

SURVEY OF MYCOFLORA AND MYCOTOXIN CONTAMINATION IN DRIED DATE PLUM PERSIMMONS (*DIOSPYROS LOTUS* L.) FROM MARKETS OF JAMMU PROVINCE

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Abstract: The present investigation was designed to analyze moulds and mycotoxins responsible for biodeterioration of the market samples of dried fruits of date plum persimmon (*Diospyros lotus* L.). A total of 31 fungal species were isolated from 65 samples by two different isolation techniques. Assessment of microbial load exhibited the presence of many such fungal species that are broadly acknowledged as the most important mycotoxin producers. Mycotoxins were assessed by high performance liquid chromatography (HPLC). The mycotoxins detected were aflatoxins, ochratoxin A and patulin. Out of 65 samples, 69.23% of dried date plum persimmon samples were found contaminated with aflatoxins in the range of 0.78-798.34 µg/kg and 47.69% samples have ochratoxin A (OTA) contamination (0.76±432.09 µg/kg). Patulin was quantified in 32.30% samples in the range of 0.89-123.90 µg/kg. The present study constitutes the first report of fungal and mycotoxin contamination in dried date plum persimmons from India.

Keyword: Mycoflora, Mycotoxin, *Diospyros lotus*, Survey

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