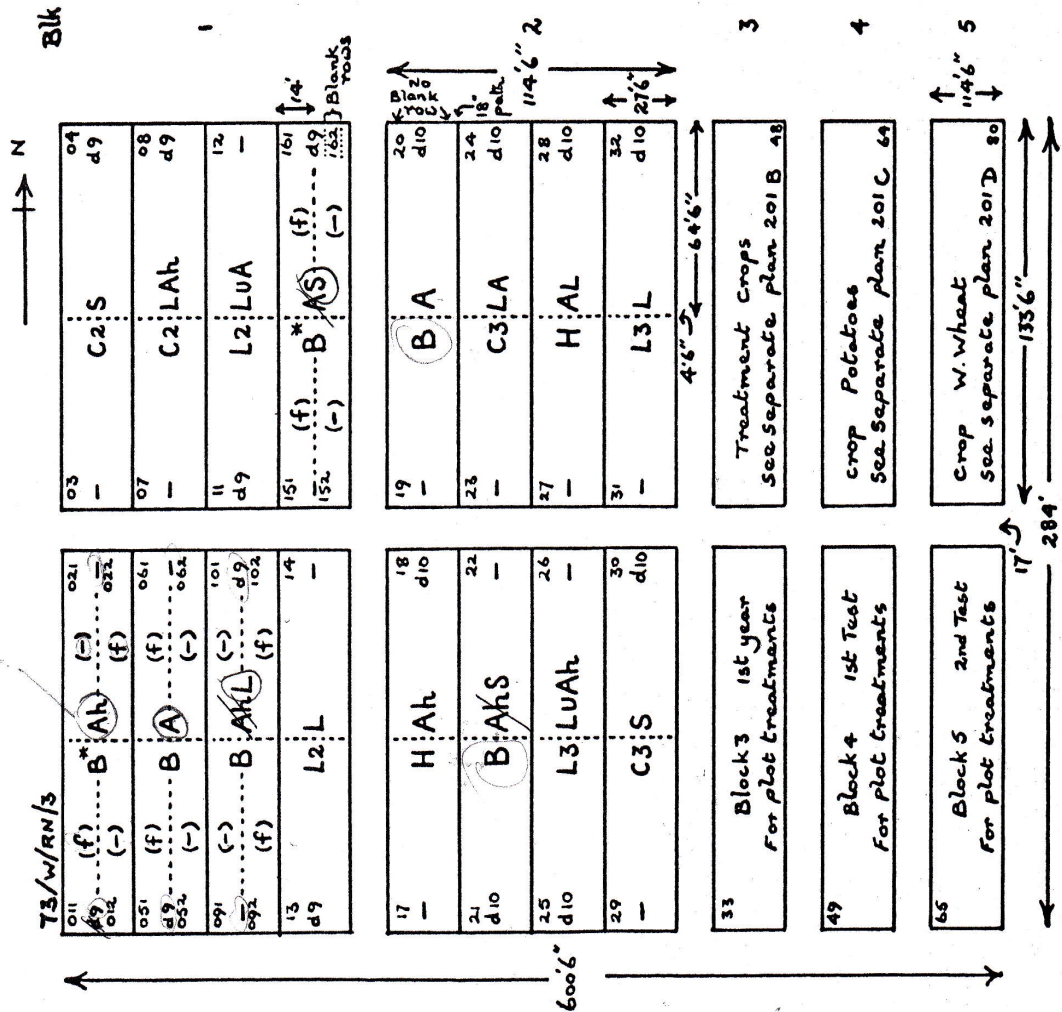
PLOT AREA

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 <sup>1/2</sup>\*, 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 <sup>1/2</sup> 1972 in Barley  
1st cut (126kg) N as 'Nitro-chalk' 2.5, 0.6 cut (75kg) P<sub>2</sub>O<sub>5</sub>, 1.2 cut (151kg) K<sub>2</sub>O as (0:14:28) in spring. 0.6 cut (75kg) N, 0.4 cut (50kg) K<sub>2</sub>O as (25:0:16) after 1st cut.

2nd and 3rd year cut Ley

1.2 cut (151kg) N, 0.9 cut (118kg) K<sub>2</sub>O 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) K<sub>2</sub>O as muriate of potash, in spring.

ALL CROPS :-

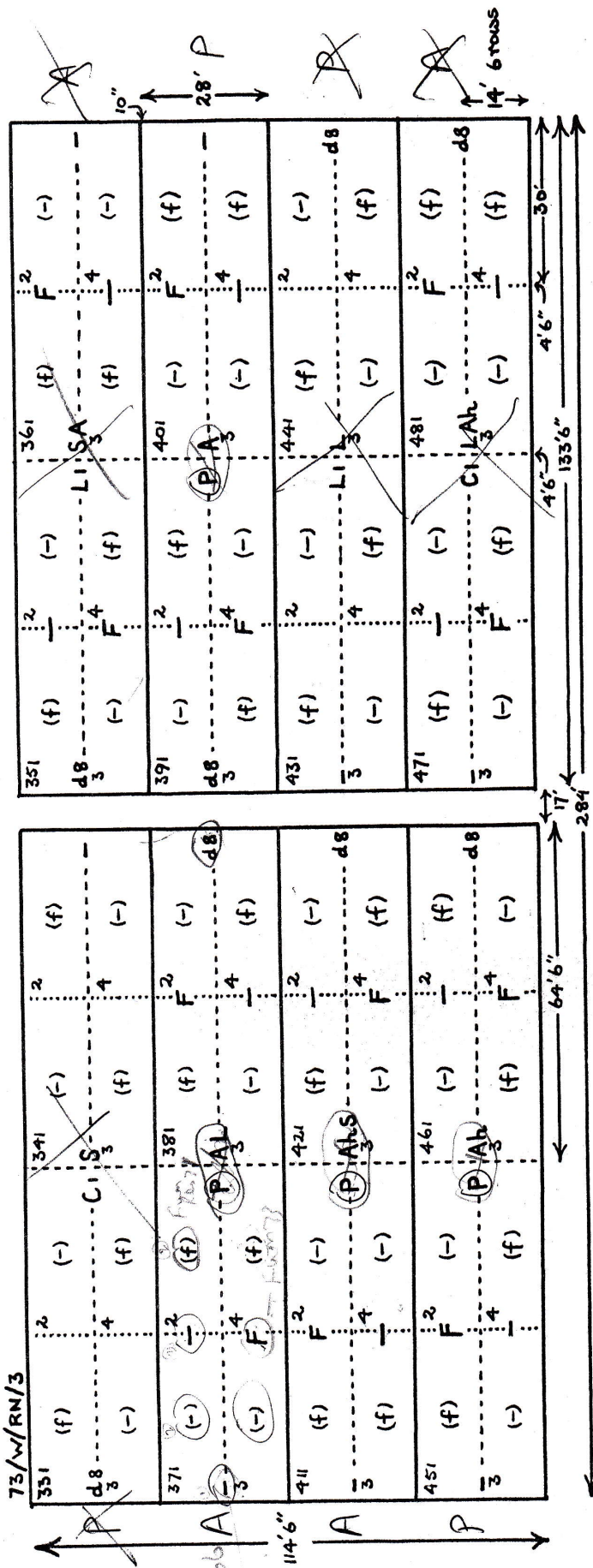
FYM

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



WOBURN 73/W/RN/3 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)

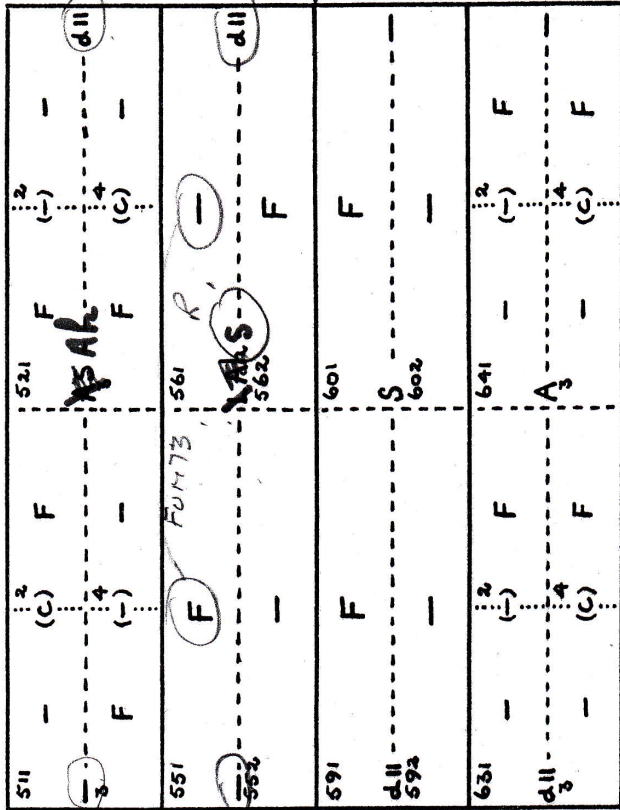
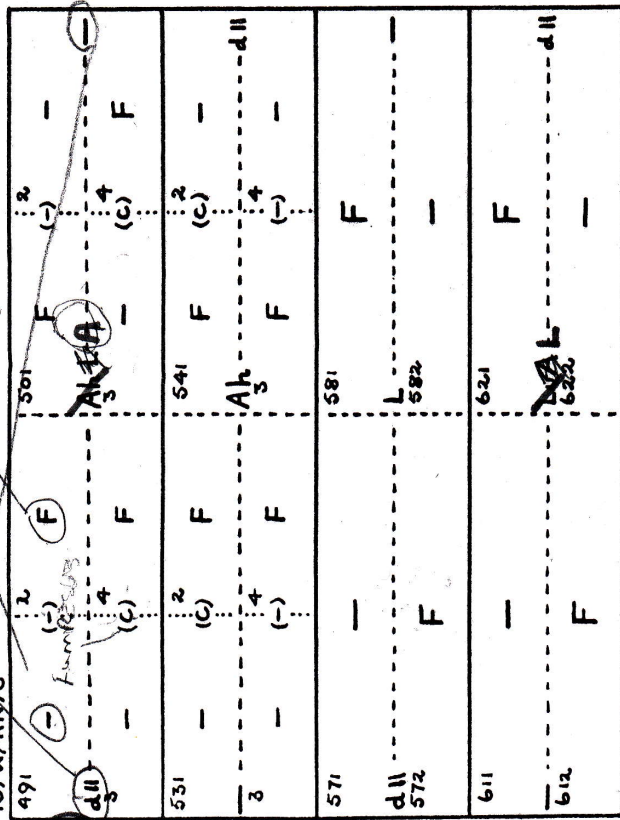


WOBURN 36th year STACKYARD D 1973 201C

ARABLE AND LEY ROTATION  
Block 4  
1st Test Crop

→ N

Amended Jan 3d/1/73



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 1973

+ 6.4lb (67 kg) of aldicarb

VARIETY Maris Piper

Planted: 9 Apr.

