

Serial No. ✓

A7.

FIELD EXPERIMENTS 1950

ENS/6002

Crop: Sugar Beet.

Field: Carr's Piece.

Experiment:

Two Stage Beet Harvesting Trial.

Treatments & Layout: Randomised block with split plots and five replications.

Main treatments: 1. October lifting.
2. November lifting.

Split for (a). Lifted and topped in normal way N.T.
(b). Topped in ground at first lifting and lifted at intervals. T
(c). Lifted and topped at first lifting and thrown into small
heaps. C.

Again split for 1 - 5: Weighed and sugared at time of first lifting
and at 1, 2, 3 and 4 week intervals afterwards.

Plot Size: 10 sq. yds.

manuring with dates ...

As for farm crop.

Date of Drilling:

Variety: Klein E.

Seed Rate:

Date of first October lifting: October 11th.

Date of first November lifting: November 8th.

Remarks (previous cropping, cultivations, etc.)

The first November lifting and last October took place on same day.

The topped plots were topped by hand-hoe.

Note Book No. Sugar Beet 1949. --

Box File (2)

Field Experiments 1950 - Results.

Sugar Beet.

2-Stage Harvesting Trial

Carr's Piece.

Yield of Washed Beet.

Tons per Acre.

	<u>November</u>	<u>October</u>	<u>Mean.</u>
Topped	16.71	16.70	16.70
Not Topped	15.90	16.05	15.98
C	16.27	14.40	15.34
Mean	16.29	15.71	
Significant Difference		Insignif.	0.62

	<u>Topped.</u>	<u>Not Topped.</u>	<u>C.</u>	<u>Mean.</u>
1st Lifting	16.11	16.40	15.88	16.13
2nd Lifting	16.91	16.14	15.01	16.02
3rd Lifting	16.72	15.06	15.38	15.72
4th Lifting	17.13	16.53	15.37	16.34
5th Lifting	16.63	15.75	15.05	15.81
Significant Difference	0.77	0.77	0.77	Insig.

Sugar Percentage.

	<u>%</u>		<u>October</u>	<u>November</u>	<u>Mean</u>
October	17.47	N.T.	17.95	17.49	17.72
November	17.18	T.	16.45	16.82	16.64
Sig. Diff.	0.22	C	18.01	17.24	17.62
		Sig. Diff.	0.31	0.31	0.22

<u>Lifting.</u>	<u>October</u>	<u>November</u>	<u>Mean</u>	<u>N. T.</u>	<u>T.</u>	<u>C.</u>
1	17.97	17.83	17.90	17.90	17.89	17.90
2	17.60	17.75	17.67	18.02	17.02	17.98
3	17.59	17.07	17.33	17.83	16.42	17.73
4	17.33	16.81	17.07	17.46	16.24	17.50
5	16.88	16.48	16.68	17.40	15.63	17.01
Significant Difference	0.256	0.256	0.18	0.31	0.31	0.31

Significant difference for comparison between parts of different whole plots 0.202.

Yield of Sugar.

Cwts. per Acre.

	<u>N.T.</u>	<u>T.</u>	<u>C.</u>	<u>Mean.</u>
October	57.6	54.9	51.9	54.8
November	55.6	54.2	56.1	56.0
Mean	56.6	55.6	54.0	n. sig.

Yield of Sugar (cwts. per acre).

<u>Lifting.</u>	October	November	Mean	T.	N.T.	C.
1	55.6	59.9	57.8	58.7	57.6	56.9
2	54.3	58.8	56.5	58.2	57.6	53.9
3	55.3	53.3	54.3	53.7	54.9	54.4
4	56.0	55.3	55.6	57.7	55.6	53.7
5	52.8	52.6	52.7	54.8	52.1	51.2
Sig. Diff.	2.5	2.5	3.6	3.09	3.09	3.09

Noxious Nitrogen & K + Na Mg. Equiv:

October.

<u>Lifting.</u>	<u>N. T.</u>		<u>T.</u>		<u>C.</u>	
	<u>Nox. N.</u>	<u>K + Na.</u>	<u>Nox. N.</u>	<u>K + Na.</u>	<u>Nox. N.</u>	<u>K + Na.</u>
	mg. %.	mg. equiv.				
1.	18	2.72	18	2.76	16	3.15
2.	32	2.44	35	2.78	34	2.81
3.	20	2.54	20	2.59	21	3.09
4.	23	2.65	22	2.87	24	3.17
5.	32	2.43	34	2.85	38	2.76

November.

1.	32	2.41	35	2.52	32	2.50
2.	22	2.35	24	2.39	22	2.41
3.	21	2.23	18	2.52	20	2.48
4.	23	2.20	21	2.46	20	2.63
5.	18	2.28	14	2.83	16	2.51