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Title: Incidence of aflatoxin producing strains and aflatoxin contamination in dry fruit slices of quinces (*Cydonia oblonga* Mill.) from the Indian State of Jammu and Kashmir

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Abstract

An investigation was undertaken to obtain data on the occurrence of aflatoxins and the aflatoxin producing potential of *Aspergillus flavus* strains isolated from dry fruit slices of quinces produced in jammu and Kashmir, India. A total of 147 *A. flavus* isolates recovered from dr fruit slices were grown in liquid rice flour medium and screened for the production of various aflatoxins by thin layer chromatography. The results showed that 23.14% of the tested isolates were aflatoxigenic, producing aflatoxins B₁ and B₂ in varying amounts. Aflatoxins G₁ and G₂ were not detected. All 25 of the investigated market samples were also found to be aflatoxin B₁ positive and the level of contamination ranged from 96 to 8164 µg/kg of the dry fruit which is quite high in comparison to the permissible level of 30 ppb. As per these results biochemical composition of dry fruit slices of quinces, along with climatic conditions seem to be very favourable for aflatoxin production by the toxigenic *A. flavus* strains. Therefore, monitoring of aflatoxins in dry fruit slices of quinces is recommended for this region.

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