


biological methods drastically reduce the aflatoxin concentration in food and feed materials. The lower moisture percentage observed in the cattle feed samples indicate the raw materials with low moisture and further moisture removal during the processing which prevent further contamination of fungi and toxins. The population of storage fungi including *Aspergillus* and *Pencillium* species in cattle feed samples were observed to be less when compared with agricultural commodities and it bi-products used for formulation of cattle feed which might be due to killing of during feed processing. The remarkable finding of the present study is the lower incidence of aflatoxin producing *Aspergillus flavus* in cattle feed samples, which indicate the further contamination is seldom possible even during storage of cattle feed. Another important observation is the constant occurrence of *Aspergillus glaucus* in almost all the feed samples which might be due to the heat tolerance and osmophilic nature in the processing environment. It is also concluded that most of the cattle feed samples available in the market is contaminated with permissible limit of aflatoxin B₁ which is possible to occur in lower level after metabolic degradation in cow and secretion of milk with safer level of aflatoxin M₁. The occurrence of aflatoxin M₁ in most of the milk samples collected from local market and field of Tamil Nadu found almost absence of aflatoxin as well as with very lower concentration as below the permissible limit as 20 ppb found to be safer level for human consumption except very few samples (1% of samples). The lower concentration of aflatoxin M₁ in milk samples reflect the occurrence of lower amount of afltoxin B₁ in cattle-feed samples and indicate appropriate quantity yield during metabolism and conversions. Overall, the present study conclude that as the majority of cattle feed samples and milk samples available from the market appeared to be with in the permissible limit (safer level) of aflatoxin contamination.




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