

6. Estimate of frequency of occurrence of "sterile" cytoplasm in Zea Mays.

One hundred different, randomly selected, non central corn belt varieties were collected and organized into a project to insert the nuclear complement of a specific strain of WF9 into each of the cytoplasms carried by the 100 varieties.

As a side light of this project, now in the BC3 stage, there has so far been conclusive evidence that fully six of the original sources carried "sterile" cytoplasm, assuming that WF9 represents a valid genic background for classifying cytoplasms as "sterile" or "fertile." (There is also some evidence that 3 additional sources may carry weaker male sterilizing characters)

If it is assumed that these 100 random (non corn belt) varieties represent an unbiased sample of Zea Mays, then it must be concluded that at least 6% of the divisional entities of the species carry cytoplasms that must be classified as "sterile" in the presence of the WF9 nuclear complement.