

## 02. ANTI-LEPTOSPIRA SP. ANTIBODIES IN CATS FROM THE SEMIARID OF THE PARAÍBA STATE

Anticorpos anti-*Leptospira* sp. em gatos do semiárido do Estado da Paraíba

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**Introduction:** Leptospirosis is an important zoonosis spread worldwide. The persistence of the agent in the environment and the high potential of infection are guaranteed, among other factors, by the multiplicity of host species able to harbor and eliminate it. On the other hand, the role of cats in the epidemiology of infection has received little attention. **Objective:** The aim of this survey was to determine the frequency of anti-*Leptospira* sp. antibodies and the associated risk factors in stray and domiciled cats in the county of Patos, semiarid region of the Paraíba state. **Methods:** Blood samples from 129 cats (61 domiciled and 68 stray) were collected during the period of July to August 2011. For the anti-*Leptospira* sp. antibody search, the microscopic agglutination test (MAT) was performed using 24 serovars as antigens. **Results:** Of the 129 cats examined, seven (5.43%) were seropositive to serogroup Pomona, with titers ranging from 200 to 3,200. Of the stray and domiciled cats, three (4.41%) and four (6.56%) were seropositive, respectively. Relating to risk factor analysis the variables and respective categories associated with the higher seropositivity were age/> 48 months ( $p = 0.001$ ), environment where the animal stays/grass ( $p = 0.009$ ) and presence of rodents/yes ( $p = 0.020$ ). **Conclusion:** The presence of seropositive cats for leptospirosis and high titers of antibodies in the municipality of Patos-PB are indicative that the agent may be circulating in the feline population and with possible elimination of the agent in the environment, which may have negative implications for public health. **CEUA:** This survey was approved and performed under the guidelines of Ethics Committee for Animal Protocol Use of Federal University of Campina Grande (Protocol No. 27.2012).

## 03. APPLICATION OF EGG ALBUMIN AS A SUBSTITUTE OF BOVINE SERUM ALBUMIN (BSA) IN THE CULTIVATION OF LEPTOSPIRA INTERROGANS SEROVARS CANICOLA AND POMONA

Aplicação de albumina de ovo como substituto de albumina do soro bovino (asb) no cultivo de *Leptospira interrogans* sorovar Canicola e Pomona

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**Introduction:** The main function of Bovine Serum Albumin (BSA) in culture media for *Leptospira* is protection against the toxic products of the degradation of the long chain fatty acids present in the medium; however, the BSA has a high cost compared to other sources of albumin, such as egg albumin, which is the main protein present in poultry eggs, especially chickens from commercial farms. **Objective:** Use of egg albumin to replace Bovine Serum Albumin (BSA) in the enrichment of the EMJH medium for the culture of *Leptospira interrogans* serovars Canicola and Pomona. **Methods:** It was elaborated an enrichment containing egg albumin, Tween 80 and a mixture of minerals and vitamins essential for the growth of *Leptospira*, which was added to the medium of EMJH in the proportion of 10%. The Canicola and Pomona serovars of *Leptospira interrogans* were chosen for the growth test in the medium, and weekly seeding were performed to verify the viability of the bacteria and microscopic evaluation of the cells. Another medium of EMJH added with DIFCO commercial enrichment based on BSA was used as a control. **Results:** Both serovars had satisfactory growth in EMJH medium enriched with egg albumin, with no difference in relation to medium turbidity, morphology and cell motility even after four consecutive seedings. **Conclusion:** The serovars Canicola and Pomona of *Leptospira interrogans* were cultivated satisfactorily in the EMJH medium enriched with egg albumin. **CEUA:** Not applicable. Funding: CNPq (MBH fellowship), Capes (Finance code 001).