

3.0 Occurrence of Trichothecenes in Thailand

There are no indications that the Thai regulatory agencies or scientists in the universities have been looking for trichothecenes in particular, therefore one cannot say with certainty that these mycotoxins do not occur in Thailand. The same holds with respect to occurrence of fungi capable of producing trichothecenes, although Thai mycologists have repeatedly stated that Fusarium spp. are very rarely, if ever, isolated¹⁾. However, there appears to be no indication that anyone has ever seen a case that may be classified as Alimentary Toxic Aleukia in man²⁾, nor is there any indication that cattle, pigs or fowl, the more susceptible domestic species, have suffered from diseases or symptoms caused by these mycotoxins³⁾.

4.0 Evaluation of Samples Collected in Thailand

For determination of mycoflora, the basic procedures used were: (1) direct microscopic examination, (2) selective isolation of Fusarium from material plated out onto P-PCNB agar. Selected isolations, representative of the diversity of forms encountered, were subcultured from the P-PCNB agar onto potato sucrose agar (PSA). The subcultures were incubated for several days under lights and were then used as the sources of the conidia used to establish the monoconidial cultures on which Fusarium determinations are based.

The chemical analysis was carried out with a Gas Chromatograph/Mass Spectrometer (sensitivity less than 1 ppm) for T-2 toxin, HT-2 toxin, DAS, vomitoxin and zearalenone.

4.1 Plant and Soil Samples from Thailand-Kampuchea Border

From banana leaves and banana sprouts, Fusarium moniliforme and F. semitectum were recovered, whereas nothing was found in old leaves and a herbal collection. Soil from a tomato field showed presence of F. solani and F. equiseti.

The chemical analysis showed no presence of mycotoxins.

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- 1) Various personal communications from mycologists at Chulalongkorn, Kasetsart and Mahidol Universities.
 - 2) Personal communication, Professor Mongkol, Siriraj Hospita.
 - 3) Various interviews with Thai veterinary pathologists, most of whom are basically familiar with diseases due to mycotoxins, although nobody has worked on trichothecenes.