Production of the mycotoxin 8-deoxy-trichothecin by *Spicellum roseum* isolated from a cultivated mushroom in Japan

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Spicellum roseum is the causative agent of the pink mold damping-off disease and has been isolated from *Flammulina velutipes*, a kind of Japanese mushroom. Identification of the fungal strain was done morphologically and by rDNA sequence analysis (Okada et al.[1)]). The ability of *S. roseum* to produce trichothecene mycotoxins was reported by Seifert et al.[2)]. In the study presented here we examined whether the Japanese strains isolated from mushroom are trichothecene producers or not.

For that reason the strains were inoculated on rice medium and cultured at 25°C for 2 weeks. Following extraction and clean-up of the samples, the extracts were trimethylsilylated and analysed by GC-ECD and GC-MS (gaschromatography -electron capture detection and mass spectrometry, respectively).

8-Deoxy-trichothecin was detected and confirmed with GC-MS by means of EI (electron impact) and CI (chemical ionisation) mode. However, deoxynivalenol, 3-acetyldeoxynivalenol, fusarenon-X and nivalenol were not detected in the extract, all of which are well known to be detected from scabby wheat. Fractionated sample revealed the toxicity against *Moina macrocopa,* a kind of animal plankton, and cultured animal cells (MTT-bioassay with swine kidney target cells). The toxicity of 8-deoxy-trichothecin has not been known yet. Further experiments will be needed hereafter and are in progress.

References

1) Gen Okada, Akiko Takematsu, Takashi Sugita, Keith A. Seifert and Katsuji Yamanaka: *Proceedings of the 6th International Symposium of the Mycological Society of Japan*, p. 66 (1998)
2) Keith A. Seifert, Gerry Loui-Seize and Marc E. Savard: *Mycologia*, **89**(2), 250-257 (1997).