Ochratoxigenic Aspergillus and ochratoxin A in wines made from varieties of Syrah and Viognier in northeast of Brazil

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Ochratoxin A (OTA) is the main mycotoxin found in wine, considered one of the most damaging to human health. This study aimed to isolate toxigenic fungi in the soil, grape and must, and OTA in wine. The isolation of the Aspergillus samples of Syrah and Viognier grape variety was carried out by Direct Plating and samples of must and soil was performed in Serial Dilution in medium Dichloran Rose Bengal Chloramphenicol. The species of Aspergillus were identified by morphological characteristics and evaluation of toxigenic potential by Plug Agar. The level of OTA in wine samples was determined by HPLC. In healthy grape varieties Syrah and Viognier were not detected the presence of Aspergillus. The Aspergillus species were identified: A. japonicus, A. foetidus, A. aculeatus and Aspergillus niger Aggregate, A, niger and A, carbonarius, isolated mainly from soil and grape. Three A. carbonarius producers of OTA were detected in Syrah grape has deteriorated, the vineyadr harvested. No ochratoxigenic fungi were detected in must and OTA in wine made using grape Viognier. In the variety Syrah detected a concentration of 0.03 ng / mL of OTA and the Aspergillus niger was the only species producing OTA detected in the must.

Keywords: Ochratoxin, Aspergillus, wine, grape