Study on aflatoxin and sclerotium producing ability of *Aspergillus flavus* isolates

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Abstract

Some isolates of *A. flavus* produce aflatoxin on pistachio seeds. In this investigation 102 isolates of *A. flavus* were isolated from pistachio seed and processing residue samples collected from different areas of Kerman province. Aflatoxin producing ability was detected on Czapek dox agar medium with 0.3% â-cyclodextrin. The production of aflatoxin coincided with the presence of a bright blue fluorescent area surrounding colonies when observed under long wavelength (365 nm) UV light after 3 days of incubation at 26°C. Sclerotium producing ability was determined on Czapek dox agar, Czapek dox agar with 3% sodium nitrate and PDA medium. As a result 39.2% isolates produced aflatoxin and 15.7% isolates produced sclerotium. There was no relationship between aflatoxin and sclerotium producing ability and geographic distribution.