4. Introduced Seed Compared With Home-grown Seed

SEED BROUGHT into the county was compared with local farmers' seed obtained from planter boxes in most counties in which demonstrations with corn were conducted.

Such introduced seed was of two classes. One, known as *imported seed,* was obtained from prominent and successful corn growers living in different parts of the state —usually prize winners at corn shows. The report for the year 1911 says, "The seed classed as imported was secured from first-prize winners at the State Corn Show in December, 1910."

Seed purchased from large seed companies and referred to as *seed house seed* was the second class of introduced seed. The seed house samples were obtained by farmers who had ordered as if for planting on their own farms.

PLAN OF DEMONSTRATIONS

The imported and seed house samples were planted beside and in the same manner as the farmers' samples. The same data were obtained. Samples of imported seed from prize-winning farmers were planted in 66 of the 83 county demonstrations where the farmers' samples were planted. Seed house samples were planted in 55 of the 83 county demonstrations.

FARMERS' SAMPLES OUTYIELDED IMPORTED SEED

The average yield of all samples imported from prize-winning farmers was four bushels less than the average of all farmers samples (see Figure 4.1). The average yield of the imported seed fell below the average of all farmers' seed in 40 of 66 demonstrations.

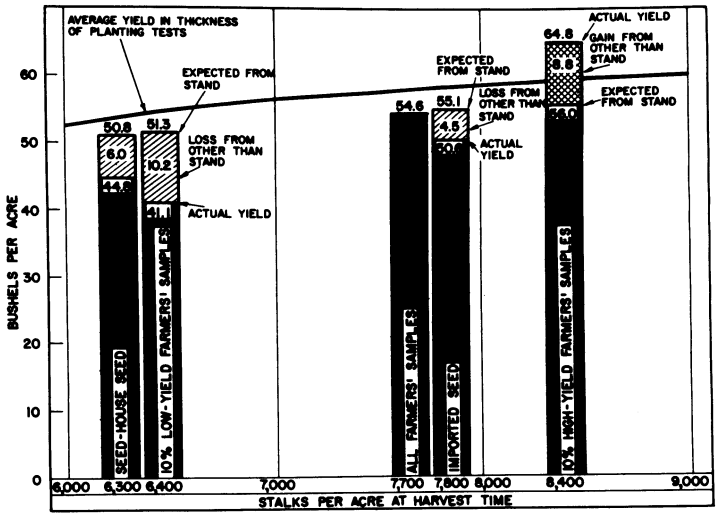

Fig. 4.1. Yield of imported and seed house seed compared with all, 10 percent best, and 10 percent poorest farmers' samples: 61 field tests in 35 counties during the eight years, 1905 to 1913, except 1907.

The 10 percent best farmers' samples outyielded the average of all imported seed in every demonstration, and by an average of 14.2 bushels per acre. The 10 percent poorest farmers' samples outyielded the imported seed in five demonstrations and were outyielded 3.7 bushels per acre as an average for all tests. The one best farmers' sample outyielded the best imported sample in 33 demonstrations, and by an average of 5.5 bushels per acre in all 41 demonstrations for which the data were available.

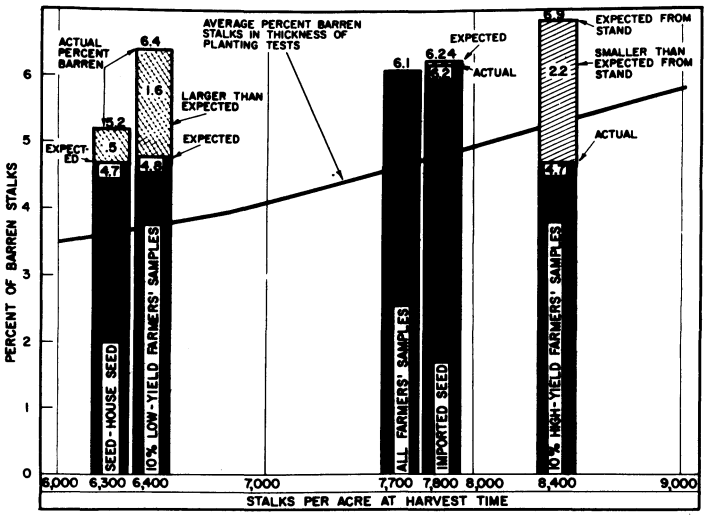

Fig. 4.2. Percent of barren stalks of imported, seed house, 10 percent best, and 10 percent poorest farmers' samples compared with all farmers' samples.