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' 6" = 0.0207 acre (0.0084ha)

Type Rotation  
FYM RES 6  
FYM RES 70  
FYM RES 73



201 D

STACKYARD D 1973

36<sup>th</sup> year

ARABLE ANDLEY ROTATION

W. Wheat  
2nd Test Crop  
Block 5

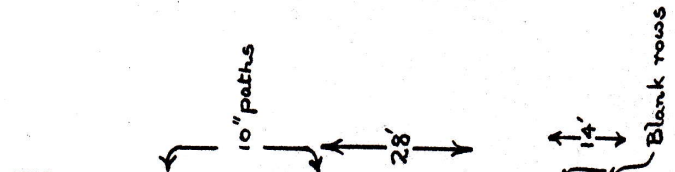
→ N

WOBURN

73/W/RN/3

651 3	2 f	1661 L <sub>3</sub>	2 0	4 1	2 f	2 2
691 3	2 0	1701 A <sub>3</sub>	2 2	4 3	2 f	2 1
731 d7 3	2 f	1741 A <sub>3</sub>	2 0	4 f	2 1	2 3
771 d7 3	2 f	1781 A <sub>3</sub>	2 0	4 f	2 1	2 3

671 d7 3	2 -	1681 f	2 1	4 f	2 f	2 c	2 1
711 3	2 -	1721 SA <sub>3</sub>	2 0	4 f	2 -	2 c	2 1
751 d7 3	2 f	1761 A <sub>3</sub>	2 0	4 f	2 f	2 0	2 -
791 3	2 3	1801 S <sub>3</sub>	2 0	4 f	2 1	2 f	2 3



Blank rows

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 (297 kg) 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) P<sub>2</sub>O<sub>5</sub>, 1.2 cut (151kg) K<sub>2</sub>O as (0:14:28) in Spring. 0.6 cut (75kg) N, 0.4 cut (50kg) K<sub>2</sub>O as (25:0:16) after 1st cut.

2nd and 3rd year cut Ley

1.2 cut (151kg) N, 0.9 cut (113kg) K<sub>2</sub>O 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) K<sub>2</sub>O 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	(-)	021
d10	(-)	A	(f)	022
051	(f)	B A	(f)	061
d10	(-)	B Ah L	(-)	062
091	(-)	B Ah L	(-)	101
d10	(f)	L3 L	(f)	102
13				14
d10				-

03		C3 S		04
-				d10
07		C3: LAh		08
-				d10
11		L3: LUA		12
d10				-
151	(f)	H AS	(f)	161
152	(-)		(-)	d10
				162

17 Crop Potatoes  
See separate plan 201B 32

17 Block 2 1st Test  
For plot treatments

331	(f)	C2 S	(-)	341
d9	(-)	A L	(f)	342
371	(-)	B A L	(f)	381
d9	(-)	B Ah L	(-)	382
411	(f)	B AKS	(-)	421
d9	(-)	Ah L	(f)	422
451	(f)	B Ah L	(-)	461
d9	(-)	Ah L	(f)	462

351	(f)	L2 SA	(f)	361
d9	(-)	A	(-)	362
391	(-)	B A	(f)	401
d9	(-)	B Ah L	(-)	402
431	(f)	L2 L	(f)	441
d9	(-)	C2: LAh	(-)	442

49 Block 4 2nd Test  
For plot treatments

65 Blocks 5 1st year  
For plot treatments

Crop W. Wheat  
See separate plan 201C 64

Treatment crops  
See separate plan 201D 80

31k

1

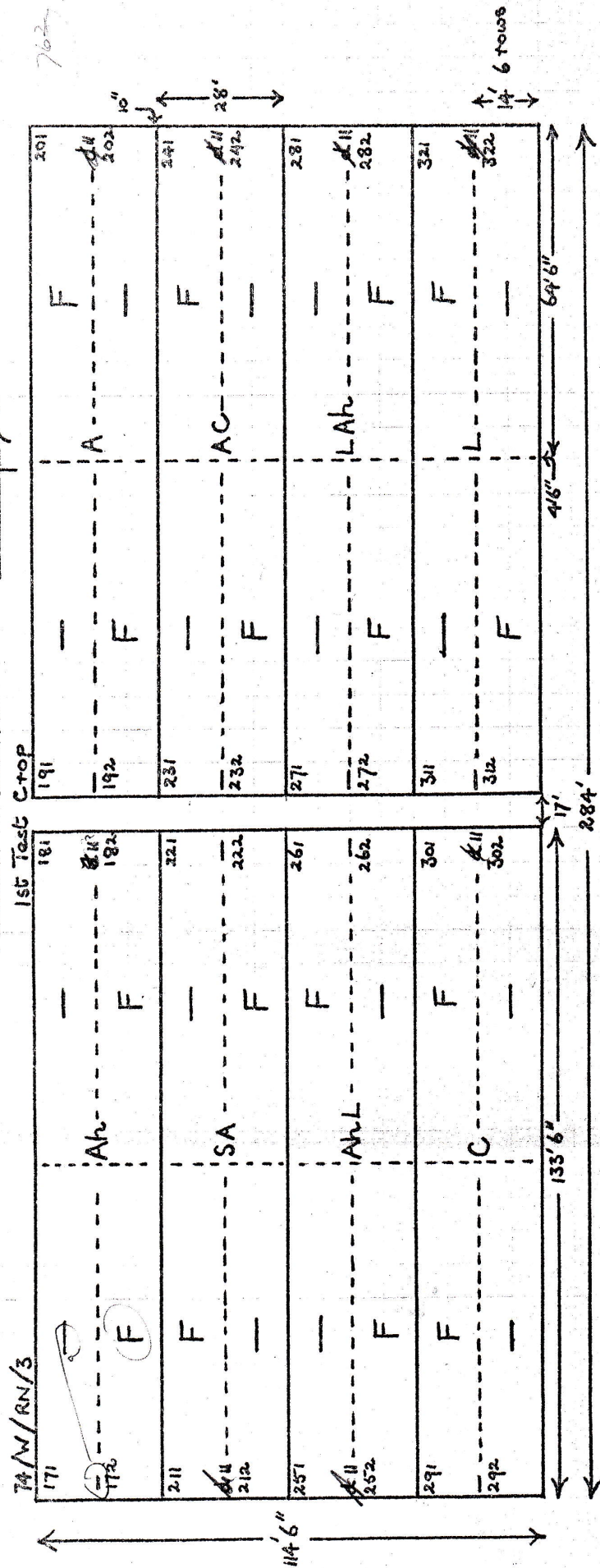
2

3

4

5

WOBBURN ARABLE AND LEY ROTATION 3 1/2 year 3/14 year 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)

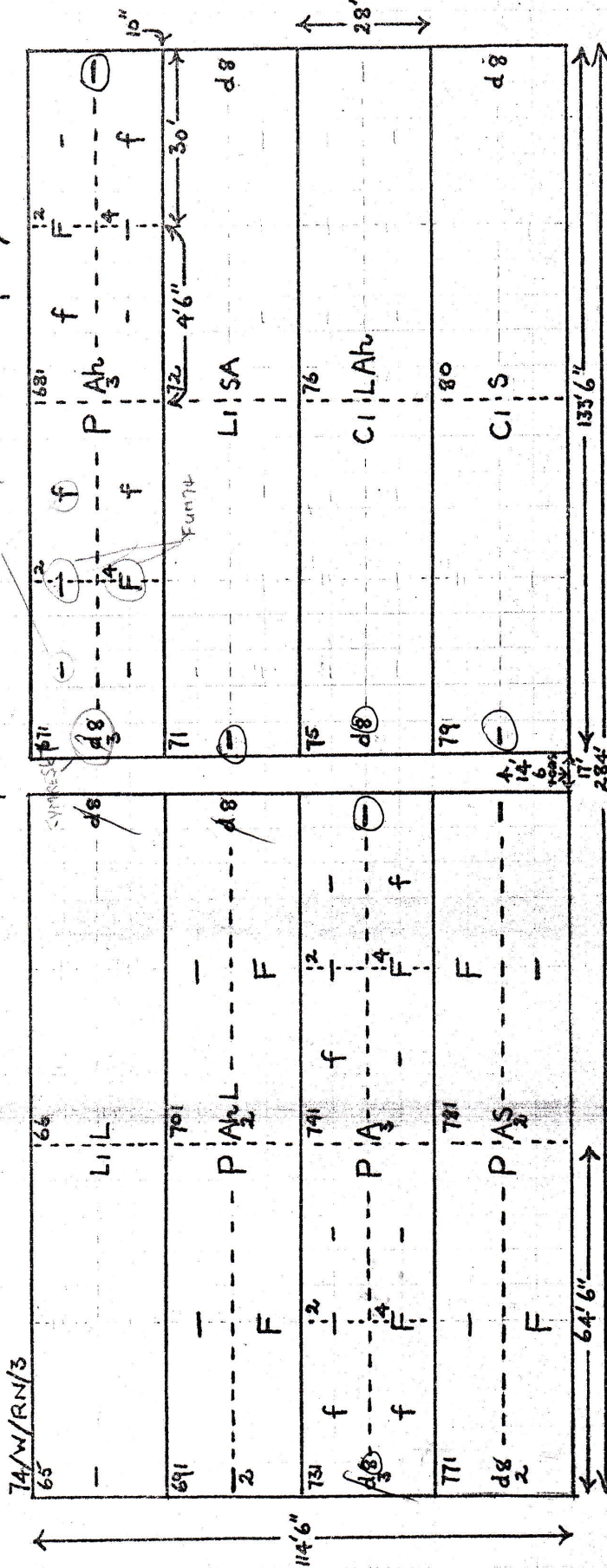


WOBURN  
74/W/RN/3

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 <sup>1</sup>/<sub>8</sub>, 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

