

**SUB-ÁREA: Diagnóstico Molecular, Bacteriológico e Sorológico da Leptospirose**

**Leptospirosis seroprevalence and associated risk factors in dairy goats in the Brazilian semi-arid region**

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*Leptospira* spp. infection is a worldwide zoonosis that causes economic losses to goat rearing, mainly due to reproductive disorders. Hence, the objective of this research was to determine the seroprevalence and associated risk factors of leptospirosis in a goat milk-producing region in the states of Paraíba and Pernambuco, Northeast Brazil. The microscopic agglutination test was used as serological method and risk factor analysis was carried out using univariable and multivariable analyses. Out of the 937 animals sampled, 102 (10.9%; 95% CI = 8.9–12.9%) were seropositive for *Leptospira* spp. and the most frequent serogroups were Ballum (41.2%; 95% CI = 31.6–50.7%), Icterohaemorrhagiae (25.5%, 95% CI = 17–33.9%) and Semaranga (23.5%, 95% CI = 15.3–31.8%), with antibody titres ranging from 1:50 to 1:200. Thirty-four of 51 herds (66.7%; 95% CI = 53.7–79.6%) had at least one seropositive animal. The risk factor identified in the multivariable two-level random effect binary logistic regression was the animal being an adult (odds ratio = 4.2; 95% CI = 1.93–9.13;  $P < 0.001$ ). Our results provide important information on the epidemiology and risk factors associated with goat leptospirosis seroprevalence in one of the main Brazilian goat milk-producing regions. Furthermore, the need for adopting sanitary control measures, especially those involving sanitary management practices, is highlighted.

**Keywords:** goat herd; *Leptospira* spp.; reproductive disorders; risk factors.

**Funding:** This study was funded by the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq; Grant Nos 302222/2016-2 and 423836/2018-8) and the Research Support Foundation of the State of Paraíba (FAPESQ; Grant Nos 46360.673.28686.05082021 and 54758.924.28686.25102022).