The imported seed produced slightly better stands than the average of the farmers' samples and about the same percentage of barren stalks (see Figure 4.2).

The quality of the average crop produced from imported seed was not as good as the average of that from local farmers. Only 72.7 percent of the ears produced from imported seed were classed as marketable, as compared with 78.5 percent, as the average for all local farmers' samples (see Figure 4.3).

The late maturity of much of the imported prize-winning seed was one of its greatest faults. The prize-winning samples from the State Corn Shows were usually relatively late in maturing.

MOST SEED HOUSE SEED WAS POOR

The seed house seed used in the demonstrations produced 9.8 bushels less than the average of all farmers'

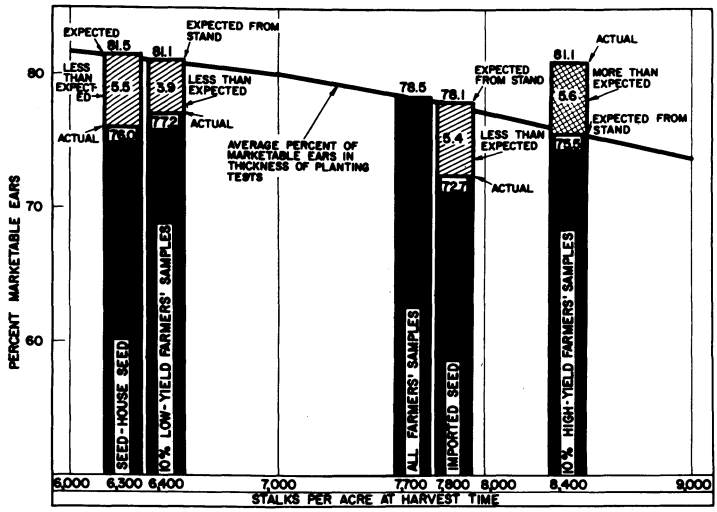

Fig. 4.3. Percent of marketable ears of imported, seed house, 10 percent best, and 10 percent poorest farmers' samples compared with the average of all farmers' samples.

samples and 20.0 bushels less than the 10 percent best (see Figure 4.1).

The average yield of all seed house seed fell below that of all farmers' samples in 50 of 54 demonstrations, and below the 10 percent poorest farmers' samples in 12 trials.

The average stand produced by the seed house seed was only 59.5 percent of the kernels planted, which was almost exactly the same as the average percent for the one-tenth poorest farmers' samples and 19.6 percent less than the best tenth of farmers' samples.

FALLACIES IN RECOMMENDATIONS BASED ON IMPORTED SEED DEMONSTRATIONS

Two fallacies in recommendations based on the Imported Seed Demonstrations were not recognized at that time. *First,* it had been assumed that the relative low

yield from the imported prize-winning samples was due to the fact that they were not acclimated and not to the fact that they, as a rule, lacked some hidden yield quality which the judges had been unable to observe but which some of the farmers' samples possessed.

The *second* fallacy was expressed when telling of a safe place for a farmer to buy good seed; namely, "He can go to some neighbor who is known to raise good corn and has more seed than he will need on his farm." This assumed that the neighbor had good seed because he had won a prize at a corn show.

One illustration of how these fallacies were discovered is given in the latter part of Chapter 10, Some Contributions of Corn Yield Tests to Seed Selection and Corn Shows.