ARABLE AND LEY ROTATION

WOBURN

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) (-) <sup>2</sup> (-) (-) <sup>4</sup>	341 S	(-) (-) <sup>2</sup> (f) (-) <sup>4</sup>	361 SA	(f) (-) <sup>2</sup> (f) (-) <sup>4</sup>
371 5	(-) (-) <sup>2</sup> (f) (-) <sup>4</sup>	381 AL	(f) (-) <sup>2</sup> (-) (-) <sup>4</sup>	401 B	(-) (-) <sup>2</sup> (f) (-) <sup>4</sup>
411 3	(f) (-) <sup>2</sup> (-) (-) <sup>4</sup>	421 AhS	(f) (-) <sup>2</sup> (-) (-) <sup>4</sup>	441 L3	(f) (-) <sup>2</sup> (-) (-) <sup>4</sup>
451 3	(f) (-) <sup>2</sup> (-) (-) <sup>4</sup>	461 Ah	(-) (-) <sup>2</sup> (f) (-) <sup>4</sup>	481 LAh	(-) (-) <sup>2</sup> (-) (-) <sup>4</sup>

49 Block 4 1st year For plot treatments

2nd TREATMENT CROPS

65 -	L2: L	66 L	(f) (-) <sup>2</sup> (-) (-) <sup>4</sup>	681 Ah	(f) (-) <sup>2</sup> (-) (-) <sup>4</sup>
691 2	(-) (-) <sup>2</sup> (f) (-) <sup>4</sup>	701 AhL	(-) (-) <sup>2</sup> (f) (-) <sup>4</sup>	72 SA	(-) (-) <sup>2</sup> (f) (-) <sup>4</sup>
731 3	(f) (-) <sup>2</sup> (-) (-) <sup>4</sup>	741 A	(f) (-) <sup>2</sup> (-) (-) <sup>4</sup>	76 C2 LAh	(-) (-) <sup>2</sup> (-) (-) <sup>4</sup>
771 2	(-) (-) <sup>2</sup> (f) (-) <sup>4</sup>	781 AS	(-) (-) <sup>2</sup> (f) (-) <sup>4</sup>	80 C2 S	(-) (-) <sup>2</sup> (-) (-) <sup>4</sup>

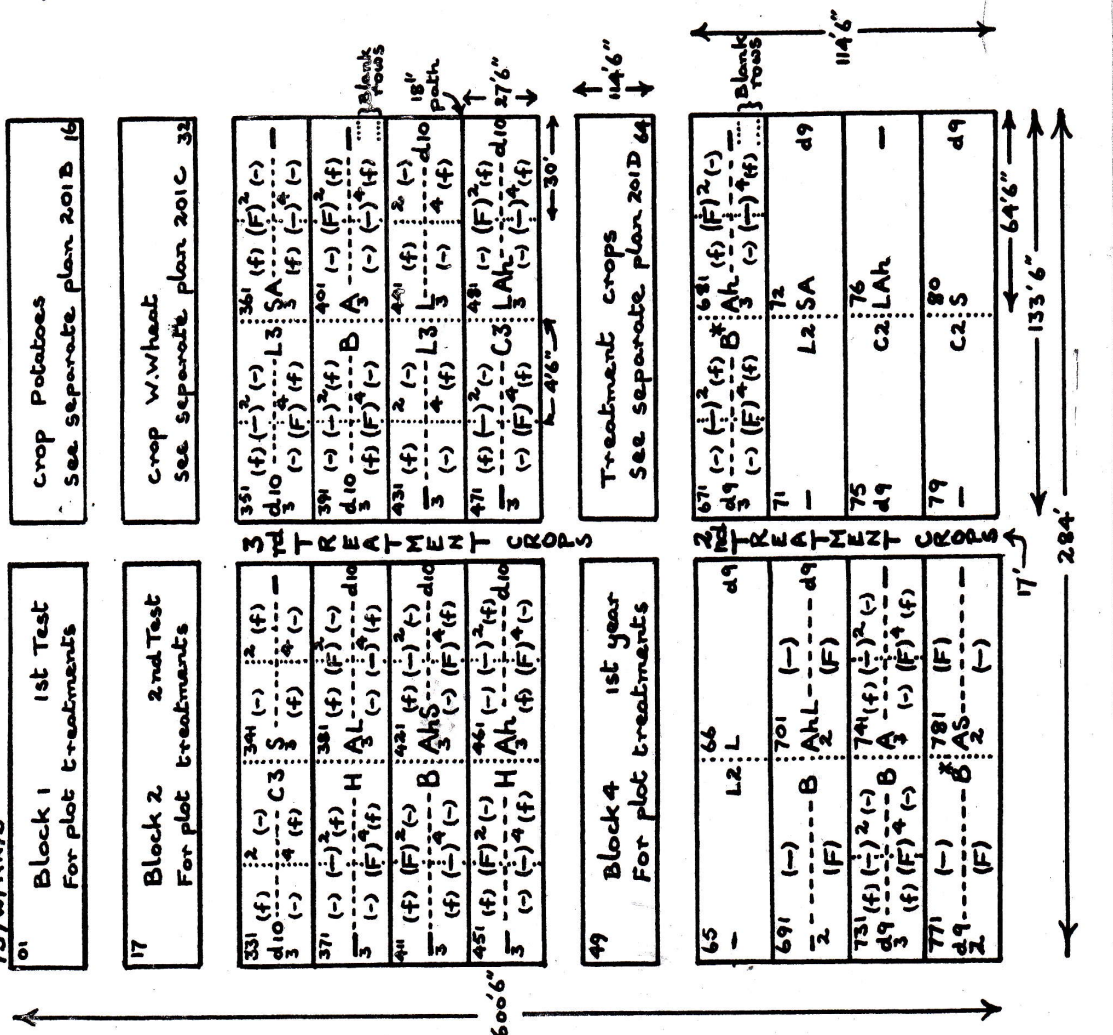
SYMBOLS

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) P<sub>2</sub>O<sub>5</sub>, 1.2 cut (151kg) K<sub>2</sub>O as (0:14:28) in  
spring. 0.6 cut (75kg) N, 0.4 cut (50kg) K<sub>2</sub>O as (25:0:16) after 1st cut.  
2nd and 3rd year cut Ley  
1.2 cut (151kg) N, 0.9 cut (113kg) K<sub>2</sub>O 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) K<sub>2</sub>O 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

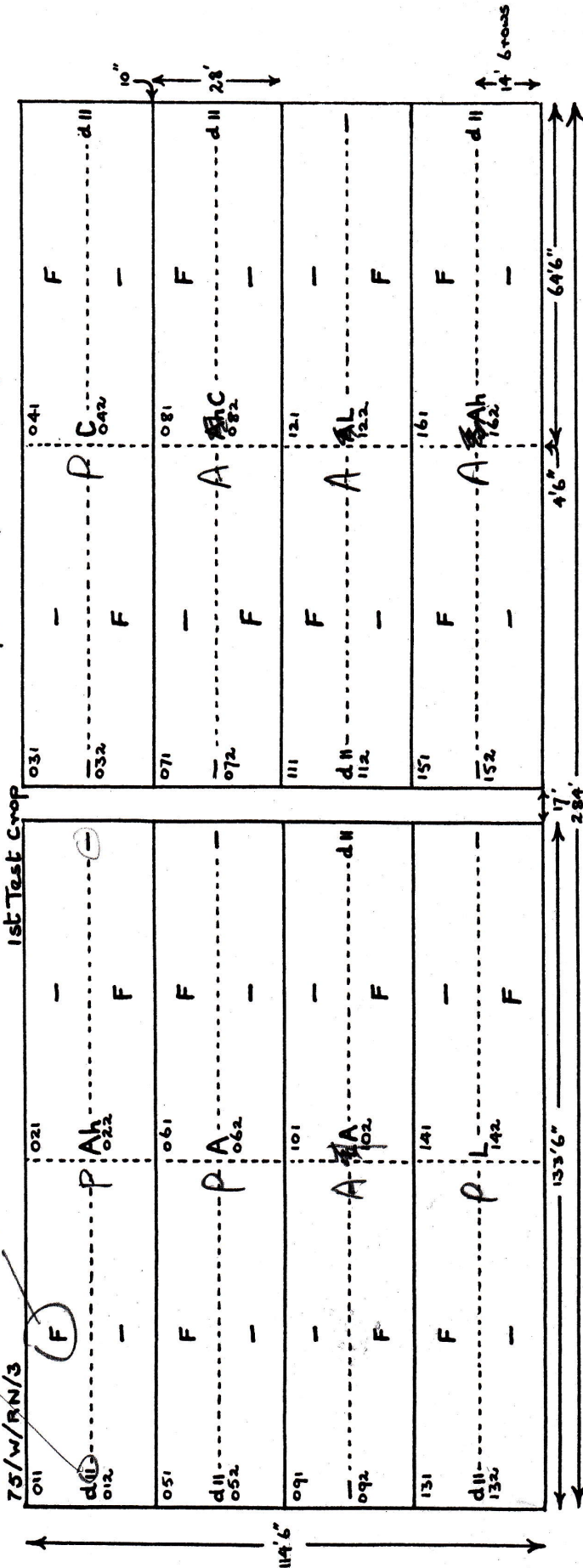
ARABLE AND LEY ROTATION

Potatoes Block 1 → N

38th year

STACKYARD D 1975

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



TREATMENTS per acre (hectare)

