



ABSTRACT

Most of the animal feeds got aflatoxin due to the growth of the fungi because of high humidity in Pakistan, which results in the spoilage of food and feed ultimately affect the health of pet animals. In the present study, a total of eleven isolates were obtained from yogurt and raw milk samples. Identification of these isolates was done on the basis of growth in MRS broth, gram staining and other standard biochemical tests such as motility test, catalase test and sugar fermentation test. Out of eleven, three isolates were identified as *Lactobacillus*. Growth inhibiting and detoxification abilities of these *Lactobacillus* species against *Aspergillus flavus* and *Aspergillus fumigatus* and their toxins were evaluated. For this purpose, these three *Lactobacillus* species were co-cultured with *Aspergillus flavus* and *Aspergillus fumigatus* separately. After that, spectrophotometric analysis and HPLC (High performance liquid chromatography) was performed. The results showed that all of three *Lactobacillus* species have the ability to inhibit growth of these *Aspergillus* species and also able to detoxify toxins (aflatoxins) produced by them to varying extent. Maximum inhibition of fungal growth was observed by *Lactobacillus* sp. 2 whereas highest detoxification ability was showed by *Lactobacillus* sp. 3 in case of both *Aspergillus flavus* and *Aspergillus fumigatus*. In addition, dry mycelium weight of both of the *Aspergillus* species was also determined, exhibited the same results as that of spectrophotometric analysis.