Abstract:

The threat of aflatoxin contamination in food commodities and its association with health risks in both animals and humans continues to raise increasing concern over years. In this report, fungal species found in association with peanuts in storage and their potential to produce aflatoxin in collected samples was determined. About 60 to 70% of collected peanut samples were infected with various moulds including Rhizopus stolonifer, Fusarium sp., Aspergilus flavus, other Aspergillus sp., Penicillium sp., Eurotium repens, Sclerotium sp., Rhizoctonia sp., and Aspergillus Parasiticus. Eurotium repens, Aspergillus Parasiticus, and A. flavus were found to be the most patent aflatoxigenic strains. The average levels of aflatoxins detected in the seed samples were far above 100 ppb. This level of toxicity is more than five times higher than the acceptable dosage (20 ppb: US Standards) in edible peanuts. This report points out the health risks associated with aflatoxin contamination in edible food commodities despite enormous efforts to control this mycotoxin. Current research efforts to control or minimize the intake of aflatoxins especially in warmer regions of the world are hereby included.