FYM residues

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

FUMIGANTS

- None

F 200 lb (224 kg) 'Telone' in autumn +

10 lb (11.2 kg) aldicarb in spring

VARIETY Mavis Piper

Planted: 5 May

BASAL MANURING per acre (hectare)

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

PLOT AREA

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

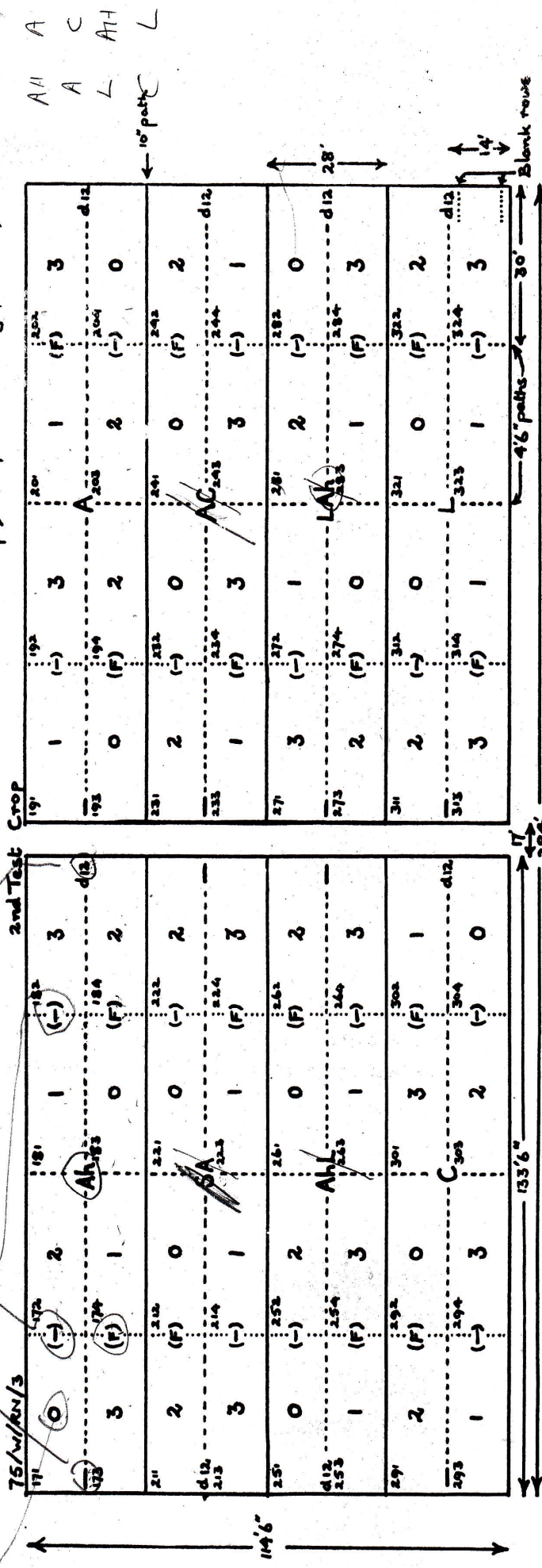
201 C

WOBURN  
FYM RES 74

ARABLE AND LEY ROTATION

38th year  
Winter Wheat Block 2

STACKYARD D 1975  
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 (290 kg) of (0:20:20) C.D.

VARIETY

Cappelle dressed dieckman

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 (96 kg) Date: 8 Nov 1974



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

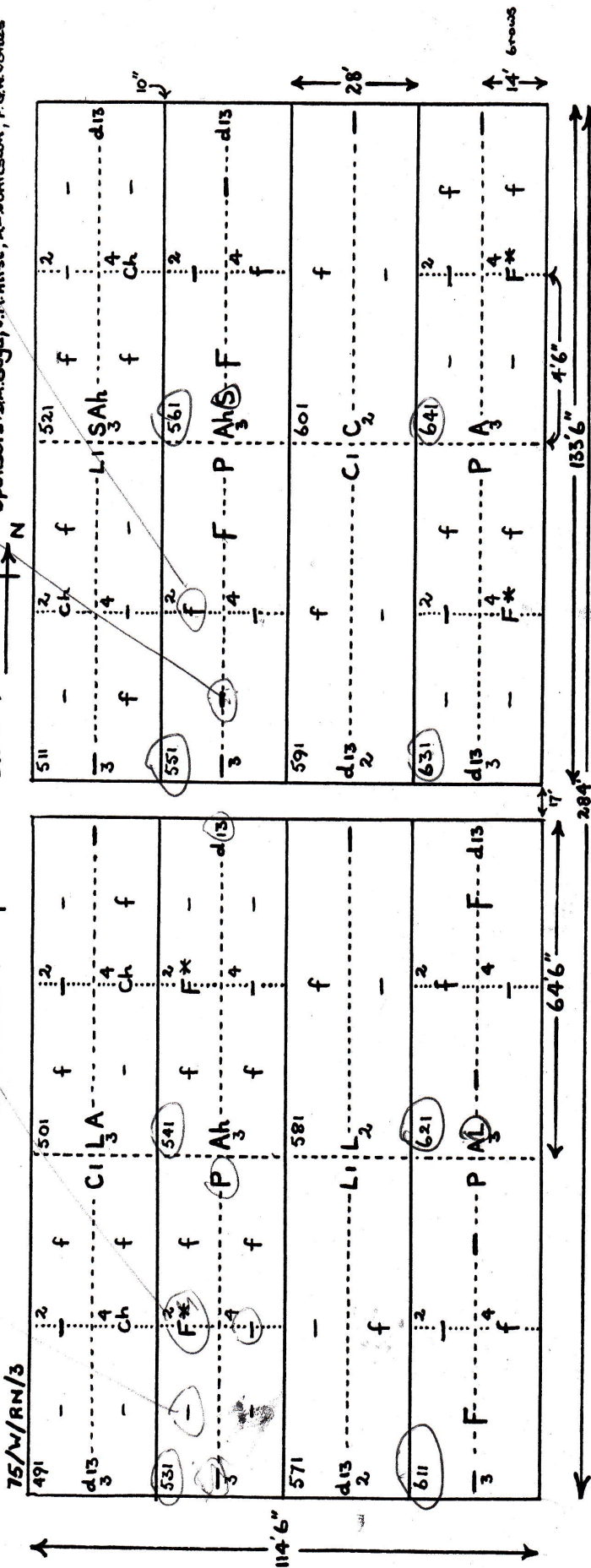
Arable and Ley Rotation 38th year (2) Fumigant 75 (1) Fumigant 73

Stackyard D 1975 (1) Fumigant 73 (2) Fumigant 75

Block 4

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

1st treatment crops



**SYMBOLS**

**Rotations**

- 3 years ARABLE A = Potatoes P, Barley B, Barley B.
- Ah = Potatoes P, Barley 1/2, 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 (6)**

- 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**

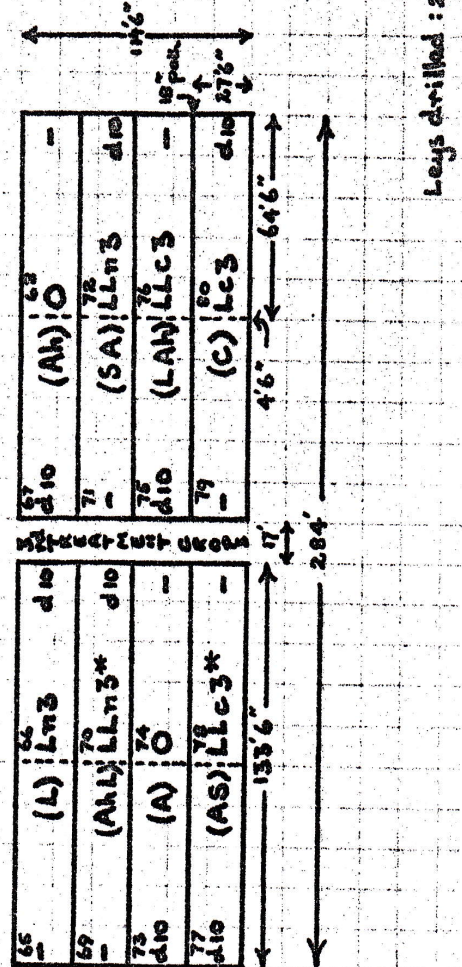
- , Ch None, 400 lb (400 kg) chloropicrin
- chloropicrin + aldicarb residues applied for 1st test crop potatoes 1973
- f None, 400 lb (400 kg) chloropicrin + 6 lb (6.7 kg) aldicarb.
- FYM residues -, d13 None, FYM residues - last applied 1963.
- VARIETY Potatoes - Maris Piper Planted: 5 May
- BASAL MANURING 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	(Lah) 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) Ln2	59	(C) Lc2	-
61 d14	(AL) LLn2*	63	(A) F	-



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 abt. animal) } 360lb (400kg) compound fertiliser @ 145lb (162kg)

Oats - Mamed @ 170 lb (190kg) } (20:14:14) C.D. Sown: 23 Mar

ALL - grass ley. sown: 22 Apr

1st year: 75kg (67lb) N as Nitro-chalk 2.5, 75kg (67lb) P<sub>2</sub>O<sub>5</sub>, 150kg (134lb) K<sub>2</sub>O as (0:14:28) in the seedbed. 75kg (67lb) N, 48kg (43lb) K<sub>2</sub>O as (25:0:16) after each cut except the last.

