TOXOPLASMOSIS AND NEOSPOROSIS AMONG BEEF CATTLE SLAUGHTERED FOR FOOD IN WESTERN THAILAND

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Abstract. Beef is a main type of meat consumed by Thais. The prevalences of anti-*Toxoplasma gondii* and anti-*Neospora caninum* antibodies were investigated among beef cattle slaughtered for food in western Thailand. A total of 389 blood samples obtained from beef cattle from 24 herds were collected at 3 slaughterhouses in 3 western provinces of Thailand: Kanchanaburi, Ratchaburi and Nakhon Pathom. An indirect immunofluorescent antibody test (IFAT) was performed using cut-off values of 1:128 for *T. gondii* and 1:200 for *N. caninum*. The antibodies to *T. gondii* were found in 100 samples (25.7%) and antibodies to *N.caninum* were found in 23 samples (5.9%) a significant difference ($p<0.001$) in prevalences, indicating the cattle tested had a greater exposure to *T.gondii* than *N.caninum*, and they should be regarded as a potential source of *T. gondii* infection to humans. The low prevalence of neosporosis in this study is still a risk for morbidity among cattle, including abortions. This is the first study in Thailand finding both *T. gondii* and *N. caninum* antibodies among beef cattle.

Keywords: *Neospora caninum, Toxoplasma gondii*, beef cattle, slaughter, Thailand

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