4. <u>Somatic Mutations in Corn</u>

An extensive study on the effect of chronic gamma radiation on the induction of somatic mutations in corn was made in 1954. A stock of popcorn of the genetic constitution Prpr was grown in they field at different distances from the source. There was an exponential relationship between mutation rate and dose rate as exists for gametic mutations for endosperm characters, with a definite threshold below which there was no increase over the controls. In a number of instances the mutations were from the P to a variegated pericarp rather than to colorless pericarp. This experiment will soon be written up for publication.

- W. R. Singleton and
- A. C. Caspar