EMPIRE COTTON GROWING CORPORATION.
INCORPORATED BY ROYAL CHARTER.

OFFICES:
MILLBANK HOUSE,
MILLBANK,
LONDON, S.W.1.

CABLES: "EMCOTTON, LONDON"

I shall be glad to learn of any suggestions on experimental design which you may care to make after you have examined the data of the uniformity trial.

Yours faithfully,

J. A. McKinlay

Plant Breeder in Charge.

EMPIRE COTTON GROWING CORPORATION.
INCORPORATED BY ROYAL CHARTER.

OFFICES:
MILLBANK HOUSE,
MILLBANK,
LONDON, S.W.1.

CABLES: "EMCOTTON, LONDON"

31

The Cotton Station,
Gatooma,
S.Rhodesia.
23rd July, 1936.

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

Dear Sir,

Major Cameron has asked me to reply to your letter of the 27th May, 1936. I send you herewith the data of a uniformity trial which were collected here in 1935.

With us the analysis of the final expression, in terms of yield data, of our latin square and randomised block experiments of strain and spacing trials, suffers in large measure through both soil variability and periods of drought during the season of rains. And again it is difficult to estimate what would have been the actual damage due to bollworm attack on one strain or spacing treatment with other variables present in the experiment. But these are matters which might be more usefully discussed by an interview than by the writing of letters. I must make the opportunity to visit you when next I am on leave in 1938.

I.....

Notes to Uniformity Trial Picking Results, Cotton Station, Gatooma, S.R. 14th June, 1935.

Site and Strain: the U.4/64/7/10/1 cotton bulk in H-C land, running the full width of the field. Not fertilized. Following maize grain crop.

Agricultural details: planted 23/11/34, by machine, 3'6" rows; thinned to 1 plant at 6" in the row - probably nearer 1 at 8" in practice, but a good and uniform "commercial" stand throughout, to the eye. Harvested 14/6/35.

Crop History: season good until peak of flowering - good growth, heavy flowering - then 5 weeks drought in critical period for crop, which, aggravated by exceptionally heavy aphis attack and heavy boll-worm (Heliothis obsoleta) attack accounts for low yield. Second crop promising, but abnormally cold weather spoilt this. (Note: because of the poor absolute yield, among other reasons, the data from this uniformity trial were never worked up)

Lay-out: At harvest, a block of 24 rows x 500' staked, and each row pegged off into 20 lengths of 25' each, giving 480 small plots. In the plan, the rows are numbered alphabetically A to X inclusive, and the 25' lengths from 1 to 20 inclusive along the rows.

If any use is to be made of these data it would be advisable to neglect the series of plots A1-B1-C1.....X1, and also A20-B20-C20.. .....X20, as both of these series are bordering roads.

Uniformity Trial (Cotton)

Plot Yields (Seed Cotton)

Cotton Station, Gatoom

Details (see also note attached)

Plot size
One plot: 1 row of 3'6" x 25' long = $\frac{1}{497}$

Total No. of plots: 24 x 20 = 480

Individual plots weighed to near

N ↑ Line No. A B C D E F G H I J K L M N O P Q R S T U V W X

Plot No. 1 (25')

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB./oz.	LB/oz	LB./oz.	LB./oz.	LB/oz.
1	1/4	1/5	1/7½	1/11	1/8	1/10	1/9	1/10	1/7½	1/6½	1/7	1/5	1/7½	1/8	1/4½	1/9	1/8	1/7½	1/7	1/7½	1/7	1/4½	1/2½	1/6
2	1/15	1/10½	1/-	1/14½	1/10½	1/11½	1/14½	1/12	1/7½	1/15	1/14½	1/8	1/6	1/9½	1/7	1/12½	1/9½	1/9	1/8	1/6½	1/8½	1/5½	1/4½	1/10
3	1/15	1/13½	1/10½	1/15½	1/12½	1/3½	1/4	1/14	1/9½	1/2	1/1½	1/11	1/12½	1/14½	1/15½	1/10	1/9½	1/5	1/7	1/7½	1/9	1/8	1/5	1/7½
4	1/11½	1/8	1/11½	1/7½	1/5½	1/10	1/14½	1/13	1/7½	1/10½	1/6½	1/9½	1/4½	1/8½	1/3½	1/12	1/10½	1/6½	1/10½	1/9½	1/6½	1/11	1/5	1/4
5	1/8½	1/7½	1/6½	1/4½	1/10	1/9½	1/13½	1/14½	1/7½	1/1	1/12	1/6	1/8	1/8½	1/6½	1/5½	1/6	1/8	1/12	1/10½	1/13½	1/12	1/12	1/12
6	1/5	1/8½	1/6	1/7½	1/6½	1/9	1/5½	1/8	1/8½	1/3½	1/7½	1/7	1/7	1/7½	1/7	1/7	1/5½	1/11	1/15½	1/11	1/-	1/7	1/14	1/12½
7	1/6	1/10	1/10½	1/15	1/8	1/10½	1/1	1/13½	1/3½	1/6	1/9	1/8	1/7½	1/13	1/7	1/6	1/7½	1/8	1/10	1/8	1/7½	1/13	1/8½	1/13½
8	1/8	1/7	1/5	1/4½	1/6	1/6	1/6½	1/5½	1/6	1/5	1/6	1/6	1/8	1/12	1/11	1/5½	1/7½	1/8½	1/5	1/6½	1/10½	1/9	1/5	1/6
9	1/9½	1/11½	1/9	1/10½	1/9	1/6½	1/11½	1/8½	1/9	1/8	1/7½	1/5	1/6½	1/6½	1/8½	1/8½	1/7	1/8	1/10	1/9½	1/9½	1/6½	1/5	1/9

9	9½	11½	9	10½	9	6½	11½	8½	9	8	7½	5	6½	6½	8½	8½	7	8	10	9½	9½	6½	5	9
10	11	15½	11½	8	14	11	9	10	8½	5½	7	8	12½	11½	9½	9	11	5	7½	8	9	9	5½	10
11	4½	7	5	9	9	4½	7	8	5	7	9½	4	2½	6	5	7	8	7½	5½	2	7	7½	7½	6
12	6	12½	12½	9	8½	10½	9	8	8½	4½	8	6	4½	3½	4	5	5½	5	6½	7	10	5	4½	8
13	4½	5	9	4	9½	12½	7½	9	7	2½	4½	3	4½	4	2	4	5½	9½	8	4½	5½	5½	6½	8
14	9½	8½	3	5½	3½	6½	4½	3	3	8½	5	7½	4	6	7½	10½	5½	11	10½	5½	4	13½	9½	8½
15	5½	4	6½	3½	4½	5	5	2	3	4½	5	3	4½	7	6	8	3½	8	8½	6	13½	8½	6½	11½
16	7	4	6	4	7	6	8½	2½	3	4½	2½	4½	4	4½	10½	9½	6½	6½	8	7½	4½	5	8	6½
17	8	4	6	4	7½	7½	3½	6½	4	8	6½	11	6	5½	8½	9	5½	6½	8½	5	5½	4	6	5½
18	4	5	3½	6½	9	5½	2	3½	5	4½	8½	5	7	5	6½	4	5½	3½	4½	5	7½	2½	3	3½
19	4	3	3	5	3	1½	2½	2½	3½	4½	5½	4½	7	6	7½	4	3	4	4½	4	5½	5½	6½	5½
20	4	2½	3½	2	3	3½	4½	5	1½	4½	4½	2½	3½	4½	6	7½	5½	6	2	6	4½	4½	6½	7