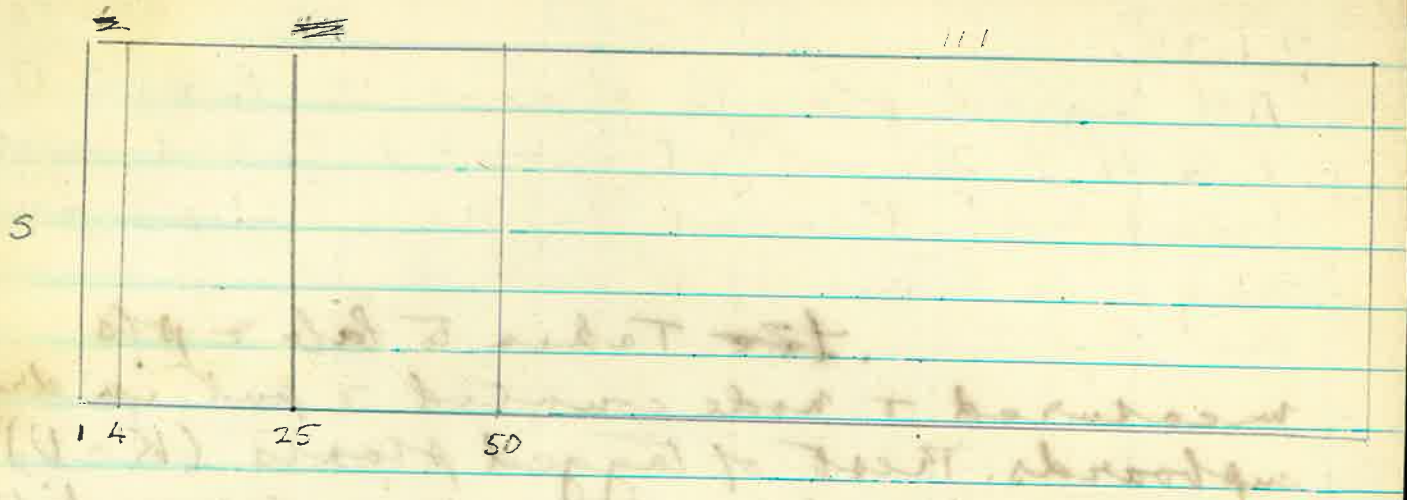
607

C 3a



Rather rough & fair number of depressions ? due to insufficient harrowing.

22.11.34.

50 lines (right across) from S end hand planted with 920 S.B. acid treated seed at 3 seeds per hole. 2' x 3'6" spacing.

23.11.34.

Rest of field planted as above.

26.11.34.

Germination counts on 16 of the lines (planted 22.11.34.) at 5.30 p.m. More than 50% showing but most of them only just showing. . . 26.11.34 may safely be taken as germination date.

4.1.35.

Thinned to one per hole.

5-6.1.35.

All plants of rows Nos 4-25 (from S end) tagged. Plants of No 25 tagged Z1, Z2, Z3 --- Z84 from E to W. No 24 similarly tagged A1 A2 etc; No 23 B1, B2 etc.; --- No 4 tagged U1, U2 etc..

7.1.35.
All tagged plants of rows Z, A, B, C, D, E F, G, H, I, J cut off at ground level before breakfast. Placed in trays (21 pls per tray) in tiers of 4 with sack over the top tray. ~~T.C.~~ Taken to lab & pls measured & node counted & put in drying cupboards. Rest of tagged plants (K-U) cut after breakfast & put in large billy cans (21 per can) & taken to lab. All cut by about 11.30 a.m. The plants of rows Z-J all measured & put in drying cupboards before lunch but rather wilted nevertheless, especially the top trays (i.e. plants Nos 64-84), ~~although~~. The plants of rows K-Q measured & put in drying cupboards during afternoon.

8.1.35
Plants of rows R-U measured & put in drying cupboards. ~~Although~~ in morning. All perfectly fresh. Seems probable that loss in wt. due to respiration overnight would not be important. (N.B. of Ht/dry wt ratio of rows killed yesterday with those killed today).

10.1.35.
Lamps in drying cupboard put out at 5 p.m. All ~~saw~~ plants appeared perfectly dry & had done so since 9.1.35 in morning.