2nd + years: 75kg (67lb) P<sub>2</sub>O<sub>5</sub>, 150kg (134lb) K<sub>2</sub>O as (0:14:28) in winter. 75kg (67lb) N, 48kg (43lb) K<sub>2</sub>O as (25:0:16) in spring and after each cut except the last.

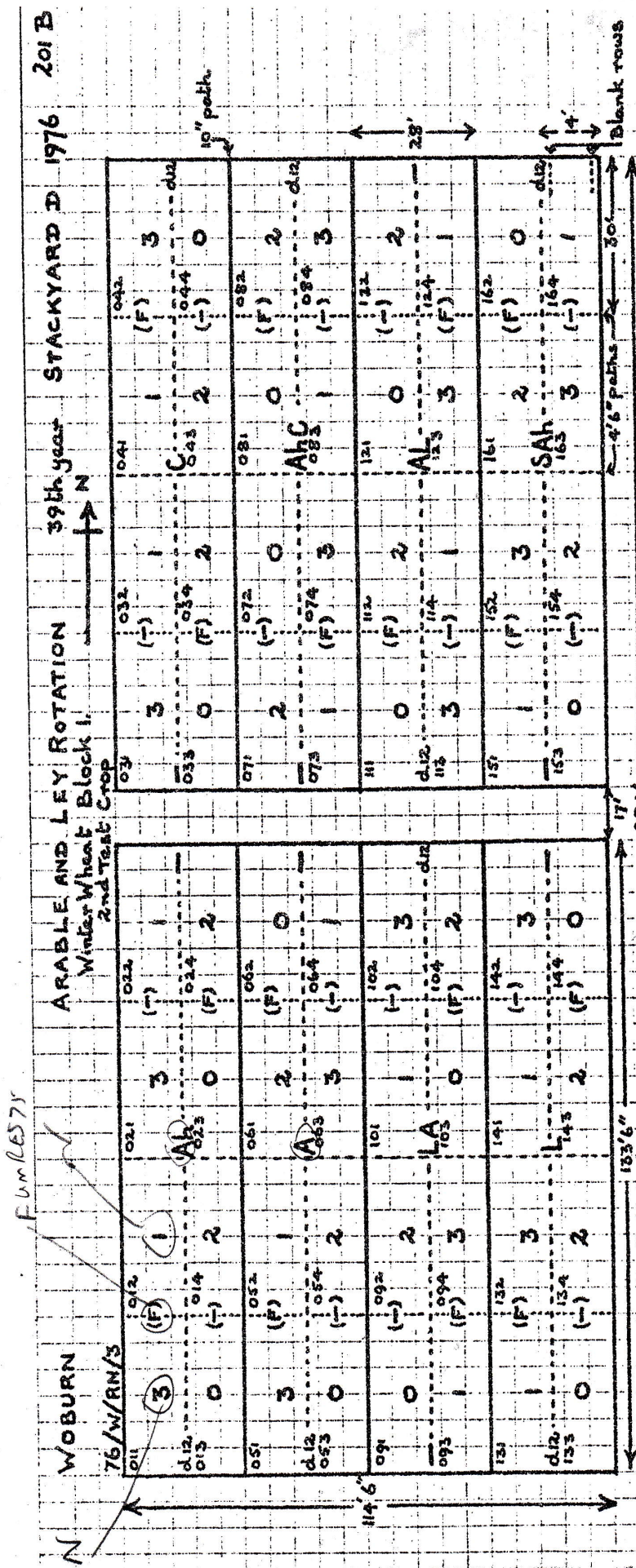
Clover/grass ley - as Ln but omitting N. K per cut as muricide of potato.

1st year: 75kg (67lb) P<sub>2</sub>O<sub>5</sub>, 150kg (134lb) K<sub>2</sub>O as (0:14:28) in the seedbed. 48kg (43lb) K<sub>2</sub>O as Muricide of potato after each cut except the last.

2nd + years: 75kg (67lb) P<sub>2</sub>O<sub>5</sub>, 150kg (134lb) K<sub>2</sub>O as (0:14:28) in winter. 48kg (43lb) K<sub>2</sub>O as Muricide of potato in spring and after each cut except the last.

Leys drilled: 22 Apr.





**ARABLE AND LEY ROTATION**  
 39th year STACKYARD D 1976 201 B  
 Winter Wheat Block 1  
 2nd Test Crop  
 N  
 10" path  
 28'  
 14'  
 Blank rows  
 2' 6" paths  
 30'

**WOBURN**  
 76' W/RN/S  
 114' 6"  
 N  
 17'  
 284'

**TREATMENTS per acre (hectare)**  
 FYM residues  
 -, d. 12 None, FYM residues - last applied 1965

**FUMIGANTS** - applied for potatoes 1975  
 None.  
 200lb (22.4kg) 'Telone' in autumn +  
 10lb (11.2kg) aldicarb in spring

**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)**  
 270lb (303 kg) of compound fertiliser (0:20:20) C.D.

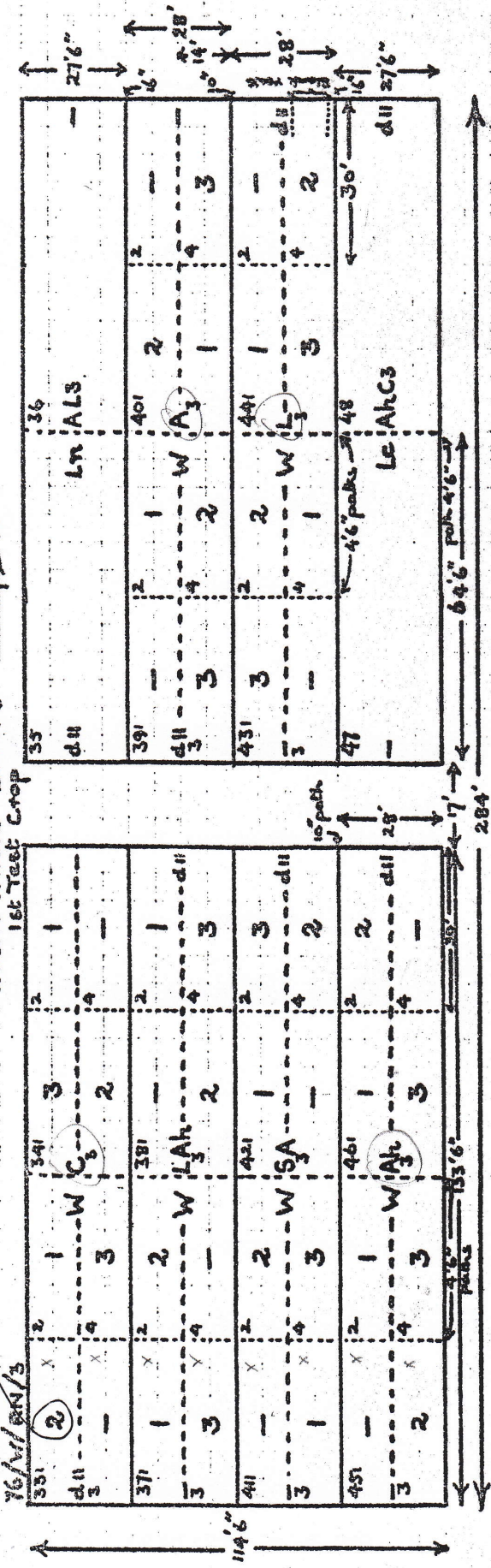
**VARIETY**  
 Cappelle  
 Sown: 15 Oct at : 190lb (213 kg)  
 14' x 30' = 0.0096 acre (0.0039 ha)  
 Harvested 9' 4" x 30' = 0.0064 acre (0.0026 ha)



WOBURN 1976/1977

ARABLE AND LEY ROTATION 1968 year STACKYARD 'D' 1976 2016

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

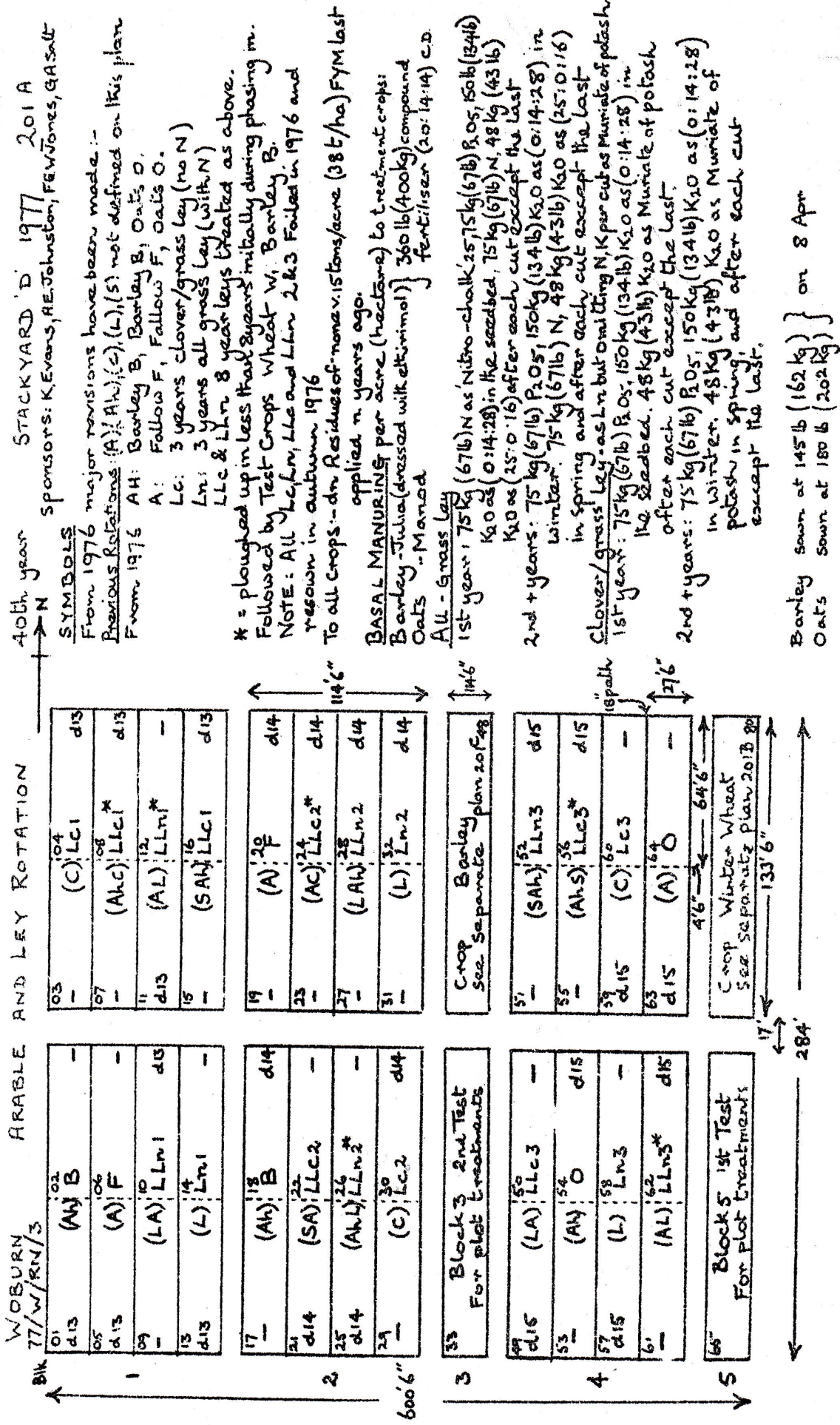
BASAL APPLICATION to Winter Wheat only  
Aldicarb at 10kg/ha (9lb/acre)

