

## MASTITIS ETIOLOGY IN GOATS AND SHEEPS FROM ZONA DA MATA AND SERTÃO OF ALAGOAS

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### Abstract:

The small ruminant production is an activity related directly to family agriculture, therefore contributing to regional development. However, There are many sanitary problems as mastitis that can influence the milk yield. This study aimed to diagnose mastitis in goats and sheeps associating to direct and indirect methods. Cases of mastitis were detected through black-bottom glass test and California Mastitis Test (CMT), associated to milk culture. Milk samples were taken from 42 goats and 36 sheeps from Zona da Mata and Sertão of Alagoas, totaling 84 goats and 76 sheeps teats evaluated respectively. In goats, clinical mastitis was present in 15.48% (13/84) of the teats. Subclinical mastitis was the most frequent case, totaling 65.48% (55/84) of the samples, while 19.04% (16/84) were healthy teats. Clinical mastitis in sheeps was present in 19.44% (14/72) of the teats. Subclinical mastitis was diagnosed in 27.78% (20/72) of the samples, while 52.78% (38/72) were negative. From all positive samples, 83.63% (46/55) from sheeps and 90% (18/20) from goats were both positive for subclinical mastitis and microbiological identification. Sixty microbial colonies were isolated from clinical and subclinical mastitis in goats. The genus *Staphylococcus* was the most frequent and represented 41.66% (25/60) of the bacterial groups identified, followed by *Corynebacterium* sp 16.68% (10/60), *Streptococcus* sp 15% (9/60), *Bacillus* sp 11.66% (7/60) and *Micrococcus* sp 11.66% (7/60), *Enterobacteriaceae* 1.67% (1/60) and the fungus *Candida* sp 1.67% (1/60) was also present. From ovine mastitis 45 microbial colonies were isolated, being *Staphylococcus* the most representative microbial agent in 60% (27/45), followed by *Streptococcus* sp 17.77% (8/45), *Corynebacterium* sp 11.11% (5 / 45), *Bacillus* sp 4.45% (2/45), *Micrococcus* sp 4.45% (2/45) and *Enterobacteriaceae* 2.22% (1/45). We conclude that subclinical mastitis is the most common form of the disease in sheep and goats as well as its etiology was identified as contagious. The bacteria responsible for most part of cases of mastitis is *Staphylococcus* sp. that can be liable to be conveyed by milk, originating some infect-contagious diseases in humans. We suggest the adoption of hygienic practices during milking and monitoring mastitis to improve the milk quality of goat and sheep.

**Keywords:** Milk Microbiology, small ruminants, *Staphylococcus* sp.