

FIELD EXPERIMENTS 19 36

Crop: Sugar Beet.

Field: B.

Experiment:

Periodic lifting of sugar beet.

Treatments & Layout:

- | | |
|---------------------------------|--|
| 1. Marsters drilled April 11th) | } Lifted at 9 fortnightly intervals from the 14th September. |
| 2. Marsters drilled May 11th | |
| 3. Klein E April 11th | |
| 4. Klein E May 11th | |

4. randomised blocks.

Each plot 5 yds. x 1 yd. at harvest.

Manuring with dates of:

F. Y. M. ploughed in during winter.

Artificially applied immediately before working down the seedbed.
3 cwts. Nitrate Soda: 3 cwts. Superphosphate: 2 cwts. Potash Salts.

	11th April.	Klein E	
Date of drilling:	11th May	Variety: Marsters	Seed Rate: 15 lbs.

Date of

Date of Harvesting: Fortnightly periods from 14th Sept. to 4th Jan. 1937.

Remarks (previous cropping, cultivations, etc.)

1935: Resistance Oats.

Seedbed worked down as for ordinary farm crop.
 Germination very irregular for early drilling.
 Extended germination period.
 Early drilling singled May 25th.
 Late " " June 11th.

Note Book No.
W.9.

Box file ①

PERIODICS, 1936.

Plant Populations.

	Early Marsters	Late Marsters	Early Klein	Late Klein	Mean	S. E.
14th September	20,080	26,860	22,510	24,680	23,500	425 plants
28th September	21,300	26,140	21,540	25,650	23,700	
12th October	20,810	24,680	19,840	27,350	23,200	
26th October	20,570	23,230	21,540	23,470	22,200	
9th November	19,840	26,140	22,260	23,720	23,000	
23rd November	21,300	25,890	21,300	27,830	24,100	
7th December	25,890	28,070	22,510	25,890	25,600	
21st December	22,260	24,440	22,510	27,830	24,300	
4th January	25,170	25,890	25,650	25,650	25,600	
Mean	21,900	25,700	22,200	25,800	23,900	
Standard Error	<u>1.314 Plants</u>					

No significant differences

Yield of Washed Beet - tons per acre.

	Early Marsters	Late Marsters	Early Klein	Late Klein	Mean	S. E.
14th September	11.23	9.23	12.04	8.59	10.28	0.428 tons S.G.
28th September	13.18	9.02	12.64	11.12	11.49	
12th October	11.93	10.31	13.45	11.66	11.84	
26th October	13.18	10.31	14.36	10.75	12.15	
9th November	13.45	11.72	15.98	13.12	13.57	
23rd November	12.91	10.42	15.59	13.88	13.18	
7th December	16.31	11.88	15.82	12.58	14.15	
21st December	14.63	11.88	18.74	13.45	14.68	
4th January	17.39	12.80	17.44	14.85	15.63	
Mean	13.80	10.85	15.11	12.23	13.00	
Standard Error	0.60 tons Sig.					

	Early Drilled	Late Drilled	Mean	
Marsters	13.80	10.85	12.33	} Sig.
Klein	15.11	12.23	13.67	
Mean	14.45	11.54	S.E. = 0.42 tons	

Sig.

PERIODICS 1936

Sugar Contents.

	Early Marsters	Late Marsters	Early Klein	Late Klein	Mean	S.E.
14th September	16.9	17.1	15.8	15.9	16.44	
28th September	17.1	17.2	16.0	16.2	16.64	
12th October	18.5	19.0	17.1	17.6	18.08	
26th October	18.8	19.7	17.9	18.1	18.63	
9th November	19.7	20.0	18.5	18.8	19.26	0.52%
23rd November	19.3	19.7	18.3	18.5	18.95	
7th December	19.8	19.7	18.2	18.8	19.13	<u>Sig.</u>
21st December	19.3	19.7	18.3	18.7	18.94	
4th January	19.1	19.6	18.3	18.3	18.88	
Mean	18.76	19.07	17.61	17.87		

Standard Error = 0.35% Sig.

	<u>Early Drilling.</u>	<u>Late Drilling</u>	<u>Mean.</u>
Marsters	18.76	19.07	18.91
Klein	17.61	17.87	17.72
Mean	18.18	18.47	S.E. = 0.25%

Not Sig.

Yield of Sugar - Cwts. per Acre.