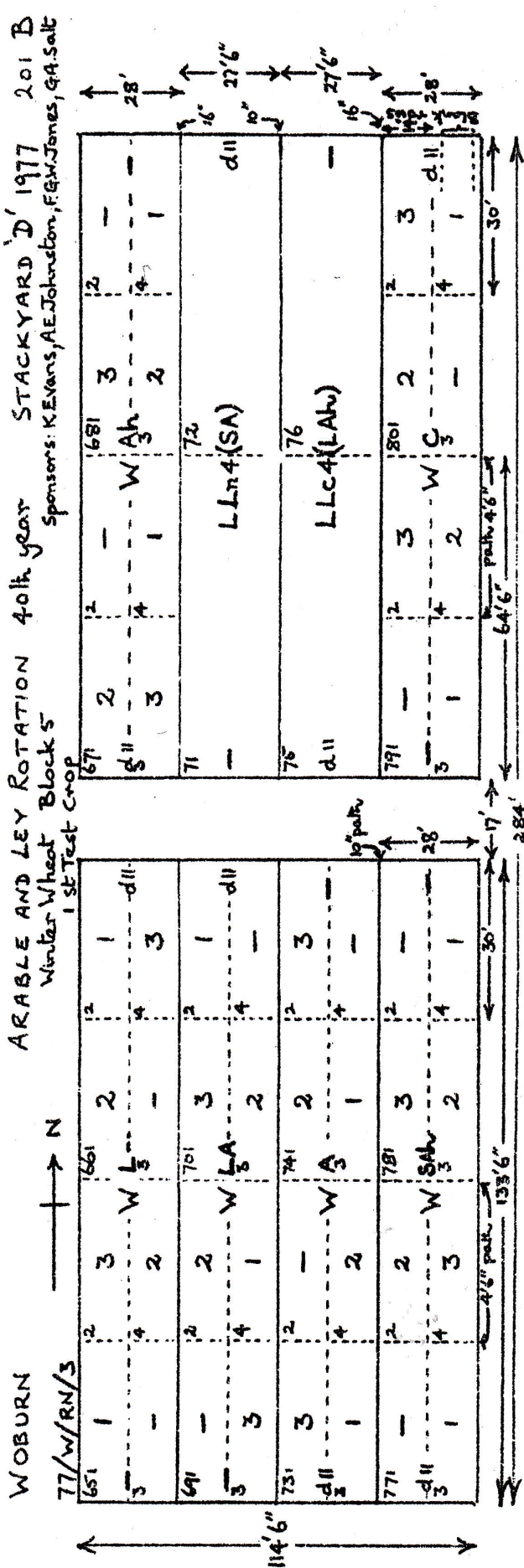
BASAL MANURING per acre (ha/acre)

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)







STACKYARD 'D' 1977 201 B  
 Sponsors: K.Evans, A.E. Johnston, F.G.M. Jones, G.A. Salt

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

**Cropping**  
 Woburn wheat Variety: Cappelle, (dressed)  
 Anti Bulb-fly & Fungicide seed dressing.  
 Sown at 190lb (213kg) Date: 24 Nov  
 Ley with N reason 30lb (34kg)  
 Ley with Clover } 13 Oct 35lb (39kg)

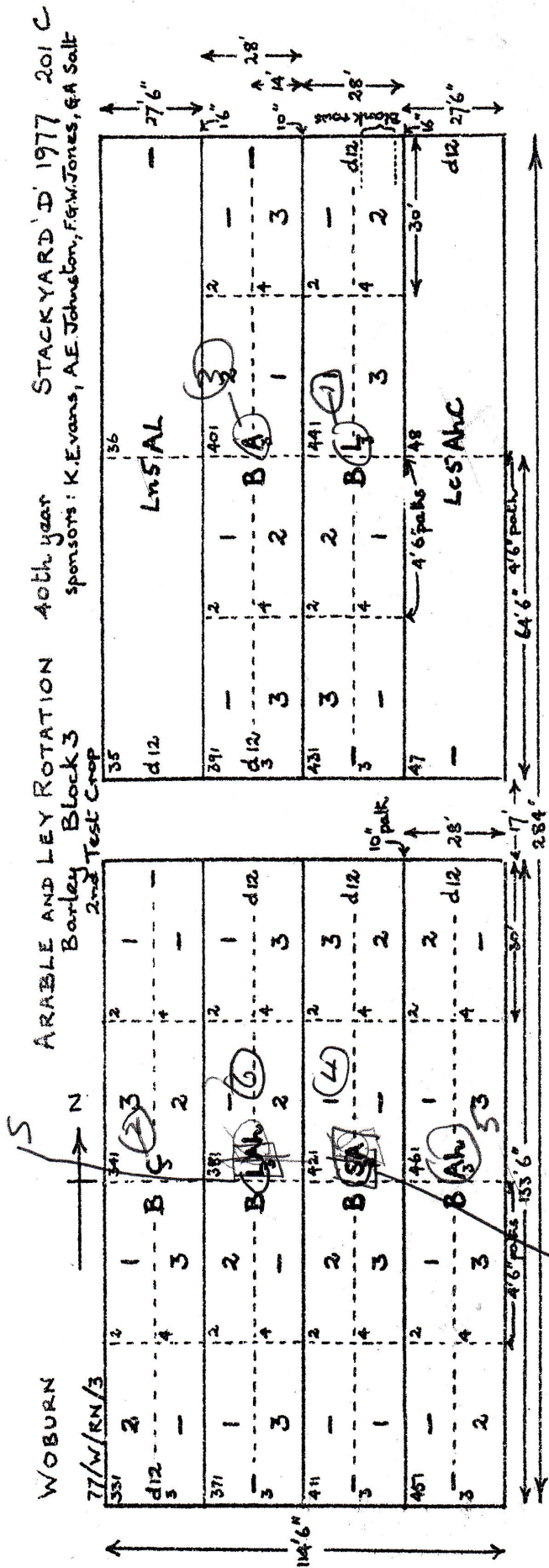
**Nitrogen to Winter wheat**  
 - 1, 2, 3 None, 0.5, 1.0, 1.5 cut N  
 (63, 126, 189kg) N as Nitro-chalk '25

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

**BASAL MANURING per acre (hectare)**  
 Winter Wheat: 300kg (270lb) compound fertiliser (0.20:20) c D.  
 Ley with N 74kg (66lb) N, 4kg (42lb) K<sub>2</sub>O as (25:0:16) applied in the Spring and after each cut except the last.  
 Ley with clover: 48kg (43lb) K<sub>2</sub>O 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)





**BASAL MANURING per acre (hectare)**  
 Barley: 270lb (300kg) compound fertiliser (0:20:20) a.d.  
 Ley with N: 74kg (66lb) N, 47kg (42lb) K<sub>2</sub>O as (25:0:16) applied in the spring and after each cut except the last

Ley with clover: 48kg (43lb) K<sub>2</sub>O 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  
 Oats - Manod  
 fertilizer (20:14:14) CD

All - Grass ley  
 1st year: 75kg (67lb) N as Nitro-chalk 25, 75kg (67lb) P<sub>2</sub>O<sub>5</sub>, 150kg (134lb) K<sub>2</sub>O as (0:14:28) in the seedbed, 75kg (67lb) N, 48kg (43lb) K<sub>2</sub>O as (25:0:16) after each cut except the last.

2nd + years: 75kg (67lb) P<sub>2</sub>O<sub>5</sub>, 150kg (134lb) K<sub>2</sub>O as (0:14:28) in winter  
 75kg (67lb) N, 48kg (43lb) K<sub>2</sub>O 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 Muriate of potash  
 1st year: 75kg (67lb) P<sub>2</sub>O<sub>5</sub>, 150kg (134lb) K<sub>2</sub>O as (0:14:28) in the  
 seedbed, 48kg (43lb) K<sub>2</sub>O as Muriate of potash after  
 each cut except the last.