12.1.35.
Z & A transferred to paper bags & strung up.

29.1 – 2.2.35
All plants of rows 27-48 (from S end) tagged Plants of No 48 tagged a1 a2 a3 — — a83 a84 from E to W. No 47 similarly tagged b1 b2 etc. No 27 tagged v1 v2 etc.?

4.2.35.

All tagged plants of rows a b c d e f g h cut off at ground level before breakfast. Placed in trays (five trays per row) & taken to lab, each tray separately. No covering used. Rest of tagged plants cut after breakfast — i to o put in trays (four per row) & p to v put in large billy cans (six per row). The plants of rows a – o all measured & put in drying cupboards. The later rows somewhat wilted, but not seriously as it was a cool day.

5.2.35.

Plants of rows p – v measured & put in drying cupboards. Plants all unwilted but had great tendency to shed leaves & squares on handling. As far as possible the shed ls & squs placed with the plants from which they came, but some loss unavoidable.

Note. The plants of C3a very irregular in size, but did not appear more so than on many of the experiments e.g. Rotn (loam) a/& Comp Exp. If anything however, there was slightly more irregularity between adjacent plants (as distinct from good & bad "patches") on C3a than on the expts i.e. correlation between adjacent plants would be less on C3a*.

Note.

Plants cut 7.1.35 were a) put in drying cupboard until dry b) strung up in paper bags till June [c)] oven dried for at least 8 hrs aggregate (& at at least 2½ hrs immediately before weighing) d) weighed on 5g Joly balance & wts recorded in cms (1cm = ·168 grms)

* This impression may have been due to the good & ~~poor~~ patches due to old road on C2a Rotn (loam) Expt (See air photos)

All the plants of one row were dried at the same time & in the same oven, but the early numbers were weighed first i.e. the late numbers had longer cooking (further loss in weight on recooking negligeable, however).

Plants cut 4.2.35 were a) put in drying cupboard until dry b) strung up in paper bags in chemistry lab until July c) weighed ~~on~~ on beam balance to 0.1 gram (using the 0.05 g weight). During all the time weighings were being done ~~for~~ no ovens were going in the Chem. Lab so that the temperatures & humidity conditions all over the ceiling should have been similar. Weighings done in July & Aug

Note:

Compactness Expts: 7 row plots (2'X3'6" spacing). Middle 22 pls kept for yields. 32 pls on each side of these used for samples. 2 plants at each end as edge plants. Total 90 plants in a row.

Rotation Expts: 11 row plots (2'X3'6" spacing). 3 edge plants at each end leaving 31 pls per row for samples.

Oven drying 6-8.3.35

Row A & Z 1-20

Cooked 10 am. to 5 pm. Wed.

" 9 am to 11.30 Thurs.

A & then Z weighed 11.30 - 4.45 pm.

Some re-cooked 9 am to 3 pm Fri.

Re-weighed:—

	New wt	1st wt	
A 3	13.40	13.50	
4	10.80	10.90	
5	12.95	13.00	
Z6	2.60	2.50	Bad.
25	4.90	4.90	
52	4.60	4.60	
53	11.50	11.55	
67	4.35	4.40	×
68	3.50	3.55	×
79	3.25	3.25	

i.e. for all except 26, 67 & 68 further loss is less than 1%. The exceptions probably due to loss of material.

Z 21 - 84 Cooked 10-5 Wed, 9-5 Thurs 9-3.20 Fri. Then weighed.

Samples Thorn (loam) a. 3.12.34

	IV						V						VI					
	Soy		M		T		S		M		C		C		Soy		F	
Start	38	16	9	38	36	27	1	44	23	47	29	3	44	23	49	34	16	37
Tin	43	44	45	46	47	48	55	56	57	58	59	60	67	68	69	70	71	72
	F		S		C		T		Soy		F		T		M		S	
Start	47	21	43	45	32	34	6	35	16	22	2	37	44	31	21	2	42	48
Tin	37	38	39	40	41	42	49	50	51	52	53	54	61	62	63	64	65	66

Road. C2a N

31 49 32 1 11 3 31 3

Begin in N.E. corner of each plot & count towards S. Random start 1-49 & then every 49th pl. until 7 taken. After 1st pl. move across to next row, but one, & back 13 pls (going back to previous row if necessary).

