

Molecular detection of ochratoxigenic *Aspergillus* species isolated from coffee beans in Saudi Arabia

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ABSTRACT. Ten fungal isolates from coffee beans were morphologically identified as *Aspergillus niger*, *A. ochraceus* and *A. carbonarius* (N = 5, 3, and 2, respectively). Only one isolate, morphologically identified as *A. niger*, was unable to produce ochratoxin A (OTA). This may be a new species in the *Aspergillus* section *Nigri*. OTA levels in all the other isolates were above the limit of detection (0.15 mg/kg). Based on microsatellite-primed PCR (MP-PCR) profiles, using three microsatellite primers, three main groups were obtained by UPGMA cluster analysis: *A. niger*, *A. ochraceus* and *A. carbonarius*. A clear-cut association was found between the MP-PCR genotype and the ability to produce OTA. Using the primer pairs OCRA1/OCRA2, a single fragment of about 400 bp was amplified only when genomic DNA from the *A. ochraceus* isolates was used.

Key words: *Aspergillus*; Ochratoxin; *Coffea arabica*