Abstract:

The most predominant bacterium in raw milk samples investigated during the present study was Staphylococcus aureus, 21 isolates (30%). Moreover, Gram-negative bacteria identified as Citrobacter spp., 15 (21.43%), Shigella spp., 14 (20%), E. coli, 10 isolates (14.281%), Enterobacter spp., 9 (12.86%), and Salmonella spp., 1, (1.43%). Staphylococcus aureus count in the milk collected from the factory was (6.103 —1.2x10'). Salmonella spp. count was 5x104 in the milk collected from the factory. Shigella spp., Enterobacter spp. and Citrobacter spp. were predominant in the milk collected from the factory (7x105 —1.4x 106). On the other hand, the E. coli count was higher in the milk collected from the collection points (7x104 -7.5x 106). In the present study, most of the bacteria isolated from the raw milk showed a wide range of multiple resistance to the tested antimicrobial agents. Penicillin, clindamycin, amoxicillin and ampicillin showed the highest resistance. Chloramphenicol showed the highest antimicrobial activity against the test organisms followed by gentamicin, novobiocin and carpenclillin.