UNIVERSITY OF MINNESOTA
DEPARTMENT OF AGRICULTURE
UNIVERSITY FARM, ST. PAUL

DIVISION OF AGRONOMY AND PLANT GENETICS

April 11, 1936

Mr. W. G. Cochran
Rothamsted Experimental Station
Harpenden, Herts.
England

Dear Mr. Cochran:

In reply to your letter of March 21, the individual plot yields of the uniformity trials reported on in the paper "Size and Shape of Plot in Relation to Field Experiments with Sugar Beets", Jour. Agric. Res. Vol. 44: pages 649-668, 1932 are given on page 652 of that article.

The data used in "Further Studies of Size and Shape of Plot in Relation to Field Experiments with Sugar Beets", Jour. Agric. Res. 47: 591-598, 1933 were not reported in that article. I have had the actual data typed and including a copy. I asked the typist to check this copy carefully with the original and assume that this copy is correct.

Dr. C.H. Goulden of the Dominion Rust Research Laboratory, Winnipeg, Manitoba, Canada, stopped here last Saturday for a visit. Dr. Goulden says that he has uniformity trial data on 2400 square yard plots of wheat. He said that the yields were extremely variable but may be of some use. I believe Dr. Goulden would furnish you with a copy of these data if you are interested in them.

Sincerely yours,

F. R. Immer

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Associate Professor of Agronomy
and Plant Genetics

FRI/SM

Yield in pounds per plot (less 40 pounds) of sugar beets grown in Minnesota 1931.
Plots were single rows 22" apart and 33' long. To obtain actual yields add 40 pounds to the figures in this Table.

Row Number	Block Number 1	2	3	4	5	6	7	8	9	10	Total
1	14.1	28.6	24.8	23.2	10.5	18.9	16.9	9.5	11.2	13.5	171.2
2	18.7	25.3	15.7	30.1	28.0	17.5	11.0	19.0	13.4	13.8	192.5
3	28.0	14.4	22.4	24.7	22.7	22.5	16.2	14.8	14.1	19.5	199.3
4	18.1	37.2	19.4	29.4	29.1	23.6	27.0	15.9	15.9	13.4	229.0
5	8.1	18.9	24.6	28.0	19.1	30.8	13.8	23.3	19.0	22.9	208.5
6	14.3	24.1	19.5	19.0	19.0	18.0	19.4	22.1	12.3	20.3	188.0
7	9.8	9.9	14.2	25.6	21.5	19.4	22.3	32.0	16.7	14.4	185.8
8	17.5	14.2	22.0	21.0	14.3	17.9	16.6	11.9	23.3	24.9	183.6
9	18.2	20.5	22.6	16.6	21.8	27.4	25.0	16.2	25.0	16.1	209.4
10	18.0	22.0	16.0	22.6	23.0	23.2	22.3	19.5	18.1	19.0	203.7
11	23.6	19.1	12.5	22.3	27.3	16.8	22.5	25.1	21.8	20.5	211.5
12	13.7	20.9	16.0	13.7	18.1	18.4	14.8	20.8	19.6	15.2	171.2
13	16.1	15.7	24.7	9.8	26.3	22.6	21.6	16.6	18.0	10.4	181.8
14	17.8	19.8	12.2	14.7	17.0	17.3	15.5	12.7	22.6	19.6	169.2
15	20.0	23.6	16.4	18.3	27.9	12.7	20.6	13.4	19.8	7.4	180.1
16	21.0	19.7	14.7	16.0	16.6	12.7	22.0	26.5	20.7	15.7	185.6
17	12.3	11.5	21.7	10.9	8.0	25.3	28.4	18.8	18.6	10.0	165.5
18	13.1	11.2	22.7	19.3	18.9	22.4	22.9	6.8	22.4	29.8	189.5
19	21.8	20.1	18.5	9.9	22.5	23.4	28.9	20.7	28.2	13.3	207.3
20	20.9	39.9	28.4	13.1	24.2	26.7	32.2	23.7	18.9	9.4	237.4
21	20.1	16.6	33.0	21.2	26.0	18.0	20.3	24.4	21.9	25.1	226.6
22	21.8	30.4	37.9	18.3	16.1	31.0	34.5	25.9	32.3	20.0	268.2
23	21.7	19.5	22.5	27.6	17.8	22.4	27.1	23.3	27.6	14.5	224.0
24	18.3	16.8	20.1	16.3	15.0	18.9	20.0	14.6	24.5	19.7	184.2
25	15.1	12.9	23.1	21.2	18.9	19.4	24.7	25.2	13.3	20.2	194.0
26	6.5	19.3	10.9	13.7	20.4	21.6	10.1	26.9	23.1	21.2	173.7
27	38.4	34.7	22.9	30.0	17.4	32.3	14.7	25.8	21.2	12.8	250.2
28	8.0	16.3	19.6	13.7	18.9	16.1	18.0	20.5	17.3	20.3	168.7
29	35.0	13.0	19.9	15.5	15.3	26.0	14.5	32.6	25.0	19.2	216.0
30	30.6	24.0	24.8	17.6	30.5	16.8	21.2	29.7	23.5	11.4	230.1

