

Serial No.

A7
ENS/0603

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FIELD EXPERIMENTS 1950
~~1950/51~~

Crop: Sugar Beet

Field: Factory Areas

Experiment: 2 Stage beet harvesting.

To compare effect on yield of beet and sugar of topping beet leaving roots in ground for varying lengths of time before lifting.

Treatments & Layout:

One replicate in each of 18 factory areas:*

- 2 main treatments: (a). Topped at time of lifting.
(b). Topped at beginning of month and lifted at varying times afterwards.

Sub Treatments: Times of Lifting.

- | | | | |
|------|----------------------|------|-----------------------|
| (a). | At time of topping | (e). | 14 days after topping |
| (b). | 2 days after topping | (f). | 21 days after topping |
| (c). | 4 days after topping | (g). | 28 days after topping |
| (d). | 7 days after topping | | |

Plot Size: At each lifting 10 samples each 1 row x 8 yds. from each main plot.

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Date of Drilling:

Variety:

Seed Rate:

Date of

Date of

Remarks. (previous cropping, cultivations, etc.)

*N.B. 9 factories were asked to do this work in November and 9 in October:

October: Allscot, Bury, Cantley, Colwick, Felstead, Ipswich, Welham, Kidderminster, Spalding.

November: Bardney, Brigg, Cupar, Ely, Lynn, Peterborough, Poppleton, Selby, Wisington.

Note: - each factory was asked to prepare its own randomisation for topped and not topped plots and for the rows to be taken as samples at each ~~for~~ lifting so that the results could be analysed statistically and a legitimate S.E. calculated.

Note Book No.

Two Stage Beet Harvesting Trial

Age Sugar: November.

<u>Treatment</u>	<u>%</u>	
Topped	16.46	
Not Topped	17.27	S.E. of one whole plot = 0.067.
Sig. Diff.	0.22	

	<u>Topped</u>	<u>Not Topped</u>	<u>Mean</u>
Lifted at time of Topping	17.3	17.5	17.4
Lifted 2 days after topping	17.0	17.4	17.2
Lifted 4 days after topping	16.7	17.4	17.0
Lifted 7 days after topping	16.5	17.2	16.9
Lifted 14 days " "	16.2	17.4	16.8
Lifted 21 days " "	15.9	17.0	16.5
Lifted 28 days " "	15.5	16.9	16.2

Sig. Diff. 0.21 0.21 0.15

Sig Diff for X comparisons = 0.27

Co. of Variation = 1.33%

Age Sugar: October.

<u>Treatment</u>	<u>%</u>
Topped	14.9
Not Topped	16.0
Sig. Diff.	0.2

<u>No. of days after Topping</u>	<u>Topped</u>	<u>Not Topped</u>	<u>Mean</u>
0	15.9	15.9	15.9
2	15.5	16.0	15.8
4	15.3	16.0	15.6
7	14.8	15.8	15.3
14	14.6	16.1	15.3
21	14.2	16.0	15.1
28	14.1	16.2	15.2
	0.3	0.3	0.2

Sig. Diff. for X comparison = 0.32.

Two Stage Beet Harvesting Trial.

OCTOBER.

Weight of Washed Beet - Given in lbs./9 plots as row-widths were not stated and so cannot convert to tons/acre.

<u>No. days after Topping.</u>	<u>Topped</u>	<u>Not Topped</u>	<u>Total</u>
0	2738	2852	5590
2	2754	2816	5570
4	2843	2957	5800
7	2928	2972	5900
14	2872	2930	5802
21	2871	3047	5918
28	2921	3050	5971

Sig. Diff. Insig. Insig. 173

Topped: 19,927.0
 Not Topped: 20,625.0 Co. of Var. 4.5%
 Sig. Diff. Insig.

NOVEMBER.

These figures were not statistically analysed.

<u>No. of days after topping.</u>	<u>Topped</u>	<u>Not Topped.</u>	<u>Total</u>
0	3043.0	3094.0	6137.0
2	3118.5	3061.75	6180.25
4	3052.75	3069.25	6122.0
7	3100.5	3121.0	6221.5
14	3137.5	3181.0	6318.5
21	3141.5	3191.5	6333.0
28	3011.5	3057.0	6068.5

Topped: 21,605.25
 Not Topped: 21,775.50

Note: - Results for noxious nitrogen and in some cases juice purity were obtained but were never presented: they are still in the main file.