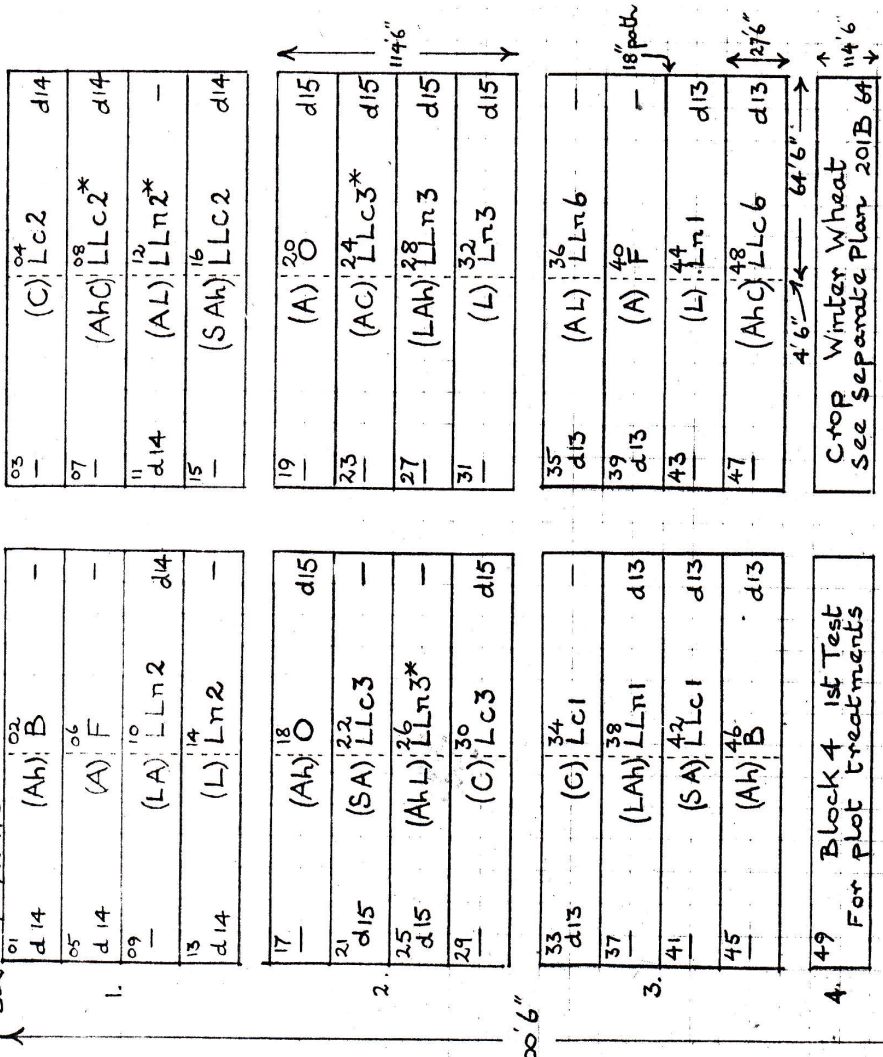
2nd + years: 75kg (67lb) P<sub>2</sub>O<sub>5</sub>, 150kg (134lb) K<sub>2</sub>O as (0:14:28)  
 in winter, 48kg (43lb) K<sub>2</sub>O as Muriate of potash  
 in spring, and after each cut except the last.

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

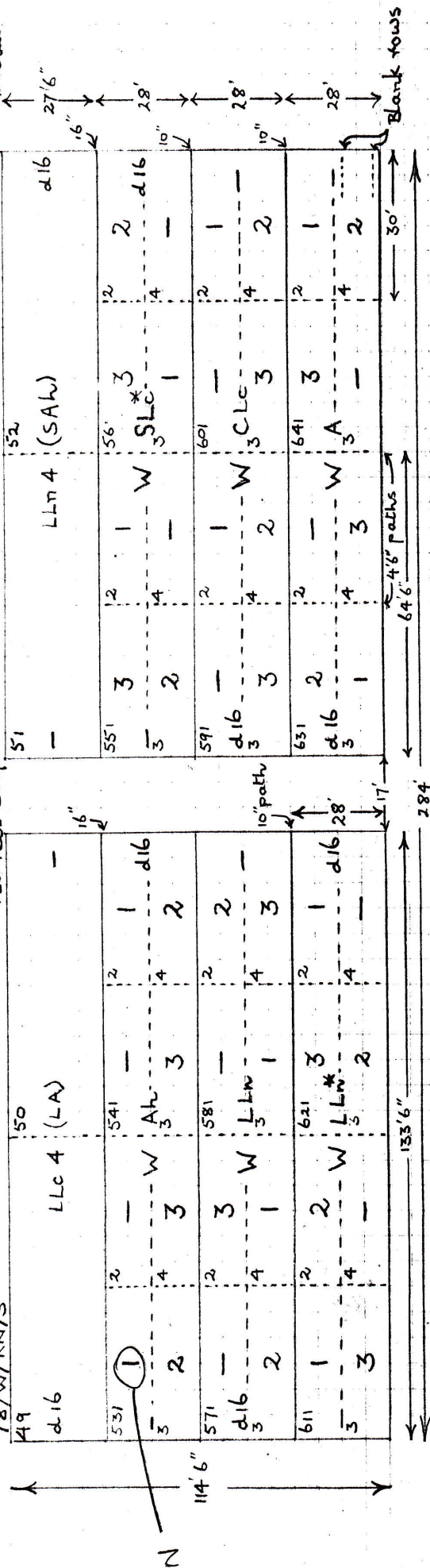


Crop Winter Wheat  
 See Separate Plan 201B 64

Crop Barley Plan 201C 80



WOBURN 78/W/RN/3  
 ARABLE AND LEY ROTATION 41ST year  
 Winter Wheat Block 4  
 1st Test Crop



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

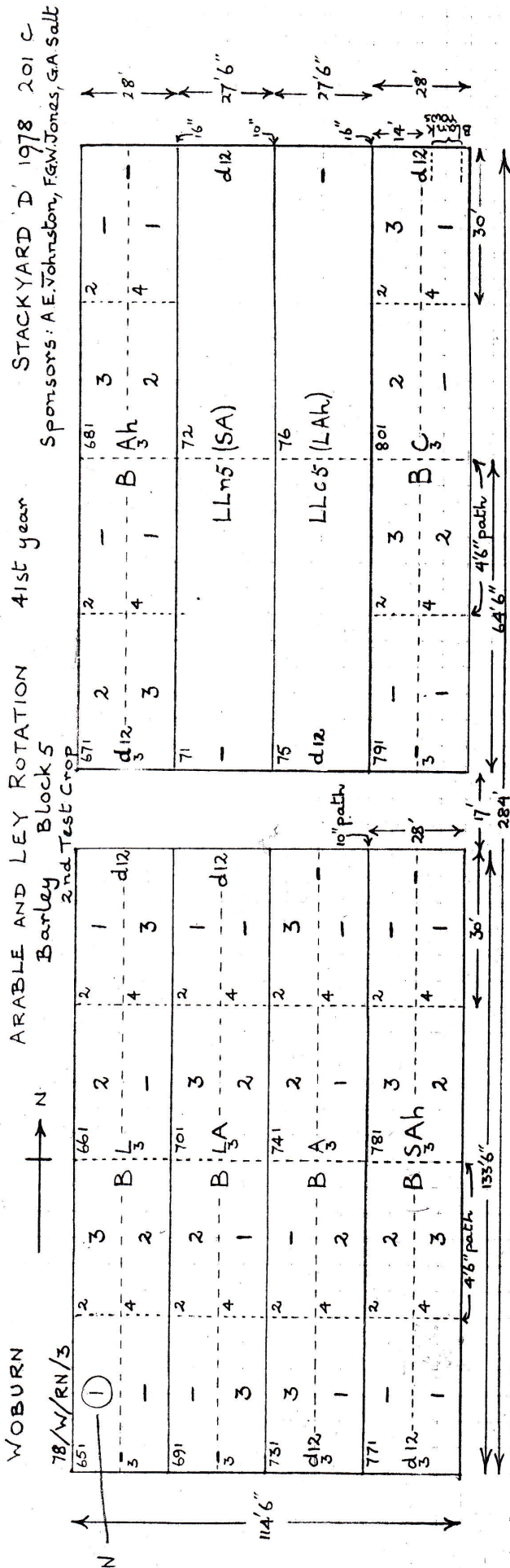
BASAL MANURING per acre (hectare)

Winter wheat: 314 kg (280 lb) compound fertiliser (0:20:20) CD  
 Ley with N 75 kg (67 lb) P<sub>2</sub>O<sub>5</sub>, 150 kg (134 lb) K<sub>2</sub>O as (0:14:28) in winter  
 75 kg (67 lb) N, 48 kg (43 lb) K<sub>2</sub>O as (25:0:16) applied in spring and after each cut except the last.

Ley with clover: 75 kg (67 lb) P<sub>2</sub>O<sub>5</sub>, 150 kg (134 lb) K<sub>2</sub>O as (0:14:28) in winter  
 48 kg (43 lb) K<sub>2</sub>O 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 abtirimol)

LLn5 Ley with N Sown at 145 lb (16 kg) Date: 5 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) K<sub>2</sub>O as (25:0:16) applied in the

Spring and after each cut except the last.

