



## Antibiotic Susceptibility of Major Bacteria Cause Caprine Mastitis in River Nile State, Sudan

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### Abstract

In this study a total of 40 milk samples positive for California Mastitis Test (CMT) were collected from goats in the three localities of River Nile State (Atbara, Barbar and El Damer). Samples were submitted for bacteriological examination. The aerobic bacteria isolated and identified from goats' milk samples were 19 Staphylococci (21.1%), 7 Streptococci (7.8%), 4 *Escherichia coli* (4.4%), 4 *Corynebacterium bovis* (4.4%) and 4 *Enterococcus faecalis* (4.4%). All isolates were subjected to sensitivity tests using 10 antibiotics in use for treatment of mastitis in Sudan. All Staphylococcal isolates were sensitive to Ampicillin, 57.9% to Kanamycin, 52.6% to Gentamycin, 42.2% to Cephalothin and Chloramphenicol, 36.8% to Ciprofloxacin, 26.3% to Tetracycline, 21.0% to Cloxacillin, 15.8% to Erythromycin and 10.5% to Procaine Penicillin. 75% of *Escherichia coli* isolates were sensitive to Ampicillin and Ciprofloxacin, 50.0% were sensitive to Cephalothin, Chloramphenicol, Gentamycin, Kanamycin, Tetracycline and Cloxacillin, 25.0% to Erythromycin and all isolates were resistant to Procaine Penicillin. All *Corynebacterium bovis* isolates were sensitive to Gentamycin, 50.0% to Ampicillin and Tetracycline, 25.0% to Cephalothin, Kanamycin and Chloramphenicol and Cloxacillin, all isolates were resistant to Procaine Penicillin, Ciprofloxacin and Erythromycin. All *Enterococcus faecalis* isolates were sensitive to Gentamycin and Ciprofloxacin, 75.0% to Chloramphenicol, 50.0% to Cephalothin, Kanamycin and Tetracycline and all isolates were resistant to Ampicillin, Erythromycin, Procaine Penicillin and Cloxacillin.

**Keywords:** Caprine Mastitis; Cephalothin; Khartoum State.