Título: AFLATOXIGENIC FUNGI DETECTION IN INDUSTRIALIZED AND NON-INDUSTRIALIZED CASHEW NUTS IN PERNAMBUCO

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Resumo

The ingestion of fresh or processed food containing mycotoxins may represent risks to human health or animal. In this context, the present study aimed to analyze the presence of total and aflatoxigenic fungi in the flour of the cashew nuts and in the cashew nuts (industrialized or non-industrialized). Six cashew nuts samples and two cashew nut flour were obtained from natural food stores. To analyze the cashew nuts, 10 chestnut were distributed in Petri dish, total of 50 nuts, in the following media: DG-18 (Dicloran glycerol 18), for total fungal growth, and AFPA (Aspergillus flavus and parasiticus Agar) for the development of aflatoxigenic fungi. To analyze cashew nuts flour, it was used serial dilution method. All samples showed contamination with fungi, ranging from 14 to 100% of cashew nuts contamination, and 0.4 to 2×10^2 cfu/g for cashew nuts flour contamination. Two samples, C1 (Chestnut) and C8 (flour), were positive for aflatoxigenic fungi. Genera of fungi isolated in samples: Penicillium, Aspergillus, Rhizopus. Non-industrialized samples were more contaminated than the industrial samples. Perhaps this difference in fungal contamination between chestnut occurred because industrialized cashews nuts is baked in industrial oven with high temperature, and nonindustrialized cashew nuts is roasted manually in cans and can get in contact with the soil. We conclude that both types of non-industrial sample (flour or own cashew nuts) marketed in Pernambuco were contaminated.

Palavras-chaves: cashew nuts, cashew nuts flour, aflatoxigenic fungi,

Agência Fomento: CAPES