The infection of the mammary gland in cows produces numerous economic losses due to the decreasing of milk productivity and quality, as well as interfering directly in the dairy industry. This study aimed to diagnose bovine mastitis by indirect methods. Subclinical mastitis was detected through the strip cup test and the California Mastitis Test (CMT) associated with microbiological milk culture. 380 mammary quarters were studied in 95 cows from five farms located at Zona da Mata in Alagoas. The percentile of teats affected by subclinical mastites was 28.42% (108/380), from these, intense mastitis was found in 57.4% (62/108). The negative teats represented 71.58% (272/380) of the samples. From the number of positive quarters for subclinical mastitis, 57.41% (62/108) was positive for microbiological diagnosis. A total of 141 microorganisms were isolated, with an average of 2.27 found per infected teat. The most frequently isolated genera were Staphylococcus sp 43.97% (62/141), Corynebacterium sp 19.85% (28/141), Streptococcus sp 11.34% (16/141), Bacillus sp 6.38% (9/141), Micrococcus sp 7.09% (10/141), Enterobacteriaceae 4.25% (6/141), Candida sp 3.5% (5/141) Pasteurella sp 2.12% (3/141) and Pseudomonas sp 0.7% (1/141). A study about bovine mastitis conducted in the dairy region of Rondon in Pará State, isolated bacteria in 15.6% milk cows (37/237), the most frequently identified bacteria groups were: Staphylococcus spp. coagulase-negative (32.3%), Staphylococcus aureus (17.7%), Staphylococcus intermedius (1.6%), Streptococcus spp. (4.8%), Corynebacterium spp. (4.8%), and Staphylococcus spp. coagulase negative / S. aureus (1.6%). These results differ from other research in that the isolation of Staphylococcus sp (63.12%), Corynebacterium sp (24.8%) and Streptococcus sp (1.55%) were more frequent. We conclude that subclinical mastitis is the most prevalent disease in dairy cattle from Zona da Mata region, caused by multi-etiological agentes and commonly associated with Staphylococcus sp bacteria, that can originate a contagious mastitis. We suggest the adoption of hygienic measures in the milking process and a more frequent monitoring of mastitis to improve the bovine milk quality.

Keywords: Diagnosis, cows, mammary gland