

SEROPREVALENCE OF NEOSPOROSIS IN CATTLE AND ITS ASSOCIATED RISK FACTORS IN SELECTED FARMS IN SELANGOR, MALAYSIA

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Abstract

Neospora caninum is a protozoan parasite causing abortion and neonate mortality in cattle. It was discovered in 1988 and has been reported to be a major cause of abortion in many countries. Worldwide seroprevalence of neosporosis range from as low as 1 to over 90%. In Malaysia, a seroprevalence study has only been done in one farm. This preliminary study is conducted to determine the seroprevalence of neosporosis and risk factors associated with neosporosis in different farms in Selangor, Malaysia. One hundred and eighty serum samples were obtained from 9 different cattle herds from 8 farms. The samples were tested for the presence of *N. caninum* antibodies using the enzyme-linked immunosorbent assay (ELISA). A questionnaire was used to obtain information on the farm for the identification of risk factors associated with neosporosis. The association between the risk factors and neosporosis were evaluated using chi-square analysis. Seropositivity was observed in 2.8% (5/180) of the samples, which came from 3 farms. Chi-square analysis revealed that none of the risk factors is significantly associated with neosporosis. Although a seroprevalence status has been established in Selangor, further investigation on the epidemiology aspects of this disease is required.

Keywords: neosporosis, seroprevalence, cattle, ELISA, risk factors