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ABSTRACTS

commune, *Aspergillus oryzae*, and *Rhizoctonia solani*. Among these species, *Trichoderma* spp. and *Penicillium* spp. are found to potent problematic contaminant sources of shiitake cultivation and *R. solani* is a known plant pathogenic fungus with wide host range and worldwide distribution. Our results suggest that the sawdust materials for import needs to be further checked through administrative process.

Applied mycology and fungal biotechnology

Poster nr. 14

Development of method for detection of the genus *Neosartorya* in strawberry juice

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Neosartorya species produce heat-resistance ascospores, which make them to survive temperatures of 85°C for 50 minutes. They are able to cause the spoilage of heat-processed foods.

We developed the method of *Neosartorya fischeri* detection in strawberry juice based on specific primers, for β -tubulin and calmodulin genes, designed by Yaguchi et al. (2012). This method was used previously just for pure strains identification not for detection of fungi in environmental samples like juice.

Fungal genomic DNA was extracted using extraction buffer based on EDTA, SDS with benzyl chloride, sodium acetate, isopropanol and ethanol. Strawberry juice was mixed in the following doses of 2, 1 and 0.5 μ l with 5 μ l of extracted fungal DNA. PCR reactions were prepared using primers and PuReTaq-Ready-To-Go-PCR Beads. The sizes of the PCR products were confirmed by electrophoresis. Among the 4 strains used in this experiment, PCR products of approximately 220 bp were detected according to the primers designed for *Neosartorya* and *A. fumigatus*. No PCR products were obtained for the control. The species specific primers detected just *N. fischeri* and not detected *A. fumigatus*. The study showed that just in the mixture of DNA and 0.5 μ l of strawberry juice the method was working very well, but for 1 μ l of juice we observed very weak bands on the gel and using 2 μ l of juice there were no bands on the gel.

Yaguchi et al. (2012) Journal of Food Protection, 75, 10: 1806-1813.

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