

APPENDIX V

Occurrence of Diseases in Thailand
Due to Toxins and Diseases Causing Rapid
Death in Humans and Animals

1.0 Introduction

Considering the fact that, trichothecene mycotoxicoses (see Appendix III) cause a variety of symptoms and lesions which may be caused by other agents or circumstances, a review of the general disease pattern in humans and animals in Thailand is indicated.

2.0 Anthrax

Anthrax, caused by B. anthracis, is a bacterial disease that is characterized by septicemia, and typical findings on autopsy/necropsy are: hemorrhages in all organs and failure of blood to clot, with blood "coming from the orifices". Anthrax occurs in the rural areas at a frightening frequency¹⁾. In a typical case history, a buffalo or cow dies first. The carcass is "butchered" and the meat consumed by people which may become infected either during the process of butchering or after ingestion of not well-cooked meat. Left-over parts of the animal are eaten by other animals (pigs, dogs) which then contact the disease as well. Finally, further cattle die due to ingestion of spores. The epidemiology is characteristic of a cascade-like event. From one bovine death in the beginning, the disease spreads in a fan-like pattern, but never do all species become affected at the very same time.

3.0 Botulism, due to the toxin of the bacterium, Cl. botulinum, occurs occasionally. Again, the typical cascade of events takes place either in members of one family only, or in animals eating from a carcass. Never is the whole population affected at once.

4.0 Rabies, a viral disease, is rampant in Thailand, and it has been said that even in Bangkok there are approximately 200 deaths per year due to rabies. The association with bites from a rabid animal is established in most cases.

¹⁾ Chit Sirivan, Chaowana Makgamol and Somchai Chabbang. Report on the outbreak of anthrax in Rajaburi Province in 1981. (Abstract) 20th Ann. Conf. Kasetsart Univ., Feb. 4-5, 1982, p. 18.

Note: Rajaburi is west of Bangkok. Deaths of 16 cattle, 9 buffaloes and 46 people is reported.