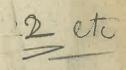
KANSAS STATE COLLEGE OF AGRICULTURE AND APPLIED SCIENCE

DEPARTMENT OF AGRONOMY
MANHATTAN, KANSAS

April 9, 1936



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

Dear Mr. Cochran:

I have your letter of March 21 in which you ask for the data from the uniformity trials at this experiment station on which my article (The Relation of Varying Rainfall to Soil Hetereogeneity as Measured by Crop Production) is based.

This data has not been published and I am therefore furnishing you typewritten copies of the actual yields obtained. The plan of the experiment including the number of plots, their size and arrangement is described in the published article. In addition to the actual yields furnished you I am sending tables showing the rank in yield of each plat in its respective series for each of the years in which yields were obtained. You will note by these figures giving the rank in yield the basis for my statements in the published article to the effect that under limited rainfall conditions, and I might add in particular on land with sufficient slope to permit of some runoff at the time of heavy rains, uniformity trials appear to be very definitely limited in their value in indicating permanent differences in productivity of any given set of experimental plats. If you have any comments or criticisms on the data or the conclusions I shall be very glad indeed to have them.

Very truly yours,

W. H. Metzger

Associate Professor of Soils

WHM:HC

Rank in Yield for the Year Indicated
Total Dry Matter
Series E

| Plat | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1934 | Average Rank |
|------|------|------|------|------|------|------|------|------|------|-----------------|
| 1 | 7 | 5 | 7.5 | 12 | 7 | 10 | 6 | 11 | 1 | 7.4 |
| 2 | 9 | 2 | 3.5 | 9 | 8.5 | 9 | 10 | 12 | 9.5 | 8.0 |
| 3 | 6 | 3.5 | 7.5 | 11 | 11 | 8 | 11 | 8 | 5 | 7.9 |
| 4 | 11 | 9 | 9 | 10 | 12 | 1 | 12 | lo | 9.5 | 9.3 |
| 5 | 10 | 10 | 2 | 8 | 10 | 12 | 8 | 5 | 8 | 8.0 |
| 6 | 4 | 11 | 5 | 7 | 8.5 | 11 | 7 | 9 | 4 | 7.4 |
| 7 | 8 | 8 | 6 | 6 | 5 | 7 | 9 | 1 | 3 | 5.9 |
| 8 | 12 | 3.5 | 3.5 | 2 | Ţ | 5 | 5 | 4 | 11 | 5.5 |
| 9 | 3 | 1 | 10 | 5 | 3 | 4 | 4 | r7 | 12 | 5.4 |
| 10 | 1 | 6 | ì | 1 | 2 | 2 | 2 | 3 | 6 | 2.6 |
| 11 | 5 | 7 | 11 | 4 | 1 | 3 | 1 | 2 | 2 | 4.0 |
| 12 | 2 | 12 | 12 | 3 | 6 | 6 | 3 | 6 | 7 | 6.3 |

Rank in Yield for Year Indicated (Total Dry Matter)
Series F

| Plat No. | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1934 | Average | |
|-------------|------|------|------|------|------|------|------|------|------|---------|--|
| 1 | 4 | 3 | 6 | 12 | 5 | 10 | 6 | 6 | 3 | 6.1 | |
| 2 | 2 | 4 | 8 | 7 | 2 | 4 | 7 | 3 | 2 | 4.3 | |
| 3 | 5 | 2 | 9.5 | 10 | 4 | 5 | 11 | 1 | 11 | 6.5 | |
| 4 | 6 | 6 | 1 | 9 | 10 | 12 | 10 | 2 | 10 | 7.3 | |
| 5 | 11 | 7 | 4 | 11 | 11 | 11 | 12 | 11 | 12 | 10.0 | |
| 6 | 1 | 10 | 2 | 6 | 6 | 8 | 8 | 4 | 4 | 5.4 | |
| 7 | 7 | 1 | 7 | 4 | 1 | 2 | 9 | 7 | 1 | 4.3 | |
| 8 | 10 | 5 | 3 | 1 | 7 | 7 | 5 | 8 | 8 | 6.0 | |
| 9 | 12 | 9 | 9.5 | 8 | 12 | 9 | 3 | 10 | 9 | 9.0 | |
| 10 | 3 | 11 | 11.5 | 3 | 8 | 3 | 1 | 9 | 5 | 6.0 | |
| 11 | 9 | 8 | 5 | 2 | 3 | 1 | 4 | 5 | 6.5 | 4.8 | |
| 12 | 8 | 12 | 11.5 | 5 | 9 | 6 | 2 | 12 | 6.5 | 8.0 | |

Rank in Yield for Year Indicated (Total Dry Matter)
Series G

| Plat | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1934 | Average |
|------|------|------|------|------|------|------|------|------|------|---------|
| 1 | 2 | 3 | 5 | 11 | 1 | 5 | 9 | 5 | 4 | 5.0 |
| 2 | 12 | 12 | 10 | 10 | 5 | 8 | 11 | 8 | 12 | 9.8 |
| 3 | 6 | 5 | 8 | 9 | 7 | 7 | 12 | 6 | 5 | 7.2 |
| 4 | 7 | 8 | 2 | 7 | 6 | 9 | 10 | 12 | 11 | 8.0 |
| 5 | 1 | 2 | 3 | 6 | 4 | 4 | 8 | 4 | 1 | 3.6 |
| 6 | 8 | 4 | 7 | 4 | 3 | 2 | 6 | 7 | 2 | 4.7 |
| 7 | 4 | 1 | 1 | 8 | 9 | 10 | 4 | 11 | 6 | 6.0 |
| 8 | 9 | 7 | 6 | 2 | 11 | 11 | 3 | 9.5 | 3 | 6.8 |
| 9 | 11 | 11 | 11 | 12 | 12 | 12 | 5 | 2 | 9 | 9.4 |
| 10 | 5 | 9 | 9 | 5 | 10 | 6 | 2 | 3 | 8 | 6.3 |
| 11 | 3 | 6 | 4 | 3 | 2 | 1 | 1 | 1 | 7 | 3.1 |
| 12 | 10 | 10 | 12 | 1 | 8 | 3 | 7 | 9.5 | 10 | 7.8 |