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**Abstracts**



# Isolation of filamentous fungi from grapes and must and study of ochratoxin A production in grape and must by indigenous *Aspergillus*

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An extensive survey of filamentous fungi in grapes and must for wine production was undertaken in one Portuguese wine making Region. Four hundred and eighty grape berries were sampled from 3 different areas and two time periods: immediately before harvest and 2 to 4 weeks before harvest. Must from 2 *Vitis vinifera* varieties were also analysed: one red and one white. Twenty-seven different genera were present in grapes. The most common genera were *Alternaria*, *Aspergillus*, *Aureobasidium*, *Botrytis*, *Cladosporium*, *Epicoccum*, *Penicillium*, *Pithomyces* and *Trichoderma*. From must, seven different genera were found, the most common being *Aspergillus*, *Botrytis*, *Cladosporium* and *Penicillium*. The penicillia and aspergilli were identified to species level. Fourteen *Penicillium* species were identified from grapes with *P. thomii* (33 isolates), *P. brevicompactum* (9), *P. spinulosum* (10), *P. oxalicum* (13), *P. citrinum* (7) and *P. expansum* (8) the dominant species. In must, only 8 species were present with *P. thomii* (35), *P. spinulosum* (18) and *P. crustosum* (18) the most frequent. In this survey, from a total of 201 penicillia, no *P. verrucosum* was isolated. In grapes, 3 species of *Aspergillus* were present: *A. niger* (14 isolates), *A. flavus* (4) and *A. ochraceus* (1). In must, only *A. niger* was present, being more common in red wine (20) than white wine must (4). Since ochratoxin A production by *A. niger* has been previously reported, all 38 strains isolated were tested by TLC for ochratoxin A production in YES and grape juice media. The *A. ochraceus* isolate was similarly tested. In both media, none of the *A. niger* were found to produce ochratoxin A in detectable amounts by TLC. These data were confirmed by using two ochratoxigenic *A. niger* strains as a positive control. The *A. niger* toxigenic strain controls, as well as *A. ochraceus*, produced ochratoxin A in both media, although the production in grape juice was lower than in YES media. All these data will be presented and discussed.