The objective of this project was to determine the additive effects of phytase (from *Aspergillus foecum*) on the growth performance of broiler. In this experiment the animals were fed with phytase along with plant based diet. Following phytase administration experimental animals showed increase in body weight gain but feed consumption, dressing percentage and internal organs weight remained unaffected. Phytase also increased serum phosphorus level and Aspartate aminotransferase. It reduced the serum alanine aminotransferase activity and bilirubin, creatinine and urea also showed variable decrease. There was no adverse effect of phytase on liver, kidney and heart.