PRESENCE OF EHRLICHIA SPP. BACTERIA IN DAIRY COWS FROM NORTHWEST REGION OF MINAS GERAIS

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RESUMO

Introduction: *Ehrlichia* bacteria belong to Anaplasmataceae family and are transmitted mainly by ticks. These bacteria can affect different animals, including ruminants and humans. The most important species that infect bovines is *E. ruminantium*, etiological agent of cowdria, an important disease that affect wild and domestic ruminants in some sub-Saharan Africa countries, some islands near of Africa and in some Caribbean island. There are no reports of occurrence of cowdria in Brazil and the South American region. Human erlichiosis can be caused by *E. chaffeensis*, *E. ewingii*, or *E. muris eauclairensis* in the United States and some reports of *E. canis* infecting humans in South America were already described. In Brazil, some species were described as infecting bovines, like *E. minasensis* and other unknown species of *Ehrlichia*, but dates about clinical signs in bovines and the possibility of transmission to other mammals, like humans, are scarce or nonexistent. **Porpouse:** Due to the economic impact that *Ehrlichia* bacteria can cause in cattle and zoonotic pontential, this work aimed to investigate the presence of *Ehrlichia* bacteria in dairy cows from northwest of Minas Gerais using the polymerase chain reaction technique (PCR). **Methods**: It was collected blood from 132 dairy cows from eight farms in northwest Minas Gerais. The blood was collected using a vacuum system and was maintained in tubs with ethylenediaminetetraacetic acid anticoagulant until laboratory manipulation. According to the manufacturer's recommendations, the blood samples were submitted to total DNA extraction using a commercial kit. Was performed a PCR to detect the *dsb* gene of *Ehrlichia* spp. **Results:** six animals were positive for *Ehrlichia* when they were tested to *dsb* gene of *Ehrlichia* spp., all bovines from the same property. **Conclusion:** Using the PCR technique, it was possible to detect *Ehrlichia* spp. presence in dairy cows. This is the first report of *Ehrlichia* spp. in bovines northwest region of Minas Gerais, Brasil.

PALAVRAS-CHAVE: Erlichiosis, Livestock, Molecular Biology.

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