

## **SENSITIVITY PROFILE OF *Staphylococcus* sp INTEND TO USE OF ANTIMICROBIAL FROM SAMPLES OF GOAT MILK FROM A HERD IN THE STATE OF ALAGOAS, BRAZIL.**

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The aim of this study is to evaluate the sensitivity profile against antimicrobial isolates of *Staphylococcus* sp. The samples are from milk collected from a herd of goats located in the state of Alagoas in Brazil. 200 milk samples were collected from 100 goats in different lactation stages and analyzed. This particular herd was located in the city of Coité do Nóia,, Alagoas, Brazil. Before the samples were collected, the ceiling ostium was cleaned with 70.0% alcohol and the first three jets of milk were discarded. Subsequently, the milk samples were collected aseptically, maintained under refrigeration and sent to the laboratory for proper processing. A 0.1 ml aliquot of each sample was grown in Petri dishes containing agar base supplemented with 10.0% of sheep blood and incubated in a bacteriological incubator aerobically at 37,0 degree Celsius. After the growth period, the slides were stained by the Gram method to identify bacterial genera. The samples that tested were positive for *Staphylococcus* sp. were then subjected to "in vitro" testing for antimicrobial sensitivity by Kirby-Bauer diffusion technique. The antimicrobial disks used were: gentamicin (10 mcg), cephalothin (30 mcg), tetracycline (25 mcg), amoxicillin (10 mcg ), penicillin (10 IU) and sulfametazol + trimethoprim (25 mcg). 23.5% (47/200) of samples tested positive for *Staphylococcus* sp. The sensitivity profile intend to use of antimicrobial was most sensitive for cephalothin 95.8% (45/47) and sulfametazol associated with trimethoprim 93.7% (44/47), followed by 89.3% gentamicin (42 / 47) and 80.9% amoxicillin (38/47). Tetracycline and penicillin G were compounds that had the highest frequencies of resistant isolated with 34.0% (16/47) and 29.8% (14/47) respectively. From the results obtained, it appears that the use of the sensitivity profile is important to determine the correct choice of substance to be used in the treatment of infections caused by *Staphylococcus* sp. Reduction of coast caused by incorrect treatment and reduction of the risks of multidrug resistance are some of the benefits of its use.

**Keywords:** Goat, mastitis, treatment, resistance, prevention.