A COMPARISON BETWEEN MEXICAN JUNE AND THREE OTHER VARIETIES OF CORN FOR SUMMER PLANTING

C. K. McCLELLAND

MEXICAN June has long been one of the popular corn varieties in the South for late planting, but there have been few controlled experiments made in support of the claim. At the Arkansas Experiment Station this variety has been used in a date-of-planting test along with other varieties and a number of comparisons between it and the others are available for study. The plantings began April 1 in most cases, but this report covers only those made June 1, June 15, and July 1. The experiments were conducted at Fayetteville in northwest Arkansas, at Scott in central Arkansas, and at Marianna in eastern Arkansas and date back as far as 1920 when experiments were begun on the present University Farm. Neal's Paymaster, Funk's 90 Day, and Hasting's Prolific corn are the varieties included with Mexican June in the experiments.

Table 1 gives the yields of these varieties for the years 1920 to 1935 at Fayetteville, 1922 to 1928 at Scott, and 1927 to 1935 at the Cotton Branch Station at Marianna. The respective averages are given, the differences between the Mexican June and the other varieties, and the odds against the chance occurrence of such differences as calculated by Student's method of comparison which seems to be the method best suited to the consideration of these differences.

At Fayetteville, the Mexican June in June 1 plantings showed significant gain only over the Hasting's Prolific variety. At Scott, it fell below Paymaster and showed only slight gains over the other two varieties. At Marianna, it proved to be superior to the other varieties by 6.74 to 15.65 bushel averages though the gain over Paymaster was not consistent enough to establish significance. If all of the tests of this date be combined into one group, the Mexican June is found to be superior to the Hasting's Prolific by high odds, better than Funk's 90 Day by good odds, while it did not show consistent gains over the Paymaster and the odds were lower than what is required to establish significance.

Table 2 gives the yields of the several varieties when planted June 15. At Fayetteville, the June corn surpasses the other three but on account of the variability the difference between it and Funk's 90 Day is not significant. At Scott, greater superiority of the Mexican June over Funk's 90 Day than over Paymaster or Hasting's Prolific is shown, but again the differences failed to reach significance. At Marianna, slight difference as compared to Paymaster but marked differences over the other varieties are shown. When the results at all three places are combined, the superiority of Mexican June for the June 15 planting is well established.

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2Assistant Agronomist.