

Study of prevalence of *Trypanosoma vivax* in dairy cattle on west region of the State of Paraná, Brazil

Alessandra Snak^{1*}, Felipe Gustavo Garcia², Euclides Mario Pieri², Arielle Aparecida Lara³, Ricardo Babinski Bregonde², Juliana Cristine Anzolim², Júlia Angélica Gonçalves da Silveira⁴, Silvia Cristina Osaki⁵

1. Discente do curso de Doutorado em Ciência Animal, Universidade do Estado de Santa Catarina, Lages, Santa Catarina, Brasil. *alessandra.snak@hotmail.com
2. Discente do curso de Medicina Veterinária, Universidade Federal do Paraná, Palotina, Paraná, Brasil
3. Discente do curso de Mestrado em Ciência Animal, Universidade Federal do Paraná, Palotina, Paraná, Brasil
4. Professora, Universidade Federal De Minas Gerais, Belo Horizonte, Minas Gerais, Brasil
5. Professora, Universidade Federal do Paraná, Palotina, Paraná, Brasil

Hemoprotozoan that mainly parasitize cattle, *Trypanosoma vivax* is transmitted by hematophagous insects, mainly Tabanidae and *Stomoxys calcitrans*, or by contaminated needles. The main clinical signs of the disease are severe anemia and abortion. In Brazil the parasite is present in several states. In the Pantanal, located in Mato Grosso and Mato Grosso do Sul and in Minas Gerais, the disease is endemic. It has also been diagnosed in the State of São Paulo and Rio Grande do Sul. In Paraná there is still no report of the parasite, but due to the state borders with Mato Grosso do Sul, São Paulo, Paraguay and Argentina, it is believed that the protozoan circulates in the region without diagnosis. The objective of this study was to investigate the prevalence of *T. vivax* in dairy cattle in the western region of Paraná and to know the risk factors related to the infection. For this, 600 blood samples and 400 serum samples of dairy cattle, distributed in 60 and 40 properties, respectively, were collected, and an epidemiological questionnaire was applied to evaluate the risk factors. It was performed leukocyte coat smear on the blood samples and Indirect Immunofluorescence Reaction of the serum samples. All samples, in both techniques, presented negative results for *T. vivax*. These results indicate that the hemoprotozoan researched is not circulating among the cattle of the western region of Paraná. However, new work with beef cattle must be carried out and preventive measures should be adopted to avoid the entry of the parasite in the State of Paraná.

Key words: IFAT, leukocyte cover, hemoprotozoan, smear, trypanosomiasis