	Early Marsters	Late Marsters	Early Klein	Late Klein	Mean	S.E.
14th September	38.18	31.62	33.23	26.90	33.72	
28th September	45.36	31.10	40.52	35.98	38.23	
12th October	44.54	39.07	46.20	41.10	42.72	
26th October	49.64	40.58	51.60	38.94	45.19	1.63 cwts.
9th November	53.14	47.02	59.02	49.31	52.12	
23rd November	50.01	41.19	56.79	51.22	49.79	<u>Sig.</u>
7th December	64.68	46.81	57.61	47.43	54.13	
21st December	56.40	46.61	68.55	50.05	55.40	
4th January	67.38	50.07	63.74	54.39	58.89	
Mean	52.14	41.56	53.58	43.92		

Standard Error 2.26 cwts. Sig.

	<u>Early Drilled</u>	<u>Late Drilled</u>	<u>Mean</u>
Marsters	52.14	41.56	46.85
Klein	53.58	43.92	48.75
Mean	52.86	44.74	S.E. = 1.60 cwts.

Sig.

PERIODICS 1936

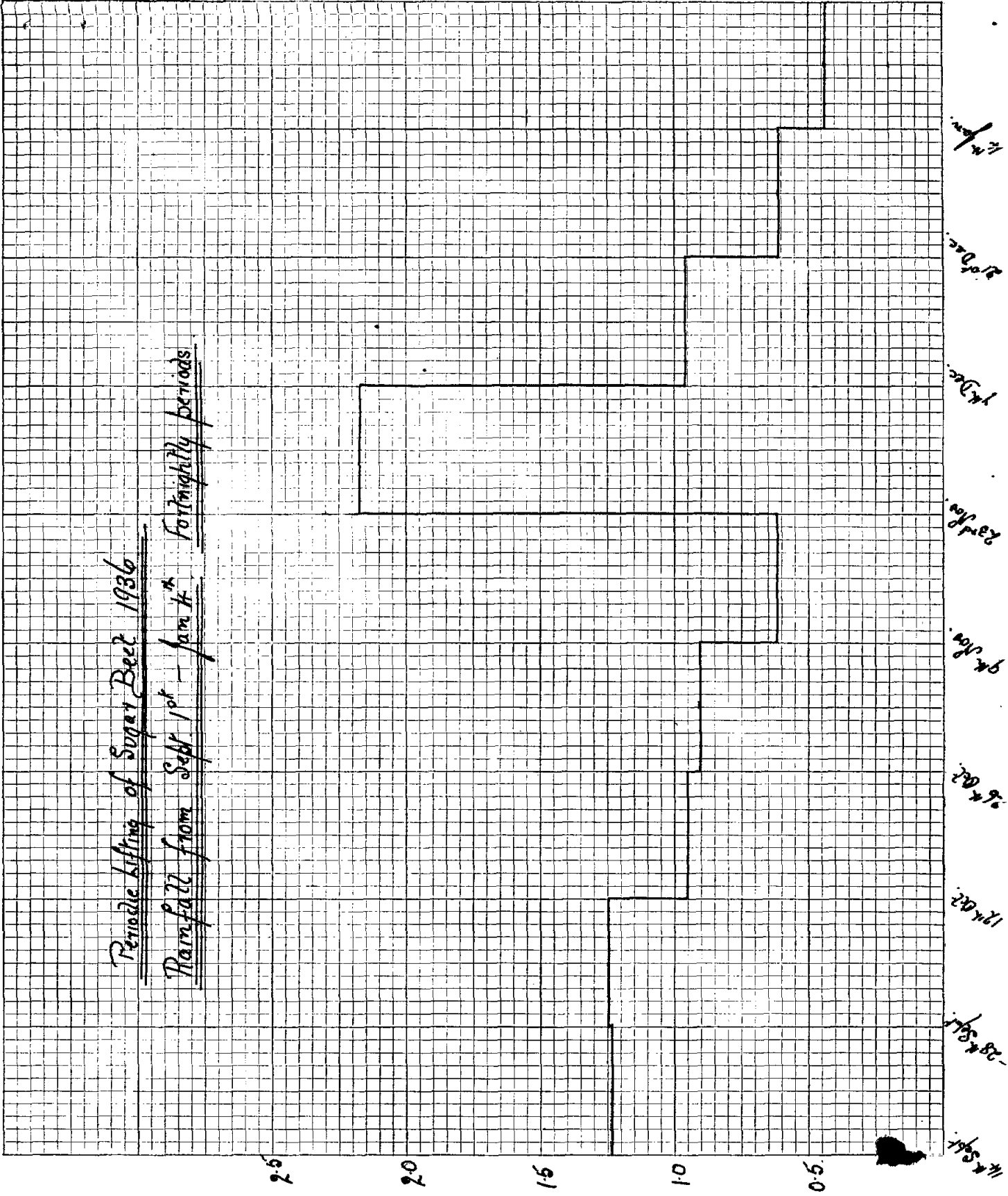
Yield of Teps - Tons per acre.

