SEROEPIDEMIOLOGIC SURVEY IN THAILAND OF COXIELLA BURNETII INFECTION IN CATTLE AND CHICKENS AND PRESENCE IN TICKS ATTACHED TO DAIRY CATTLE

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Abstract. A seroepidemiologic survey of Coxiella burnetii in cattle and chickens in Thailand was carried out using indirect fluorescent antibody test. Nine of the 130 serum samples from cattle were positive for antibodies against C. burnetii, with antibody titers ranging from 32 to 64. Only one of 113 serum samples from chickens was seropositive, with antibody titer of 16. No C. burnetii-specific DNA was detected using restriction fragment length polymorphism-nested PCR in spleens of cattle and chickens. However, coxiella DNA was detected in two of 102 engorged Rhipicephalus microplus ticks attached to dairy cattle. These results indicated that infestation of C. burnetii among cattle and chickens is considerably low in Thailand.

Keywords: Coxiella burnetii, cattle, chicken, tick, Thailand