

**TITLE: BACTERIAL ISOLATION IN SAMPLES OF GOAT MILK**

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**ABSTRACT:**

The aim of this study was to monitor the presence of pathogens causing caprine mastitis during three months in a properties situated in the region of the Zona da Mata of Minas Gerais. A total of 30 lactating goats were examined for clinical mastitis. Subsequently, 60 individual samples (one per teat) were collected, totalling 180 samples (60 samples/month). For the collection of the goat milk samples, the teats had been washed with water and dried with disposable paper towels. Thereafter, the antiseptics of the teat ostium with 70% alcohol was done and the samples were collected in sterile Falcon flasks and sent to the laboratory of microbiology of Embrapa Caprinos e Ovinos for bacterial isolation. The samples were submitted to bacteriological culture carried out in agar with 5% sheep blood and McConkey agar using the spread plate method. These plates were then incubated at 37°C and the readings done after 24-48 hours of incubation. The bacteria were later subjected by their morphological, dyeing and biochemical tests. The clinical exam of the mammary glands of 30 dairy goats did not reveal the presence of clinical signs. The isolated reveal bacterial growth in 14 (46.66%) lactating goats milk, totalling 26 positive samples (14.44%). Among these, 20 isolated coagulase-negative *Staphylococcus* (76.9%) and six *Staphylococcus aureus* (23.1%) were obtained. During the period of this study, it was observed that the bacterial isolation occurred in only one collection for 11 samples; in two collections for six samples and in the three collections for only one sample. The presence of isolated microorganisms of goat milk stresses the importance of prophylaxis measures and control of subclinical mastitis in the flock. That's because the isolated microorganisms exhibit great importance for public health, as they are possible producers of staphylococcal toxin, and therefore, possible causes of food poisoning.

**Keywords:** goats mastitis; quality of the goats milk, *Staphylococcus*, Minas Gerais.

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