RESULTS FROM COOPERATIVE ROD-ROW WHEAT TRIALS
IN 1927

L. R. WALDRON

In 1927 plans were made for 35 cooperative rod-row wheat trials variously located in North Dakota. Reliance was placed mainly upon Smith-Hughes instructors, but cooperation was obtained also with a few farmers and with certain state institutions including two substations. Out of the 35 planned experiments usable results were secured from 21. Lack of space prevents individual acknowledgment, but the writer wishes to thank those who carried out the experiments. Of course those who were faithful with no results deserve as much credit as those whose yields participated.

OBJECTS

The objects of the cooperative work were: (1) To secure comparative yield data (and other data) between certain named varieties of common wheat, some of which had been newly introduced; (2) to secure yield data between these named varieties and certain unnamed hybrid selections obtained from crosses made by the writer between the varieties Marquis and Kota; and (3) to secure yield data between the hybrid selections and the most important durum varieties grown in the state.

The objects of reporting these data in this article are: (1) To show the efficiency of results secured from volunteer cooperators in conducting rod-row wheat trials, and (2) to show the application of these results when applied to losses due to stem rust by a comparison of yields from resistant and non-resistant wheats.

PLAN

The trials consisted in the main of quadruplicated unguarded rod-rows, 10 varieties being used in most cases. The rows were planted 18 feet long to allow a net rod to be cut and on either side the entire plat was protected by two guard rows. At three points the experiments were planted in guarded triplicated rod-rows. The experiments were not distributed uniformly over the state, but the distribution was such that the state was divided into four regions, viz., I, II, III, and IV, corresponding to the northeast, southeast, northwest, and southwest, respectively. Two trials, located geographically...