Samples Thorn (loam) a. 3.12.34

Road N

	C		Soy		T		Soy		M		S		T		F		C	
Start	15	4	2	16	38	42	47	45	29	14	34	20	5	37	9	45	4	35
Tin	7	8	9	10	11	12	19	20	21	22	23	24	31	32	33	34	35	36
	S		M		F		T		C		F		S		Soy		M	
Start	22	28	43	38	45	13	32	43	20	18	25	19	1	6	40	47	14	30
Tin	1	2	3	4	5	6	13	14	15	16	17	18	25	26	27	28	29	30
	I						II						III					

C1a

31 49 32 1 11 3 31 3

Begin in NE corner of each plot & count towards S. Random start 1-49 & then every 49th pl. until 7 taken. After 1st pl. move across to next row, but one, & back 13 pls. (going back to previous row if necessary).

C 3a. Germination counts 1934.
Planted 22.11.34

1772
1848

Full stand = 84.

50 lines.

		6	11	11	11	11	lines
	Rows		5 9 10 11	1 6 9 10	2 6 8 9	3 4 6 8	
5·30pm	Pls. 26.11.		73 73 65 73	69 72 56 72	62 58 56 67	59 71 64 59	5·30pm
	Rows		1 2 6 9	1 3 8 10	2 5 7 11	2 3 4 8	
S	Pls. S 27.11		78 74 73 78	78 79 77 77	73 78 71 74	69 66 77 67	88·5% 11·30am
	Rows		1 4 9 11	2 7 8 9	1 6 9 10	1 8 10 11	
	Pls. 29.11		80 78 82 78	83 80 80 80	71 72 76 72	75 73 80 70	12 noon 91·5%

1189

1230
1344

84.

C39. Germination count of whole field

4.12.34. 5/1/35 — Full stand = 84. — 4.12.34

Row	Pls.	Pls	Row	Pls	Row	Pls	Row	Pls.
1	84	83	51	82	101	80	151	81
2	77	75	52	81	102	77	152	78
3	84	84	53	74	103	80	153	77
4 U	82	80	54	83	104	80	154	77
5 T	80	79	55	80	105	80	155	80
6 S	83	83	56	81	106	79	156	76
7 R	80	78	57	81	107	80	157	78
8 Q	82	81	58	82	108	78	158	75
9 P	82	79	59	82	109	77	159	78
10 O	79	74	60	81	110	80	160	79
11 N	84	83	61	83	111	74	161	79
12 M	79	79	62	79	112	77		
13 L	76	74	63	81	113	72		
14 K	80	72	64	77	114	74		
15 J	83	81	65	79	115	71		
16 I	80	78	66	81	116	80		
19 H	80	79	67	84	117	76		
18 G	81	79	68	77	118	74		
19 F	84	81	69	81	119	76		
20 E	82	78	70	79	120	73		
21 D	79	79	71	78	121	75		
22 C	84	82	72	78	122	76		
23 B	80	78	73	83	123	71		
24 A	82	82	74	74	124	78		
25 Z	83	83	75	81	125	76		
26	78	76	76	76	126	75		
27 v	84	82	81	77	127	74		
28 u	84	84	84	78	128	73		
29 t	80	80	78	79	129	76		
30 s	80	76	72	80	130	74		
31 r	82	82	80	78	131	77		
32 q	78	77	76	81	132	70		
33 p	83	83	82	80	133	69		
34 o	78	80	77	77	134	67		
35 n	82	79	75	81	135	67		
36 m	82	82	81	86	136	67		
37 l	82	73	70	87	137	73		
38 k	77	76	76	88	138	70		
39 j	84	83	82	89	139	76		
40 i	81	81	78	90	140	77		
41 h	80	78	78	91	141	72		
42 g	78	78	77	92	142	73		
43 f	83	82	82	93	143	66		
44 e	80	80	80	94	144	66		
45 d	83	80	79	95	145	80		
46 c	83	81	80	96	146	78		
47 b	79	78	78	97	147	79		
48 a	79	77	76	98	148	76		
49	81	81	79	99	149	80		
50	78	78	78	100	150	80		

94.5%

29.1.35

93.2%

96.6%

96.8%

96.3%

80 - 81
78 - 79
< 78