COMMON DISEASES DIAGNOSED IN LIVESTOCK IN THE VETERINARY RESEARCH INSTITUTE (VRI) FROM 2006-2010

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Abstract
Animal diseases are diagnosed routinely in the Veterinary Research Institute. The information obtained each year as a result of almost 400,000 samples tested for various diseases from zoonotic to exotic diseases highlights the importance of rapid and efficient diagnostic services for the country and region. This paper reports the common diseases diagnosed in various animal species, from samples submitted for various purposes such as surveillance programmes for herd basis, disease diagnosis for individual animals and monitoring of flocks for zoonotic, emerging and zoonotic diseases. Yearly outbreaks of several key disease profiles are also noted. This information is important to plan and enforce regulatory measures to control disease spread thereby reducing morbidity and mortality to aid farmers. Between 2006 and 2010, a total of 1.7 million samples were tested with the most common disease in bovine being bacterial diseases such as brucellosis and melioidosis, in caprine and ovine being contagious lymphadenitis and melioidosis, and in poultry Newcastle disease and Infectious bronchitis.

Keywords: Animal diseases, zoonotic, diagnostic

INTRODUCTION
Animal pests and diseases are a major threat to Malaysia’s livestock and poultry industries and an outbreak could impact on this country access to export markets and undermine livelihoods. Starting from 2006 to 2010, Veterinary Research Institute (VRI) received 67,629 cases with the 1,736,232 number of samples for various tests conducted according to laboratory. Among 67,629 cases, 7,969 cases are reported as a positive case in various diseases and its involving all state in Peninsular Malaysia also with Sabah and Sarawak.

OBJECTIVE
This paper is primarily to obtain a pattern of infected animal and disease in Malaysia that had been reported in VRI from 2006 to 2010. The pattern can be used for control and monitoring of the animal diseases, improving the diagnostic techniques, vaccination development and surveillance structure. Furthermore, it can be used to develop a continuous study in economic impact especially in veterinary field related to the livestock industry.

MATERIALS & METHODS
There are 18 laboratories conducting 300 tests for a total of 300,000-400,000 samples per year with a turn around time of 3-30 days for a full diagnostic procedure and confirmation of a particular disease or condition. Data generated from Laboratory Information Management
System (LIMS) are analysed by using various methods in SPSS software and Microsoft Excel 2010.

RESULTS

From 2006 to 2010, VRI received 67,629 cases with 7,969 cases reported as positive for a disease entity. *Caprine* cases were classified as the highest species involved with 3,261 cases followed by *Bovine* (2,934 cases) and *Equine* (843 cases). There is a general increasing trend in the number of positive disease cases diagnosed. The total positive cases reported in VRI for 2006 (1,053 cases), 2007 (1,586 cases), 2008 (1,726 cases), 2009 (1,600 cases) and 2010 (2,002 cases). Between 2006 and 2010, a total of 1.7 million samples were tested with the most common disease in bovine being bacterial diseases such as brucellosis and melioidosis, in caprine and ovine being contagious lymphadenitis and melioidosis, and in poultry Newcastle disease and Infectious bronchitis.

Other species diagnosed for diseases are deer, dog, feline, rabbit, rodent, swine and wildlife.

DISCUSSION & CONCLUSION

This data analysis shows the common diseases diagnosed in livestock as submitted to the Veterinary Research Institute. These samples submitted give an indication of the disease pattern and current diseases seen locally. As these results are from cases submitted, it may not show real time scenario of disease incidence, however, can give an indication of impending diseases. This is especially important where zoonotic disease diagnosis is important and can give an early warning sign so that control measures can be taken.

REFERENCES