

2. White endosperm seeds from crosses of yellow inbreds.

Single crosses between the yellow inbred line Mo. 567, which was inbred for at least 10 generations, with other yellow inbreds give F_2 ears segregating for yellow and white kernels. The yellow kernels vary in density of yellow. Some yellow inbred lines, such as Oh29, when crossed with Mo. 567 give F_2 ears segregating approximately 3 to 1 for yellow and white kernels, whereas Mo. 567 crossed with other yellow inbreds do not appear to give the same ratios. When these white endosperm kernels first appeared in crosses involving Mo. 567, they were thought to be due to contamination. To be sure that some plants of Mo. 567 might not give such progeny a number of plants were selfed and at the same time outcrossed to Ohio 29. In all instances the F_2 seed from these outcrosses segregated for white endosperm kernels.