

International Society for Mycotoxicology (ISM)
Conference entitled:
“Worldwide Mycotoxin Reduction in Food and Feed
Chains”

Tulln/Vienna, Austria, 9-11 September 2009.

**Application of PCR-DGGE (Polymerase Chain Reaction Denaturing) to analyze
microbial ecosystems in foods**

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Abstract

The determination of geographical origin is a requirement of traceability system of import and export of food products. To this end, molecular techniques using 16S, 26S rDNA profiles generated by PCR-DGGE were used to detect the variation of the microbial community (bacteria, yeasts) structures of Pangasius fish from Viet Nam harvested in different aquaculture farms and during different seasons and two fruits from Physalis. If Physalis, the ecology of the yeast was also studied in the same purpose. Bacterial band profiles and mandarin fish, yeast and the Gaza Physalis specific profiles for each location and can be used as a bar code to certify the origin of fish and fruit. This method is a new tracking tool, which provides organic food with a unique bar code and an audit trail of food to their original location.

Mots-clés: Traceability, PCR-DGGE, Pangasius fish, Physalis, microbial communities, origin