Ley with clover: 48 kg (43 lb) K<sub>2</sub>O 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

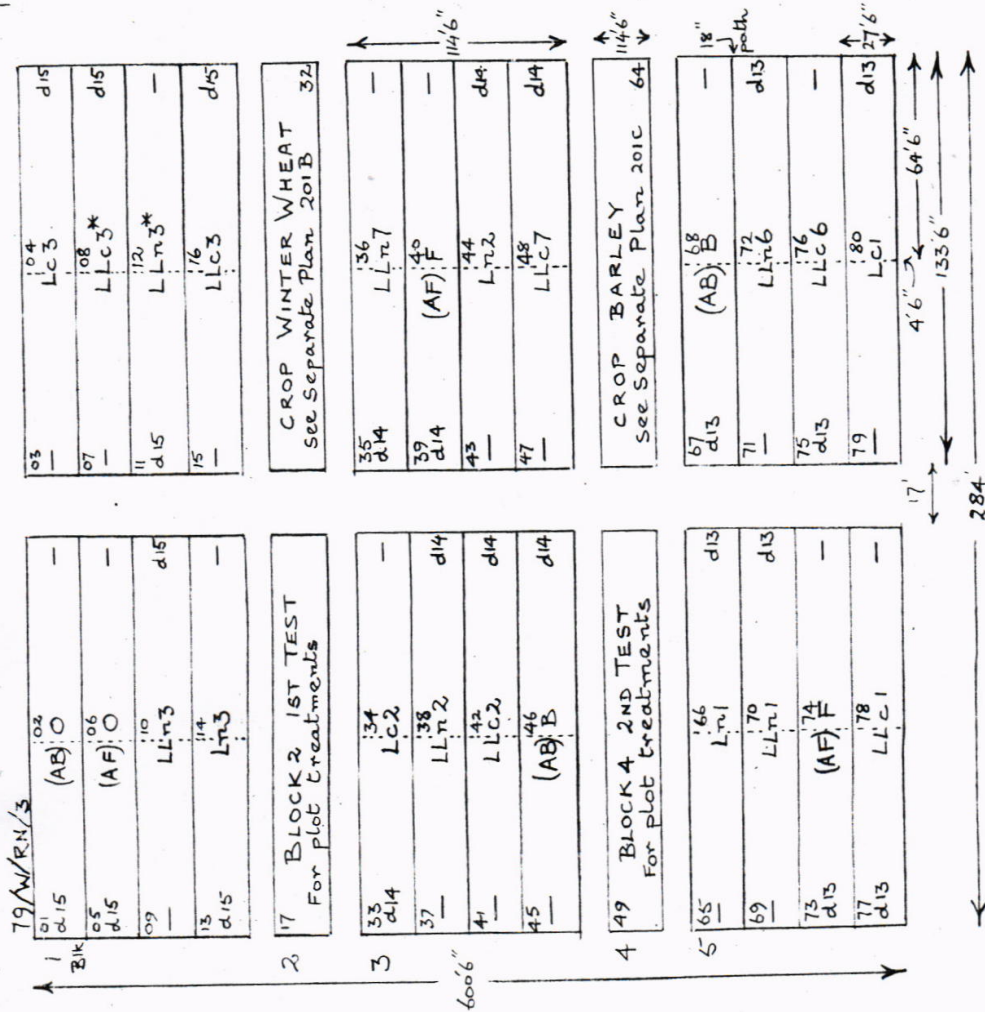
Ley with clover 27'6" x 64'6" = 0.0407 acre (0.0165 ha)



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

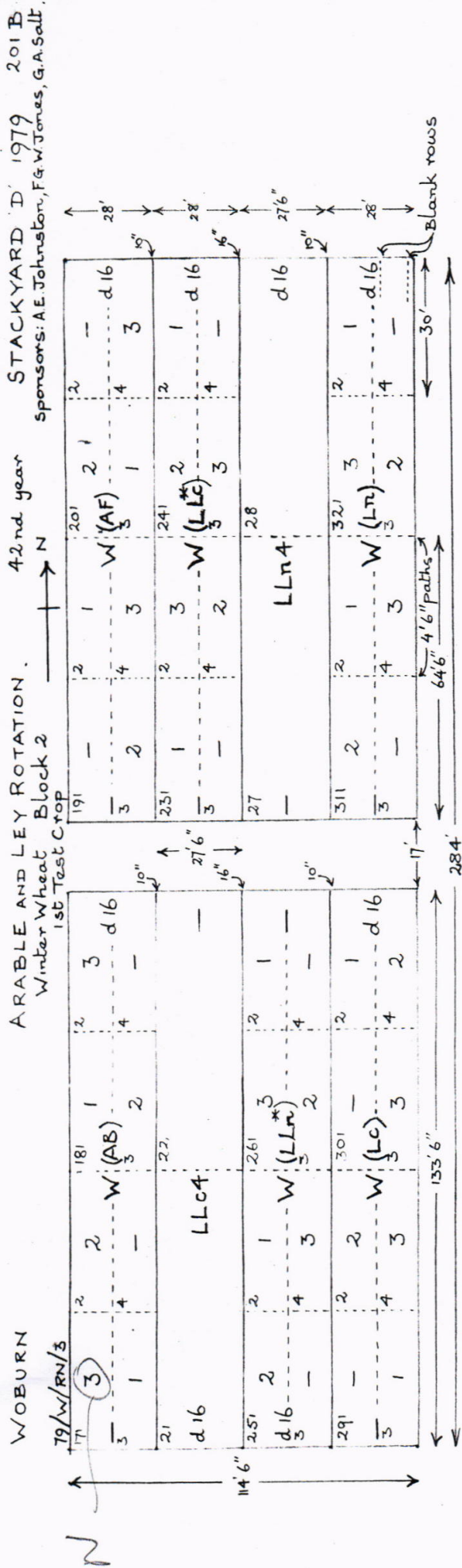
Barley and Oats 360 lb (400 kg) compound fertiliser (20:14:14) c.d.

ALL Grass Ley

1st year: 75 kg (67 lb) N as Nitro-chalk, 75 kg (67 lb) P<sub>2</sub>O<sub>5</sub>, 150 kg (134 lb) K<sub>2</sub>O as (0:14:28) in the seedbed, 75 kg (67 lb) N, 48 kg (43 lb) K<sub>2</sub>O as (25:0:16) after each cut except the last.  
 2nd + years: 75 kg (67 lb) P<sub>2</sub>O<sub>5</sub>, 150 kg (134 lb) K<sub>2</sub>O as (0:14:28) in winter 75 kg (67 lb) N, 48 kg (43 lb) K<sub>2</sub>O as (25:0:16) in spring, and after each cut except the last.

Clover/grass ley

1st year: 75 kg (67 lb) P<sub>2</sub>O<sub>5</sub>, 150 kg (134 lb) K<sub>2</sub>O as (0:14:28) in the seedbed, 48 kg (43 lb) K<sub>2</sub>O as muriate of potash after each cut except the last.  
 2nd + years: 75 kg (67 lb) P<sub>2</sub>O<sub>5</sub>, 150 kg (134 lb) K<sub>2</sub>O as (0:14:28) in winter, 48 kg (43 lb) K<sub>2</sub>O as muriate of potash in spring, and after each cut except the last.



TREATMENTS per acre (hectare)  
 - d16 None, FYM residues - last applied 1963

Cropping  
 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

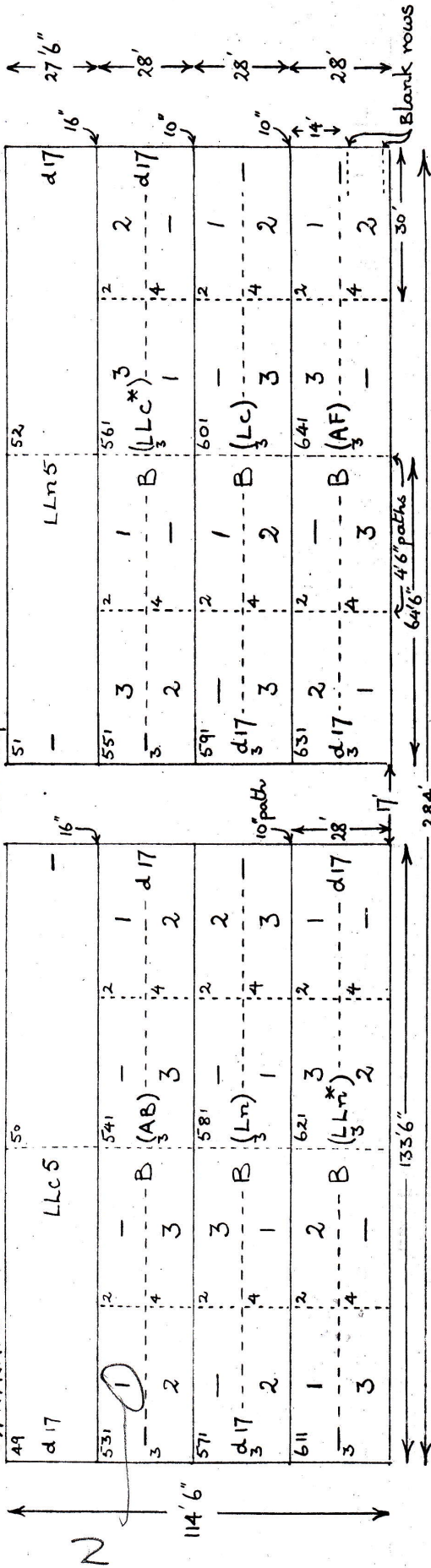
STANDARD APPLICATION to winter wheat only  
 Aldicarb at 10 kg/ha (9 lb/acre) applied by farm

BASAL MANURING per acre (hectare)  
 Winter wheat: 314 kg (280 lb) compound fertiliser (0:20:20) CD  
 Ley with N : 75 kg (67 lb) P<sub>2</sub>O<sub>5</sub>, 150 kg (134 lb) K<sub>2</sub>O as (0:14:28) in winter.  
 75 kg (67 lb) N, 48 kg (43 lb) K<sub>2</sub>O as (25:0:16) applied in spring and after each cut except the last.  
 Ley with clover: 75 kg (67 lb) P<sub>2</sub>O<sub>5</sub>, 150 kg (134 lb) K<sub>2</sub>O as (0:14:28) in winter.  
 48 kg (43 lb) K<sub>2</sub>O 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)



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)  
 -, d.17 None, FYM residues - last applied 1962

Cropping  
 B Barley Variety: Porthos (dressed with ethionol)  
 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 (14h) 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) K<sub>2</sub>O as (25:0:16) applied in the Spring and after each cut except the last  
 Ley with clover: 48kg (43lb) K<sub>2</sub>O 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)  
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