

# **Mutagenic studies in M1 generation of French beans**

**submitted by**

**mohammed baqer hussein**

## **Abstract**

The French bean, botanically described as *Phaseolus vulgaris* L., is a member of family Fabaceae, which comprise an important grain legume crop of the world. It is the third most important worldwide spread crop.

In present investigation the effect of two different mutagenesis, sodium azide and gamma rays on various M1 parameters of French bean variety Varun was studied. The seeds of variety Varun of French bean were obtained from National Agriculture Research Project (NARP) Ganeshkhind, Pune-7. These seeds were subjected to mutagenesis by using chemical and physical mutagens. M1 generation was raised and effect of these two mutagens on different parameters like germination percentage, seedling injury, chlorophyll chimeras, leaf morphological change, pollen sterility, plant survival percentage and morphological mutation was studied. Both these mutagens had shown an inhibitory effect on seed germination. An increase in concentrations of both the mutagens effectively reduced the seed germination.