

SCREENING OF TOXOPLASMA GONDII IN OVINE BY IMMUNOSORBENT ASSAY

IDENTIFICAÇÃO DE TOXOPLASMA GONDII EM OVINO POR ENSAIO IMUNOENZIMÁTICO

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Toxoplasmosis is one of the most frequent zoonosis around the world and occurs by the contact of host to *Toxoplasma gondii* parasite. In humans, the transmission can be congenital, when pregnant woman are exposed to the parasite and the fetus can develop micro and macro encephalitis, mental retardation, abortion, etc. In animals, transmission can be congenital or can be done by saliva, milk or semen containing *Toxoplasma gondii*. Ovines are potential transmitters, where the parasite cysts are found in animal tissue for long periods of time. Disease diagnoses are needed to avoid economic losses and human health problems. Despite immunofluorescence is the most used test to diagnose *T. gondii*, ELISA tests were used in this study to screen animals in ovine herd, at IZ. For those, 134 animals from Morada Nova and Santa Inês breeds were tested using the IDEXX *Toxoplasma gondii* test kit, using sera as biological sample. Blood was taken from jugular vein and centrifugation was performed. Sera were separated and kept frozen. Presence of *T. gondii* was verified in ELISA test and reading at Biotech microplate reader, analyzed by Xchek 3.3 software. O.D. showed 27 animals with the presence of *T. gondii*. Only one animal was diagnosed "suspect" and new sample will be run. ELISA test showed to be fast, easy and reliable in the farm. Once the amount of sera used is minimum (1 ul), same blood sample can be used for several screening diseases, avoiding animal stress. For these tested animals, around 20% present *T. gondii*, which is lower than São Paulo State average (around 40 %), meaning a good management of ovine herd. A monitoring of *T. gondii* in ovine herd is essential to guarantee quality meat and quality management practices for food safety and sustainability.

Keywords: ELISA, Santa Inês, Morada Nova, toxoplasmosis.

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