

THE EVALUATION OF AFLATOXINE RESIDUES IN FOODSTUFF AND MILK PRODUCTION IN SOME ALBANIA'S FARM WITH SCREENING METHODS.

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Abstract

Mycotoxins are toxic metabolites synthesized by some naturally occurring fungi under suitable physical, chemical and biological factors. Mycotoxins contaminated food and feed supplies could increase the economic and health risks to humans and animals. The aflatoxins constitute a group of fungal metabolites that have varied toxic and carcinogenic properties, depending on dose and duration of exposure. The adverse effects of aflatoxins in humans ranged from acute hepatic toxicity to chronic disease such as liver cancer. In animals, the aflatoxins cause liver damage, decreased milk production, reduced reproductively and suppressed immunity in animals consuming low dietary concentrations. All species of animals are susceptible to aflatoxicosis. The susceptibility of individual animals to aflatoxicosis varies considerably depending on dose, duration of exposure, species, age, sex and nutrition. Nevertheless, contamination of milk with aflatoxins is considered as a potential risk for human health. The aim of this study was to determine the levels of aflatoxin M₁ (AFM₁), metabolite of aflatoxin B₁ in raw cow milk in high milk producing areas in some Albania's dairy cows farm as like as Lushnja and Lezha's District. Aflatoxin M₁ levels were investigated by high performance liquid chromatography (HPLC) equipped with a fluorescence detector, monitoring at wave lengths 365 nm and 425 nm for excitation and emission, respectively. Fifty samples of raw milk were collected from randomly selected dairies in five provinces in the two districts, and analyzed for AFM₁ using the Official Methods of Analysis of Association of Official Analytical Chemists (AOAC) International.

Kew word: *aflatoxine, mycotoxines, milk, feedstuff, ruminants*