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Isolation and Identification of Staphylococci Isolated From Bovine Mastitic Milk in River Nile State, Sudan

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Abstract

A total of 133 staphylococci were isolated from 100 bovine mastitic samples in different localities of River Nile State. In some cases more than one isolate was recovered from the same sample. These isolates were subjected for further confirmation by using API staph. 35 (26.3%) of the staphylococci were coagulase-positive Staphylococcus aureus and 98 (73.7%) were coagulase-negative. These findings show a high prevalence of staphylococci in dairy herds in River Nile area. A high prevalence rate of coagulase-negative staphylococci was observed in cows with a high SCC i.e. more than 660,000 cell/ml. Coagulase-negative staphylococci are suspected to be significant as a cause of mastitis especially in quarters with high SCC. The coagulase-negative staphylococci isolated in order of frequency were: S. epidermidis (10.3%), S. chromogenes (9.0%), S. capitis subsp. Ureolyticus (6.8%), S. haemolyticus (6.0%), S. hyicus (6.0%), S. caseolyticus (5.3%), S. simulans (5.3%), S. xylosus (5.3%), S. saprophyticus (4.5%), S. carnosus (3.8%), S. lugdunensis (3.8%), S. capitis (3.0%), S. saccharolyticus (2.3%) and S. sciuri (2.3%).

Keywords: Bovine Mastitis; Staphylococci; API Staph; Khartoum State.