

REPORT OF CORN POLLINATION. II.

By M. L. FISHER.

The work reported in 1908 was continued in 1909. The seed from the different crosses reported in the Proceedings for 1908 was planted in 1909. In each lot a number of ears were self-fertilized by hand pollination.

d¹. Boone County White, male; Reid's Yellow Dent, female.

Forty ears were pollinated. Four were pure yellow and thirty-six were mixed. In a count of 2,000 kernels from mixed ears, 204 showed pure yellow, 276 pure white, and 1,520 mixed white and yellow, often cream color. In this connection it is to be noted that it is difficult to tell when a kernel is pure white. The yellow tinge may be so faint that the most careful examination in a good light may not detect it.

d². Stowell's Evergreen (Sweet), male; Reid's Yellow Dent, female.

Forty-seven ears were hand pollinated. None was pure sweet or pure dent. Thirteen showed earlier ripening than the others and were smaller in size. There seemed to be a larger proportion of sweet kernels on these ears. The stalks on which they grew were also earlier maturing and smaller in stature. A count of 2,000 kernels showed 322 white, 1,165 yellow, and 513 sweet. The sweet being recessive, the proportion agrees fairly well with Mendel's Law.

d³. Speckled, male; Reid's Yellow Dent, female.

Sixteen ears were pollinated. Four were pure speckled, twelve were not speckled. Most of those not speckled were pure red, and a few (3) were pure yellow. This also seems to be Mendelian.

d⁴. Reid's Yellow Dent, male; Boone County White, female.

The record of the number of ears pollenized has been lost or mislaid, but ears showed the same mixture of kernels as the reciprocal cross, d¹. There were no pure ears. In 2,000 kernels there were 486 pure white, 1,306 mixed, and 208 pure yellow—a close resemblance to the results in d¹.

Various selections were made from the above crosses for 1910 planting, but the data are not in readiness to report at this time.

