4.2 Plant and Soil Samples from Thailand-Laos Border

Black spots on bamboo leaves were thought to be caused by a Podosporium-like deuteromycete. Soil, obtained from a bamboo growth, showed presence of Trichoderma hamatum and F. solani and some other Trichoderma and Fusarium spp. A mildew-like lesion on a weed did not contain Fusaria, and soil from a tomato field yielded F. solani, F. moniliforme and F. oxysporium.

The chemical analysis showed no presence of any mycotoxins.

4.3 Discussion

The fungal species isolated (F. equiseti, F. moniliforme, F. oxysporum, F. semitectum and F. solani) are what one would expect from such samples, and the results seem to agree very well with more extensive investigations in this region[1,2].

It is documented in the literature that F. semitectum is capable of producing T-2 toxin[3], diacetoxyscirpenol (DAS) and neosolaniol[4]. However, in a review of stachybotryotoxicosis[5], it is reported that out of 31 samples infested with F. semitectum, 26 fungal isolates were found to be non-toxic.

The findings of this report indicate that potential producers of trichothecenes do exist in Southeast Asia, but that neither naturally occurring diseases due to trichothecenes occur, nor that there are any detectable levels of trichothecenes in the natural environment.

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