Row Number	Block Number 1	2	3	4	5	6	7	8	9	10	Total
31	12.3	8.5	13.0	15.8	10.7	26.2	2.9	28.6	34.1	12.5	164.6
32	13.6	19.9	20.2	22.4	16.1	15.7	12.3	16.1	16.1	13.7	166.1
33	25.3	30.9	21.2	29.3	22.4	27.1	21.5	26.0	29.5	21.8	255.0
34	16.8	23.7	16.4	27.8	40.7	16.5	15.8	21.9	20.1	17.0	216.7
35	17.4	19.3	29.5	16.7	25.7	16.5	15.5	18.8	23.5	13.9	196.8
36	13.4	16.9	18.4	17.8	21.5	19.2	14.8	21.0	25.2	12.8	181.0
37	23.6	15.8	25.5	18.6	25.3	35.7	16.5	23.9	17.5	19.2	221.6
38	28.3	19.8	22.7	17.3	18.1	23.1	20.3	27.2	24.0	32.9	233.7
39	27.5	17.4	17.7	18.2	20.2	18.1	12.7	17.9	16.3	16.5	182.5
40	26.7	25.7	34.1	26.7	19.7	25.4	12.7	29.1	27.4	15.8	243.3
41	12.8	19.8	13.7	22.9	20.5	17.8	12.1	30.1	17.4	11.4	178.5
42	28.8	22.3	18.5	19.8	19.2	21.1	20.9	17.0	20.0	28.1	215.7
43	15.0	16.8	19.4	27.6	30.9	22.7	13.3	17.7	21.9	21.3	206.6
44	25.3	13.2	18.0	17.3	19.1	15.4	18.3	18.8	17.9	13.5	176.8
45	14.0	19.7	12.4	31.9	12.1	15.4	18.0	23.7	25.3	20.6	193.1
46	7.1	6.6	23.1	24.1	14.8	25.6	13.2	24.2	28.6	18.1	185.4
47	11.8	22.7	19.8	12.4	21.8	13.4	20.8	15.2	25.6	30.0	193.5
48	16.5	15.8	18.1	12.4	13.8	17.0	18.6	13.3	25.8	21.4	172.7
49	12.6	16.6	24.8	17.6	18.7	15.4	21.7	17.3	20.7	22.5	187.9
50	20.5	18.6	16.4	13.4	19.1	9.5	9.8	17.3	19.0	21.7	165.3
51	14.2	19.5	17.0	21.0	19.1	21.3	23.2	26.0	25.1	21.3	207.7
52	23.5	19.5	17.1	14.4	9.5	8.3	7.2	26.7	18.7	16.9	161.8
53	15.0	18.6	17.2	22.0	13.1	22.7	22.9	21.0	23.0	20.2	195.7
54	11.9	13.3	13.0	10.2	21.0	15.8	20.9	28.5	29.3	19.2	183.1
55	22.6	13.4	14.6	20.8	14.4	14.8	16.1	20.6	25.3	29.3	191.9
56	17.4	9.5	14.4	14.6	11.7	8.0	2.9	12.3	17.7	.2	108.7
57	12.0	19.4	10.6	13.7	30.8	9.1	7.2	18.8	24.2	27.7	173.5
58	9.0	7.0	10.3	7.1	23.7	29.3	1.2	15.6	13.2	25.3	141.7
59	12.1	14.6	7.3	22.3	11.9	15.0	11.3	17.1	24.3	20.5	156.4
60	14.0	12.3	10.5	13.2	15.0	16.6	.9	14.5	14.5	19.6	131.1
Total	1081.6	1137.2	1158.6	1152.6	1192.7	1197.7	1050.5	1244.4	1280.5	1098.4	11,594.2

These are yield data in pounds per plot for single row plots 33 feet long, each block being 33 feet. The field layout is exactly the same as for the 1931 study. The yields were obtained for normally competing beets in the row and then corrected to the basis of 100% stand of normally competing beets per plot.