Abstract

Camels are adapted to the arid and semi arid lands (ASAL), but their full milking potential is affected by udder infection especially sub-clinical mastitis. The purpose of this study was to identify the most common pathogens responsible for sub-clinical mastitis in camels kept under ranch conditions in Northern Kenya. A total of 435 camel milk samples were collected over a period of 11 months and examined for mastitis causing microorganisms. Mastitis causing bacteria were isolated from 66.7% of the samples. The most prevalent groups were group D streptococci (30%), coagulase negative staphylococcus (CNS) (20.1%), Staphylococcus aureus (16%), Streptococcus dysgalactiae (3.6%) and Streptococcus agalactiae (1.5%). Other isolates were Coliforms and Micrococci. Streptococcus dysgalactiae and Streptococcus agalactiae had a greater association with sub-clinical mastitis than the other pathogens. Streptococcus agalactiae and Staphylococcus aureus were ranked as infectious pathogens while group D streptococci, Streptococcus dysgalactiae, CNS, Coliforms and Micrococci were ranked as environmental pathogens. The mean milk yield from quarters infected with infectious streptococcal pathogens was 1.58L per milking, which was lower than that from quarters infected with environmental streptococci (2.63L). Sub-clinical mastitis in camels has adverse implications and needs to be addressed in order to maximize camel production in the ASAL.