## EMPIRE COTTON GROWING CORPORATION.

MHABANK HOUSE, AHLES! "EMCOTTON, LONDON

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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,

MAMMinstry

Plant Breeder in Charge.



### EMPIRE COTTON GROWING CORPORATION.

INCORPORATED BY ROYAL CHARTER.

OFFICES

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

CABLES: "EMCOTTON, LONDON"

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.

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### 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 Al-Bl-Cl.....Xl, 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: I row of 3'L" x 25" long 477)

Total No. of plots weighted to reco

	×	Line	No A	В	С	D	E	F	G	Н	I	J	K	L	M	N	0	P	9	R	S	Т	U	V	W	X	To the last
	PLOT Nº	1 &	L8/02.	15	17½	LB./02.	18/oz.	710	19	10 to	17½	162	43./oz.	15-	17½	18 /s	1/4±	79	18	77½	17 /7	171	17 /7	14±	723	16	
		2	715	1/02	1	1/42	1/02	1/1/2	7143	112	772	<i>†15</i>	7142	1/8	16	195	17	7122	195	19	18	16=	杨立	15-2	142	10	
- <	1	3	15	7132	102	152	1/12/2	1/31/2	1/4	114	79±	1/2	1/12	111	1/121	1/45	1/5-1	/10	792	1/5	17	172	1/9	18	15	力主	I
		4	加支	18	十11章	172	152	<i>†</i> 10	14/2	1/13	175	102	を立	村谷宝	741	182	/3 ±	1/12	7101	161	MA + 710 1	神主	162	Tu	15	1/4	1
		5	t82	/7±	762	742	tio	793	力は気	142	<b>才7</b> 克	1/1	1/12	76	18	182	162	15-1	76	/8	7/12	1102	7132	7/12	7/12	/12	8
		6	15	ts==	<i>†</i> 6	175	162	1/9	15-1	18	182	731	171	17	17	775	17	17	15%	111	1/52	711	4	17	114	1/22	
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		8	18	17	75	142	16	16	161	15%	1/4	1/5	1/6	1/6	1/8	1/12	111	7/5-2	172	/8i	15-	762	102	19	1/5	16	
		9	192	1112	19	102	19	762	加量	182	19	1/8	竹	1/5	162	龙立	181	/s1	17	1/8	110	神主	伊立	杉主	15	19	

	9	195	九章	19	102	19	76%	加量	181	19	1/8	竹	15	162	龙盖	181	<b>/61</b>	17	18	110	神主	伊立	762	15	19	
	10	<i>†</i> 11	7152	7112	18	14	1u	19	110	182	fsi	17	te	1/122	加立	192	19	74	1/5	771	1/8	19	19	151	10	
				ts														111201	14		1/2					
	12	76	1/12=	/121	19	183	7101	19	18	182	142	18	16	142	/31	1/4	75	754	1/5-	162	17	# 1/10	75-	741	1/4	
	13	742	15	19	14	t9½	7/123	771	19	77	加加	142	/3	143	14	/2	14	/s±	193	1/8	141	/s-i	15-1	162	15	
	14	191	₹8 <sup>2</sup>	/3	/54	/31	162	742	/3	13	/8i	1/5-	775	1/4	16	172	1/10=	15%	<i>†</i> "	7102	15-2	1/4	1/132	192	1/52	
	15	7 52	14	762	732	1/42	15	ts	1/2	1/3	1/42	15	1/3	141	17	16	1/8	/32	1/8	182	16	1/133	152	を主	加至	
	16	17	14	16	14	17	76	783	1/22	/3	741	7/21/2	1/43	1/4	1/42	1/03	793	762	162	18	775	1/43	1/5-	18	を言	
	17	18	14	16	14	771	771	131	761	1/4	15	765	†"	<i>†</i> 6	152	163	19	15-2	162	1/82	15	152	14	76	15%	
	18	14	1/5	131	162	19	753	1/2	132	15	1/42	182	1/5	77	1/5	61	1/4	/51	7/3/2	142	100	1/1/2	加拉	WA 3	/3注	
77	19	14	<i>†</i> 3	/3	<i>ts</i>	/3	力拉	1/21	1/21	加加	142	15-1	1/41/2	17	16	力益	1/4	/3	1/4	1/42	1/4	752	1/52	龙立	\$-3	1
	0.5	14	121	/31	/2	1/3	731	142	1/5	力益	1/42	143	なき	/33	越	16	172	15-2	16	/2	16	/41	142	162	17	