Abstract

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Title of diploma thesis: Optimalization of *Leishmania* antigen formulations for the diagnosis of canine leishmaniasis

Leishmaniasis is a vector-borne disease caused by a protozoan parasite of the genus *Leishmania* and is prevalent in 98 countries worldwide.

Reliable and accurate tests are necessary for laboratory diagnosis of *Leishmania* infection because of the wide spectrum of clinical characteristics and symptoms and high rate of asymptomatic infections that may occur. Serological diagnosis of canine leishmaniasis (CanL), especially enzyme-linked immunosorbent assay (ELISA), proved to be useful tool.

Data obtained from ELISA assay for the detection of antibodies against selected recombinant A, B, C, D, E and F proteins were evaluated in infected canine sera from Portugal and Brazil. This work presents the best formulation of recombinant proteins for serological diagnosis. We found that antigen C showed high level of sensitivity and specificity in recognition of positive and asymptomatic sera infected with CanL.

Key words: canine leishmaniasis, reservoir, diagnosis, ELISA.