Occurence of Ochratoxin A (OTA) on grapes in the province of Ancona, Italy

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Ochratoxin A (OTA) is a mycotoxin that is naturally produced by some species of filamentous fungi belonging to genera *Aspergillus* and *Penicillium.* OTA is among the most harmful of mycotoxins. It has been proven by various studies that OTA has strong toxic properties such as nephrotoxic and neurotoxic effects, and it is classified by the International Agency for Research on Cancer (IARC) as potentially carcinogen for humans and carcinogen for animals. The major problem is the fact that OTA is produced by fungi that are commonly present in a wide variety of agricultural products, including grapes and their derivatives. Due to its toxicity and health hazard provoked by the presence of OTA in food and feed, the European Community has established a limit for toxin concentration of 2 µg/kg in grape and grape derivates. The concentration should be reduced as much as possible, not only below the legal limit, in order to diminish the daily intake of this toxin. A research on the presence of ochratoxigenic fungi on grapes was performed in order to evaluate the risk of contamination of grapes and grape derivates from various vineyards in the province of Ancona, Italy with OTA, and to, eventually, propose a strategy for their control. The mycoflora from grapes harvested in September 2018 was isolated and fungi were determined morphologically. Potential OTA producers were inoculated on OTA conducing media and screened for toxin production. All potential producers and confirmed ochratoxigenic strains will be determined by molecular techniques.

Keywords: Ochratoxin A, wine, food safety