

Avaliation of antibody anti-*Corynebacterium pseudotuberculosis* in goats milking of Sisal area in State of Bahia - Veschi J.L.A.^{1*}, Zafalon L.F.², Borges F.C.³, Azevedo V.³, Miyoshi A.³, Meyer R.⁴, Portela R.⁴, Gouveia A.M.G.³

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The caseous lymphadenitis (CL) is an infectious disease of worldwide occurrence, caused by the bacteria *Corynebacterium pseudotuberculosis*, which affects mainly sheep and goats. It is a chronic and debilitating illness, characterized by the formation of abscesses in lymph nodes. To evaluate the presence of antibodies of these bacteria, we used 305 animals of both sexes, various breeds, older than six months from 25 dairy herds located in different municipalities of the Territory of Sisal, State of Bahia. Blood samples were collected by jugular vein puncture into tubes in vacuum and the obtained serum remained at -20°C until use in the Indirect-ELISA test. The cut-off was predetermined calculation based on the relative operating curve (ROC) and set at 0.35. Considering the results obtained from 305 blood serum samples analyzed by indirect ELISA, 84 animals showed anti-*C. pseudotuberculosis*, ie 27.54% goat tested were positive. Of the 25 herds studied, 13 (52%) had at least one animal serologically positive for caseous lymphadenitis. Therefore, we conclude that 27.54% of dairy herds of goats of the Territory of Sisal, Bahia, have anti-*C. pseudotuberculosis* when assessed by Indirect- ELISA.

Key-words: caseous lymphadenitis, ELISA, antibodies

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AVALIATION OF ANTIBODY ANTI-*Corynebacterium pseudotuberculosis* IN GOATS MILKING OF SISAL AREA IN STATE OF BAHIA



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INTRODUCTION

The Caseous Lymphadenitis (CL) is an infectious disease of worldwide occurrence, caused by the bacteria *Corynebacterium pseudotuberculosis*, which affects mainly sheep and goats. It is a chronic and debilitating illness, characterized by the formation of abscesses in lymph nodes.

The aim of this study was to evaluate of antibody anti-*Corynebacterium pseudotuberculosis* in goats milking of Territory of the Sisal in State of Bahia.

METHODOLOGY

305 animals (both sexes) were used, various breeds, older than six months from 52 dairy goats herds located in different towns of the Sisal area, State of Bahia. Blood samples were collected from all goats by jugular vein puncture into tubes in vacuum and the blood serum remained at -20°C until be used in the Indirect ELISA. The cut-off was predetermined calculation based on the relative operating curve (ROC) and set at 0.35.



Figures 1 and 2: Herds of goats used in the experiment.



Figure 3: The place where the goats are milked (local also used for collection of blood samples during the experiment).



Figure 4: Coating with sisal cultivation area (local also used to collect samples of blood during the experiment).

RESULTS

Considering the results obtained from 305 blood serum sample analyzed by indirect ELISA, 84 animals showed antibody anti- *C. pseudotuberculosis* ie 27,54% is the goats tested were positive.

Therefore, 52 herds studied, 31 (59,61%) had at least one animal serologically positive for Caseous Lymphadenitis. This fact is of great importance for the spread of the disease to animals in other herds.

CONCLUSION

Therefore, we conclude that 27,54% of dairy herds of goats of the Territory of the Sisal, State of Bahia, have antibody anti- *C. pseudotuberculosis* when assessed by Indirect- ELISA.

