

## Abstract:

A total of 174 isolates were identified during the present study. Among these 41 (23.56%) were *Staphylococcus aureus*, 25 (14.34%) were *S. epidermidis* (alhus), 15 (8.62%) were *Klebsiella aerogenes*, 11 (6.3%) were *Escherichia coli*, 17 (9.77%) were *Actinomyces pyogenes*, 12 (6.89%) were *Bacillus cereus*, 8 (4.59%) were *B. subtilis*, 4 (2.29%) were *Bacillus* spp., 13 (7.47%) were *Acinetobacter antrax*, 22 (12.64%) were micrococci and 6 (3.4%) were yeast. When comparing the composition of mastitic cow's milk with that from normal cows, highly significant differences were obtained. The types of bacteria isolated had significant effects on lactose and acidity. The interaction of types of bacteria isolated and the intensity of infection has a significant effect on chloride and lactose, while the interaction with season affect casein, chloride, whey proteins, acidity and fat %.