ABSTRACT

Aflatoxin is a naturally occurring mycotoxin in our foods and feeds. It probably is the best known and most intensively researched mycotoxins in the world. Aflatoxin has received greater attention than any other mycotoxins because of its demonstrated carcinogenic potential in susceptible laboratory animals and its acute toxicological effects on human beings. The liver is the main site for the metabolic transformation of the drugs and other foreign compounds entering the body. It is the main target of aflatoxin also. Aflatoxin can not be neutralized within the organism and hence the toxicity can not be prevented by medicine. Alleviation of aflatoxicosis by improving hepatic function is the only alternative.

_Eugenia caryophyllata_, a hepatoprotective spice has been selected for amelioration of aflatoxin toxicity in mammalian system in this study. The relative antiaflatoxic potential of the entire clove, its alcoholic fraction and one of its active principles (eugenol) have been investigated through morphological, haematological, biochemical and histopathological parameters.

Out of the three forms in which _Eugenia caryophyllata_ has been experimented (entire clove, alcoholic fraction and eugenol), the alcoholic fraction seems to be the best hepatoprotective form against aflatoxin. The alcoholic fraction has been as effective as the standard hepatoprotective agent this was followed by eugenol and in some parameters even better than the standard drug, perhaps due to the synergistic effect of the different types of secondary metabolites present in it.