

Fungi Producing Ochratoxin A in Coffee

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SUMMARY

Coffee samples (*C. arabica*) were collected from the three major Brazilian coffee producing states as follow: São Paulo, Minas Gerais and Parana. Coffee samples were collected at different stage of ripening and processing from soil under trees, ripe cherries and raisins from trees; cherries and raisins from ground; from the drying yard and from storage. Coffee beans were surface disinfected with 0.4% of chlorine and plated on Dichloran 18% Glycerol Agar (DG 18), at 25°C for 5-7 days.

Coffee beans from different regions were infected, with *Penicillium* spp., *Fusarium* spp., *Aspergillus niger* and *Aspergillus ochraceus*. The frequency of *Aspergillus ochraceus* was lower in beans from trees and soil, however from the drying yard and storage area, the presence of this species increased. *Aspergillus carbonarius* was found only in one farm from West of São Paulo States.

Most isolates of *A. ochraceus* and *A. carbonarius* were capable of producing OA, but few *A. niger* isolates produced OA. The presence of OA in coffee was at the level of 0.3 to 19.75µg/Kg.

A. ochraceus was capable of producing OA in coffee with high water activity (approaching 1.0), however when was a, was reduced, OA production was reduced considerably.