

Sukumal Prukudom 2010: Epidemiology of Equine Infectious Anemia Virus in Horses rested in Kanchanaburi, Ratchaburi and Suphan Buri Province. Master of Science (Veterinary Clinical Studies), Major Field: Veterinary Clinical Studies, Interdisciplinary Graduate Program. Thesis Advisor: Assistant Professor Worakij Cherdchutham, Ph.D. 108 pages.

The purposes of this study were to investigate seroprevalence of equine infectious anemia virus infection and to investigate the risk factors of the infection in native horses rested in Kanchanaburi, Ratchaburi and Suphan Buri Province. Blood samples of seventy two horses from Kanchanaburi Province, one hundred and fifty five horses from Ratchaburi Province and one hundred and thirteen horses from Suphan Buri Province were collected for serological test, using Agar gel immunodiffusion (AGID) test. The risk factors were investigated by interviewing the owner using a standardized questionnaire. It was found that the individual disease prevalence was 2.1% and the herd prevalence was 8.7%, lower compared to the average found in other areas in Thailand. The environmental factor and owner's practice can make the transmission possible in this area. Hematophagous insects were found 96.2% on horse's body. Only 20% of horses have a net for protecting insects from the stable. It was found that 55% of horses were brought in to the farm from disease-reported province and 15.2% of the horse owners used reused needles. Besides, it was found that 22% of the horse owners already known the equine infectious anemia disease. Infected horses in the study were brought from disease-reported provinces, without disease testing or quarantine method before transporting these horses to the farm. The results from this study suggested that the disease prevention plan should be introduced while the prevalence still low. The preventions, such as hematophagous insect control, knowledge transfer of sterile needle practices, and control measures for horse farms testing of horses on the premises prior to selling and reproduced as well as an annual health examination.

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Student's signature

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Thesis Advisor's signature