

REPORT OF THE WORK IN CORN POLLINATION, IV.

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A series of studies in corn pollination was begun in 1908. The results of these experiments have been reported from time to time. The present report will deal with the Sweet-Reid's Yellow Dent cross.

In 1911 the two types which arose from this cross were planted, but conditions were such that only enough for seed was obtained. There was no chance to determine the quality. In 1912 the two types were again planted. Only a small area of ground was available and it was necessary to resort to self-pollination again.

The germination from both types proved good and the plants grew vigorously. The light-colored type was the more vigorous of the two and produced a larger proportion of ears.

When the ears were in proper condition samples were taken for cooking and testing as to quality. The light colored type had large ears, white in color. Upon cooking the flavor was found to be excellent, being very sweet. The sweet flavor combined with a long grain makes this a very desirable type. The cooking test showed it to be superior to the corn bought on the market in West Lafayette.

The yellow type had a medium sized ear, creamy white in color and when cooked had also an excellent, sweet flavor. The flavor was considered not quite so good as that of the light colored type.

At maturity the light colored type showed itself quite true to type, having whitish kernels, red cobs, and large size. There were few yellow dent kernels, probably no more than due to cross-pollination from adjoining plats.

The yellowish type had smaller ears, mostly white cobs, yellowish kernels, and a larger proportion of yellow dent kernels than the other type. The yellowish type does not have the depth of kernel that the whitish type possesses.

The crop season of 1913 will be the final test for this experiment. The result of this season will determine whether the new types are worthy of extensive propagation.

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