	Early Marsters	Late Marsters	Early Klein	Late Klein	Mean	S.E.
14th September	11.18	9.61	12.52	9.67	10.75	
28th September	11.93	8.10	13.77	11.07	11.22	
12th October	10.42	8.48	12.52	10.58	10.51	
9th November	7.45	6.75	10.85	7.99	8.26	0.41 tons
21st December	7.24	5.45	10.42	6.32	7.36	
4th January	7.45	5.51	9.07	7.07	7.28	<u>Sig.</u>
Mean	9.28	7.32	11.53	8.79		
Standard Error = 0.72 tons						<u>Sig.</u>

	Early Drilled	Late Drilled	Mean	
Marsters	9.28	7.32	8.30) <u>Sig.</u>
Klein	11.53	8.79	10.16	
Mean	10.40	8.05	S.E. = 0.51 tons	
<u>Sig.</u>				

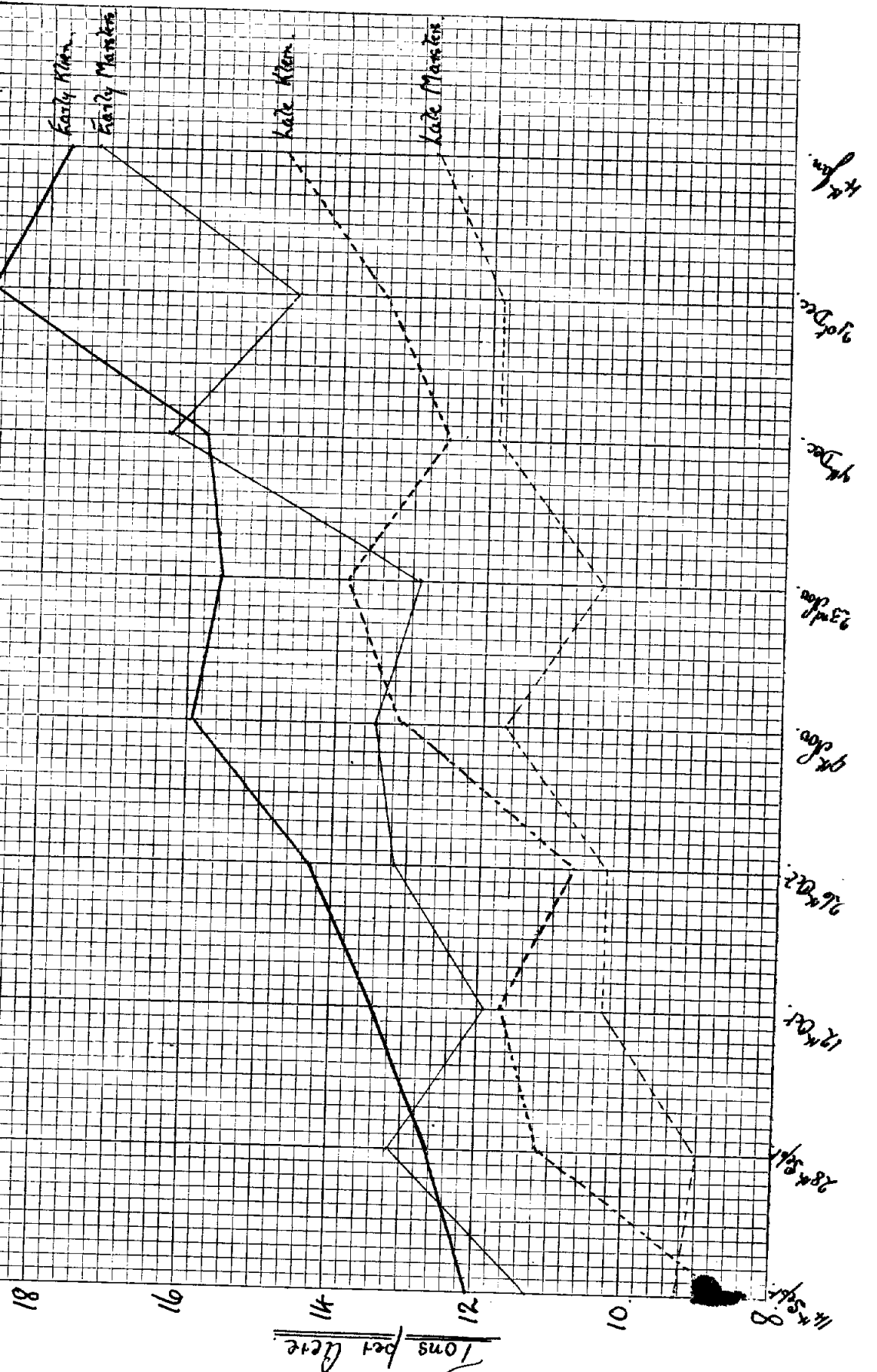
Periodic listing of Sugar Beet 1936

Harmfall from Sept 1st - Jan 1st fortnightly periods



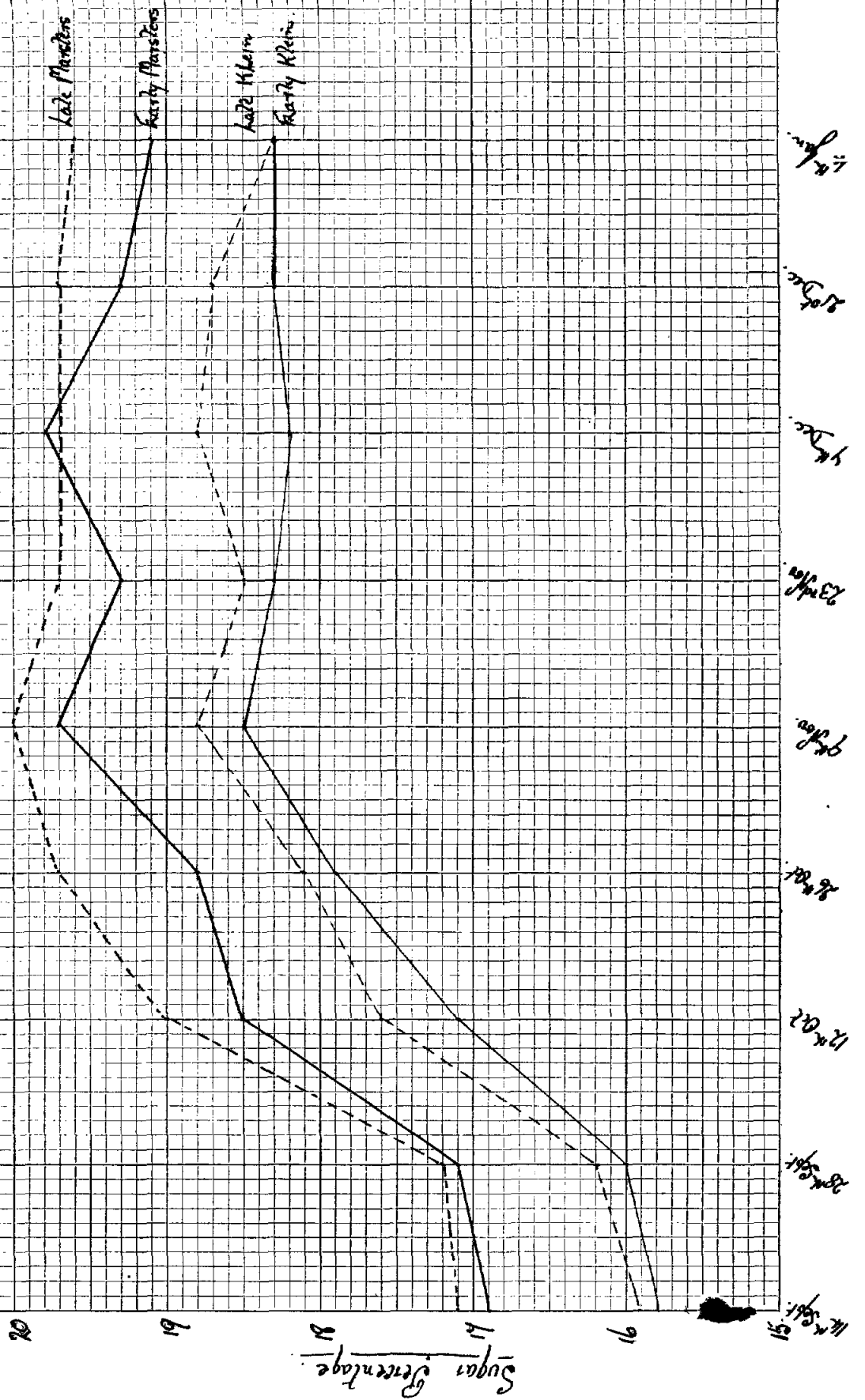
Periodic Kipping of Sugar Beet 1936 Field B

Yield of Washed Beet - Tons per Acre



Periodic Testing of Sugar Beets 1936

Sugar Content



Periodic Lifting of Sugar Beet 1936

Yield of Sugar - Cane - Area.

